

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 9/TT/2022

Coram:

**Shri I. S. Jha, Member
Shri Arun Goyal, Member**

Date of Order: 20.03.2023

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for determination of transmission tariff of 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of LILO of Sagardighi-Subhashgram 400 kV S/C line at Jeerat and 02 Nos. 400 kV GIS line bays at Jeerat Sub-station of West Bengal under "Eastern Region Strengthening Scheme XV (ERSS-XV)" in Eastern Region.

And in the matter of:

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

.... Petitioner

Vs.

1. Bihar State Power (Holding) Company Limited,
(Formerly Bihar State Electricity Board-BSEB),
Vidyut Bhawan, Bailey Road,
Patna-800 001.
2. West Bengal State Electricity Distribution Company Limited,
Bidyut Bhawan, Bidhan Nagar, Block DJ, Sector-II,
Salt Lake City, Kolkata-700091.
3. Grid Corporation of Orissa Limited,
Shahid Nagar, Bhubaneswar-751007.
4. Damodar Valley Corporation,
DVC Tower, Maniktala, Civic Centre,
VIP Road, Kolkata-700054.
5. Power Department,
Government of Sikkim,
Gangtok-737101.



6. Jharkhand State Electricity Board,
In Front of Main Secretariat,
Doranda, Ranchi-834002.

7. West Bengal State Electricity Transmission Company Limited,
Bidyut Bhawan, Bidhan Nagar, Block DJ, Sector-II,
Salt Lake City, Kolkata-700091.

...Respondent(s)

For Petitioner : Shri Mukesh Khanna, PGCIL
Shri B.B. Rath, PGCIL
Shri D.K. Biswal, PGCIL
Shri Amit Yadav, PGCIL
Shri Ashish Alankar, PGCIL

For Respondents : Shri Manish Chaudhary, Advocate, BSPHCL
Shri Himanshu Thakur, Advocate, BSPHCL

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited, for determination of transmission tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) for the period from COD to 31.3.2024 in respect of LILO of Sagardighi–Subhashgram 400 kV S/C line at Jeerat and 02 Nos 400 kV GIS line bays at Jeerat Sub-station of West Bengal (hereinafter referred to as “the transmission asset”) under “Eastern Region System Strengthening Scheme XV (ERSS-XV)” in Eastern Region (hereinafter referred to as “the transmission project”)

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

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

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

3) Approve the DOCO for the subject Asset as 23.06.2021 and allow full tariff as claimed under instant petition.

4) Approve the initial spares as claimed in the instant asset-I.



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

6) 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 8.3 above for respective block.

7) 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.

8) 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.

9) 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.

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

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

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

Background

3. The facts of the case briefly stated are as follows:

- a. The Petitioner has been entrusted with the implementation of the transmission project in Eastern Region. The scheme was discussed and deliberated in the 17th Standing Committee Meeting of Eastern Region held on 25.5.2015 and 30th ERPC meeting held on 26.6.2015.



- b. The Investment Approval (IA) and expenditure sanction of the transmission project was accorded by the Board of Directors of the Petitioner's Company in the 327th meeting held on 2.4.2016, and communicated *vide* Memorandum No. C/CP/ERSS-XV dated 5.4.2016 at an estimated cost of ₹45111 lakh including an IDC of ₹2673 lakh based on October, 2015 price level.
- c. The scope of work covered under the transmission project broadly includes as follows:

Transmission Lines

- (i) 400 kV Farakka-Baharampur D/C (Twin HTLS) line-80 km
- (ii) Removal of the existing LILO of Farakka-Jeerat S/C line at Baharampur-3 km
- (iii) LILO of Farakka-Jeerat 400 kV S/C line at Sagardighi-
- (iv) LILO of Sagardighi-Subhasgram 400 kV S/C line at Jeerat

Sub-stations

- (i) Extension at 400/220 kV Farakka Sub-station of NTPC
 - 2 nos. 400 kV line bays for Farakka-Baharampur 400 kV D/C (HTLS) line
- (ii) Extension at 400/220 kV Sagardighi Sub-station of West Bengal
 - 2 numbers 400 kV line bays for LILO of Farakka-Jeerat 400 kV S/C line at Sagardighi (formed after removal of the existing LILO of Farakka-Jeerat S/C line at Baharampur)
- (iii) Extension at 400/200 kV Jeerat Sub-station of West Bengal
 - 2 numbers 400 kV GIS line bays for LILO of Sagardighi-Subhasgram 400 kV S/C line at Jeerat
- (iv) Extension at 400 kV Baharampur Sub-station of POWERGRID*
 - 2 numbers 400 kV line bays for termination of Farakka-Baharampur 400 kV D/C (HTLS) line
 - 125 MVAR bus reactor at 400 kV at Baharampur Sub-station
- (v) Extension at 400 kV Subhasgram Sub-station
 - Conversion of 50 MVAR fixed line reactor at Subhasgram end of Sagaradighi-Subhasgram 400 kV S/C line to switchable line reactor



(*2 numbers of 400 kV line bays released after removal of existing LILO of Farakka-Jeerat 400 kV S/C line at Baharampur are proposed to be utilized for connection of one existing bus reactor which is presently connected to one end of the bus due to space constraint & one new bus reactor mentioned above)

- d. The Petitioner has confirmed that all the transmission assets in the transmission project have been completed. The details of transmission assets covered under the transmission project are as follows:

Sl. No.	Name of Asset	COD	Remarks
1	Farakka-Baharampur 400 kV D/C transmission line with 01 number 400 kV line bay at Baharampur Sub-station and 02 numbers line bays at Farakka (Sub-station of NTPC)	3.9.2018	Covered under order dated 20.8.2020 in Petition No. 95/TT/2020 (truing up 2014-19 and tariff of 2019-24)
2	LILO of Farakka-Jeerat 400 kV S/C line at Sagardighi (WPDCL) Sub-station with associated line bays	7.8.2018	
3	01 number 125 MVAR Bus Reactor and 01 number 400 kV line bay at Baharampur Sub-station.	30.3.2018	
4	LILO of Sagardighi-Subhashgram 400 kV S/C line at Jeerat and 02 numbers 400 kV GIS line bays at Jeerat Sub-station of West Bengal	23.6.2021	Covered in the instant petition
Removed from scope			
5	Conversion of 50 MVAR Fixed Line Reactor at Subhasgram end of Sagardighi-Subhasgram 400 kV S/C line to Switchable Line Reactor.	8.3.2018	Removed from scope of ERSS-XV as per direction of the Commission vide order dated 12.9.2019 in Petition No. 259/TT/2018 and filed under its original project "Formerly Tala Supplementary" in Petition No. 50/TT/2020.

- e. As per IA dated 2.4.2016, the transmission asset was scheduled to be put into commercial operation within 24 months from the date of i.e. by 2.4.2018. The transmission asset was put into commercial operation on 23.6.2021. Thus, there is a time over-run of 1178 days.



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

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public or respondents in response to the aforesaid notices published in the newspapers by the Petitioner. During the hearing dated 27.10.2022, Bihar State Power (Holding) Company Limited (BSPHCL) i.e. Respondent No. 1, prayed for time to file reply in the matter. However, no reply has been received either from BSPHCL or any of the Respondents in the matter.

6. The hearing in this matter was held on 27.10.2022 through video conference and order was reserved.

7. This order is issued considering the submissions made by the Petitioner in the petition and affidavit dated 31.3.2022.

8. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.

DETERMINATION OF ANNUAL FIXED CHARGES (“AFC”) FOR 2019-24 TARIFF PERIOD

9. The Annual Fixed Charges (AFC) claimed by the Petitioner in respect of the transmission asset for 2019-24 tariff period are as follows:



(₹ in lakh)

Particulars	2021-22 (Pro-rata 282 days)	2022-23	2023-24
Depreciation	248.90	330.04	332.14
Interest on Loan	224.62	277.31	256.15
Return on Equity	264.03	350.13	352.37
Interest on working capital	11.14	14.52	14.33
O&M Expenses	38.54	51.64	53.45
Total	787.23	1023.63	1008.43

10. The details of the Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission asset for 2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2021-22 (Pro-rata 282 days)	2022-23	2023-24
O&M Expenses	4.16	4.30	4.45
Maintenance Spares	7.48	7.75	8.02
Receivables	125.62	126.20	123.99
Total	137.26	138.25	136.46
Rate of Interest (in %)	10.50	10.50	10.50
Interest on Working Capital	11.14	14.52	14.33

Date of Commercial Operation (“COD”)

11. The Petitioner has claimed COD in respect of the transmission asset as 23.6.2021 under Regulation 5 of the 2019 Tariff Regulations. Regulation 5(1) and (2) of the 2019 Tariff Regulations provides as follows:

“5. Date of Commercial Operation: (1) *The date of commercial operation of a generating station or unit thereof or a transmission system or element thereof and associated communication system shall be determined in accordance with the provisions of the Grid Code.*

(2) *In case the transmission system or element thereof executed by a transmission licensee is ready for commercial operation but the interconnected generating station or the transmission system of other transmission licensee as per the agreed project implementation schedule is not ready for commercial operation, the transmission licensee may file petition before the Commission for approval of the date of commercial operation of such transmission system or element thereof:*

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



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

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

12. In support of COD of transmission asset, the Petitioner has submitted CEA Energisation Certificate dated 30.12.2020 under Regulation 43 of Central Electricity Authority (CEA) (Measures relating to Safety and Electric Supply) Regulations, 2010, RLDC Charging Certificate dated 19.10.2021, self-declaration COD letter dated 23.6.2021 and CMD certificate as required under the Grid Code.

13. Taking into consideration the CEA Energisation Certificate, RLDC Charging Certificate and CMD Certificate, COD of the transmission asset is approved as 23.6.2021.

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;*
- (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 tried 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 assets 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 vide Auditor's Certificate dated 6.8.2021 has claimed the following capital cost incurred as on COD and Additional Capital Expenditure (ACE) actual/ projected to be incurred, in respect of the transmission asset:

(₹ in lakh)

Apportioned Approved cost as per FR	Capital cost claimed as on COD	Actual/ Projected ACE		Estimated completion cost
		2021-22	2022-23	
7453.67	6082.00	100.00	71.68	6253.68



Cost Over-run

16. The Petitioner has submitted that the estimated completion cost of the transmission asset of ₹6253.68 lakh is within the FR apportioned approved cost of ₹7453.67 lakh. Therefore, there is no cost over-run. The Petitioner has submitted Form-5 and indicated element wise reasons of cost variation, wherein the Petitioner has submitted that the cost variation was mainly due to actual site conditions encountered during execution as compared to normative values considered at FR/DPR stage and actual awarded rate vis-à-vis estimated rates considered at the time of FR/DPR, which were beyond the control of the Petitioner. The Petitioner has prayed to allow the marginal cost variation in respect of the transmission asset on its merit.

17. We have considered the submissions of the Petitioner. It is observed that the estimated completion cost of the transmission asset of ₹6253.68 lakh is within the FR apportioned approved cost of ₹7453.67 lakh. Therefore, there is no cost over-run.

Time Over-run

18. As stated above in this order, there is time over-run of 1178 days in declaring the commercial operation of the transmission asset. The Petitioner has submitted that the time over-run is mainly because of space constraint at Jeerat Sub-station of WBSETCL and additional scope approved at a later date. The Petitioner has also submitted additional reasons for delay such as shutdown between February-March, 2020 and COVID-19 Pandemic between March to June, 2020.

19. The reasons submitted by the Petitioner for time over-run in case of the transmission asset are as follows:

- i. Space Constraint at Jeerat (WBSETCL) Sub-station



(a) During the course of finalisation of TBCB line namely, 400 kV D/C Jeerat (New)-Jeerat (WBSETCL) line under ERSS-XVIII, it was observed that there will be constraint of space at the existing Jeerat (WBSETCL) Sub-station (regarding termination of new /under construction/planned lines due to existing 4 numbers of lines in view of following transmission system:

Existing

(i) Jeerat (WBSETCL)-Baharampur/Farakka 400 kV S/C line of POWERGRID;

(ii) Jeerat (WBSETCL)-Rajarhat/Subhashgram 400 kV S/C line of POWERGRID,

(iii) Jeerat (WBSETCL)-Barkeshwar (WBSETCL) 400 kV S/C line of WBSETCL and

(iv) Jeerat (WBSETCL) – Kolaghat (WBSETCL) 400 kV S/C line of WBSETCL.

Under Construction

(v) LILO of Sagardighi- Subhasgram 400 kV S/C line at Jeerat (WBSETCL) as part of ERSS-XV by Powergrid.

Planned

(vi) Jeerat (New)- Jeerat (WBSETCL) 400 kV D/C line (Quad) as a part of ERSS-XVIII to be implemented.

(b) In order to address the issue of space crunch at Jeerat (WBSETCL), a joint site visit by the officials of CEA, CTU, PFCCL, WBSETCL and Petitioner was conducted on 9.9.2016, and it was followed with a meeting of the above officials on 10.9.2016. It was suggested during the meeting that WBSETCL would carry out detailed survey regarding feasibility of overhead crossing of 4 numbers



existing lines, ongoing instant LILO line and the proposed TBCB line. Thereafter, WBSETCL *vide* letter dated 5.10.2016 submitted detailed survey report to CEA wherein WBSETCL submitted that the overhead crossing of existing 4 numbers lines by new lines is not feasible as it requires long tower extension parts as well as considerable space for maintaining required tower falling height.

(c) Thereafter, a comprehensive meeting was held on 14.12.2016 between CEA, WBSETCL and the Petitioner. During the meeting WBSETCL reiterated that overhead crossing of new lines over existing lines is not feasible either using Double Circuit or Multi Circuit due to requisite height of overhead crossing alongwith technical and space issues. After detailed deliberation, it was mutually agreed that dismantling the crossing portion of the existing lines (ISTS and State lines) and termination of the existing lines through GIS bus duct would be appropriate proposal as the new lines can be directly terminated on a separate Double Circuit towers at normal height (~45m) to new GIS extension area in Jeerat (WBSETCL) Sub-station.

(d) Thus, in the meeting dated 14.12.2016, It was also acknowledged that implementation of LILO of Sagardighi-Subhasgram 400 kV at Jeerat along with associated line bays will get delayed by about one year due to addition of GIS duct arrangement.

i. Scope Modification (Addition) under ERSS-XV

(a) In the meeting dated 14.12.2016 held between CEA, WBSETCL and the Petitioner, it was agreed that certain modification and addition to the original



scope of the transmission project is necessary in order to implement the works associated with crossing of lines at Jeerat (WBSETCL).

- (b) The changes proposed in the transmission project was further deliberated in the 19th SCM meeting of ER held on 1.9.2017 and the following was agreed at Item No. 2, and extracted herein:

“2. Termination of 400 kV lines at Jeerat (WBSETCL) S/s under the ERSS-XV and ERSS-XVIII

2.1 Director (PSPA-2), CEA Informed that Ministry of Power had appointed PFC Consulting Limited (PFCCL) as BPC for ERSS-XVIII scheme. PFCCL intimated CEA that there was a ROW constraint for termination/ interconnection of Jeerat (New)-Jeerat(WBSETCL) 400 kV D/c (Quad) line to be executed under TBCB add the proposed GIS location at existing JEERAT(WBSETCL) substation. In order to address the RoW constraint, a joint team of officers of WBSETCL, CEA, CTU, PFCCL, POWERGRID (ER-II) visited the Jeerat substation of WBSETCL on 09th September, 2016. This was followed by joint meeting of the above officers on 10th September, 2016 at WBSETCL office at Kolkata. Further, she stated that following 400 KV lines are existing/ under construction/ planned at 400/220 kV substation of Jeerat (WBSETCL):

Existing:

- (i) Jeerat (WBSETCL)-Baharampur/Farakka 400kV S/C line of POWERGRID
- (ii) Jeerat (WBSETCL)-Rajarhat/Subhashgram 400kV S/C line of POWERGRID
- (iii) Jeerat (WBSETCL)-Barkeshwar (WBSETCL) 400kV S/C line of WBSETCL
- (iv) Jeerat (WBSETCL)-Kolaghat (WBSETCL) 400kV S/C line of WBSETCL

Under Construction:

- (v) LILO of Sagardighi-Subhashgram 400 kV S/c line at Jeerat (WBSETCL) as a part of ERSS-XV by POWERGRID

Planned:

- (vi) Jeerat (New)-Jeerat (WBSETCL) 400 kV D/c line (Quad) as a part of ERSS-XVIII to be implemented as ISTS under TBCB by POWERGRID Medinipur-Jeerat Transmission Ltd.

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2.10 In view of the above, members agreed for the following:

- (i) Dismantling of dead end towers and termination of existing lines mentioned at 2.1 (i), 2.1 (ii) of POWERGRID & 2.1 (iii), 2.1 (iv) of WBSETCL through GIS duct at the existing 400 kV Jeerat AIS S/s (WBSETCL) as ISTS.



- (ii) *The new lines mentioned at 2.1(v) and 2.1 (vi) can be directly terminated on separate double circuit towers at normal height (around 45 meters) to new GIS extension area.*
- (iii) *Further, it was also acknowledged that implementation of LILO of Sagardighi-Subhasgram 400 kV S/c line at Jeerat along with associated line bays shall get delayed due to addition of above mentioned GIS duct arrangement.”*

(c) The issue of carrying out additional work was discussed and decided in the 2nd meeting of the Empowered Committee (EC) held on 6.8.2018. In the said meeting, it was decided that the termination of 400 kV lines at Jeerat (WBSETCL) Sub-station under the ERSS-XV and ERSS-XVIII schemes shall be implemented by the Petitioner under the Regulated Tariff Mechanism (RTM). The relevant portion of minutes of meeting is extracted hereunder:

“4.3.4 Augmentation works at existing ISTS Sub-stations

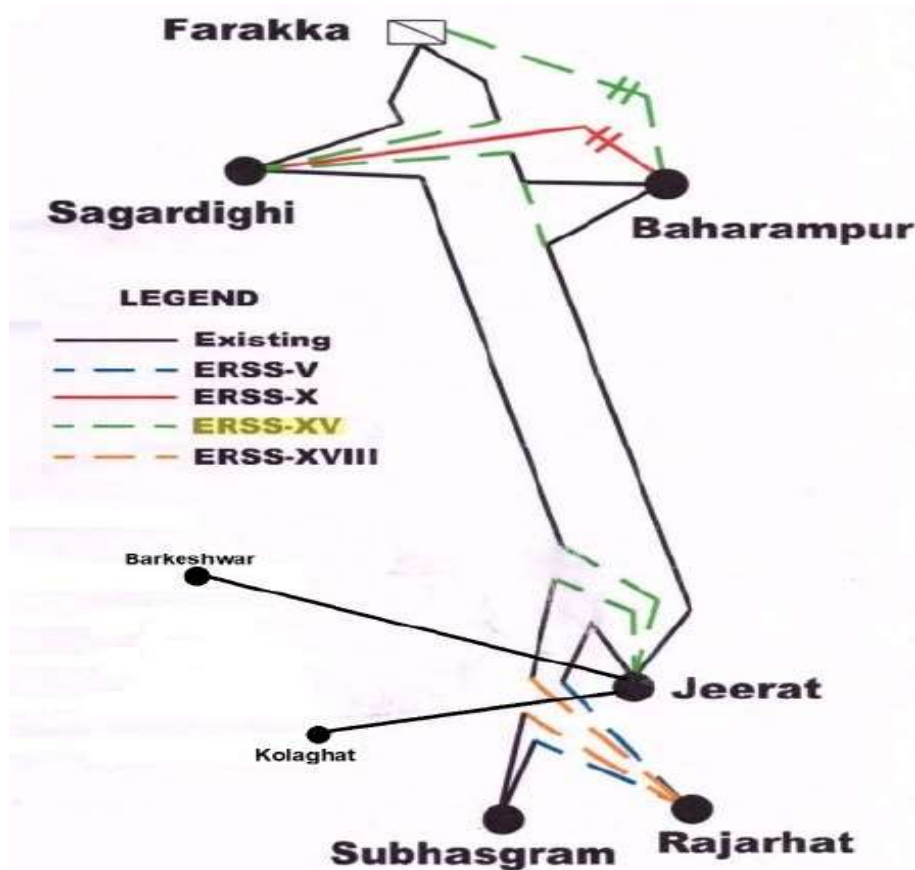
- (iv) *Others augmentation works to be implemented under RTM by POWERGRID:
 - b) *Termination of 400 kV lines at Jeerat (WBSETCL) Ss under the ERSS-XV & ERSS-XVIII schemes.”**

- (d) The issue of scope change and additional timeline was also recorded and noted in the 39th ERPC dated 17.11.2018.
- (e) Accordingly, the following works were added in the scope of the subject transmission project to be implemented by the Petitioner:

- (1) Dismantling of dead-end towers and termination of 4 numbers existing lines as mentioned above through GIS duct to the existing Jeerat (WBSETCL) Sub-station.
- (2) The new lines i.e. instant LILO line and TBCB line to be directly terminated through normal towers heights to new GIS extension area at Jeerat (WBSETCL) Sub-station.



- (f) The Petitioner has submitted the pictorial representation of the termination arrangement of various lines at Jeerat (WBSETCL) Sub-station which is as follows:



- (g) The Petitioner has summarised the revised scope of the transmission asset as follows:

- (i) LILO of Sagardighi-Subhashgram 400 kV S/C line
- (ii) 2 numbers 400 kV GIS line bays for termination of LILO of Sagardighi-Subhashgram 400 kV S/C line at Jeerat (WBSETCL) Sub-station
- (iii) Additional works as per deliberation in SCM/ERPCs i.e. dismantling of existing dead-end towers and termination of existing lines through GIS bus duct.

- (h) Further, the Petitioner has submitted that the works mentioned at (i) above, has been executed by the Petitioner whereas the works at (ii) and (iii) above were

executed through WBSETCL on deposit work basis as part of consultancy works.

ii. Time extension in completion schedule of ERSS-XV

(a) The matter was discussed in the 1st meeting of Eastern Region Standing Committee on Transmission (ERSCT) held on 16.7.2018, wherein it was decided that the modification/additional scope of work and termination of 400 kV lines at Jeerat (WBSETCL) Sub-station under the ERSS-XV and ERSS-XVIII schemes may require additional time. Hence, timeline of these schemes may be extended. The relevant portion of minutes of meeting is as follows:

4. Termination of 400 kV lines at Jeerat (WBSETCL) Sub-station under the ERSS-XV and ERSS-XVIII schemes

.....

4.3 *Since the work to be carried out under ISTS may not match the timeline of ERSS-XV & ERSS-XVIII schemes, representative of CTU requested to extend the completion of ERSS-XV & ERSS-XVIII schemes.*

4.4 *After deliberations, it was agreed that, after finalization of implementing agency for the work, a separate meeting would be held in CEA with CTU, POWERGRID, WBSETCL and implementing agency to discuss the extension of completion schedule of ERSS-XV & ERSS-XVIII schemes. Decision of the meeting will be put up before ERSCT for ratification.*

(b) Subsequently, in the 2nd meeting of Eastern Region Standing Committee on Transmission (ERSCT) held on 5.7.2019, it was proposed to revise the timeline of ERSS-XV scheme. After deliberations, the revised completion schedule of ERSS-XV was agreed as February, 2020 (i.e. 29.2.2020). The relevant portion of minutes of meeting is extracted as follows:

“2. Termination of 400 kV lines at Jeerat (WBSETCL) S/s under the ERSS-XV and ERSS-XVIII schemes

.....

2.3 *He further stated that in the 1st meeting of ERSCT held on 16.7.2018 it was also decided that “after finalisation of implementing agency for the work, a*



separate meeting in CEA with CTU, POWERGRID, WBSETCL and implementing agency will be held to discuss the extension of completion schedule of ERSS-XV & ERSS-XVIII schemes". In the 2nd meeting of ECT held on 06-08-2018, POWERGRID was intrusted with the works mentioned above at 2.2 (i) through RTM.

A meeting was held at CEA on 26-03-2019, wherein representative of CTU stated that the work has been awarded to JV of M/s Techno and M/s ABB in November 2018 with expected commissioning schedule of 15 months (i.e. Feb 2020) from award. He requested to approve revised completion schedule of ERSS-XV scheme as February 2020.

After deliberations, the revised completion schedule of ERSS-XV was agreed as February 2020."

- (c) In view of the above, the Petitioner has submitted that as per revised completion schedule of 29.2.2020, there is an overall time over-run of 480 days (w.r.t. revised SCOD) against the time over-run of 1178 days (w.r.t. original SCOD) of 2.4.2018 as per following details:

Asset Description	SCOD as per IA	Revised SCOD	COD	Delay w.r.t. revised SCOD
LILO of Sagardighi-Subhashgram 400 kV S/C line at Jeerat and 02 numbers 400 kV GIS line bays at Jeerat sub-station of West Bengal	2.4.2018	29.2.2020	23.6.2021	480 days (16 months)

iii. Shutdown issue (February, 2020 to March, 2020)

- (a) The Petitioner has submitted that there was a disruption of about one month in the execution of line as the requisite shutdown required for GIS bus duct could not be availed due to Madhyamik Parsiksha (Secondary Examination) of 2020 conducted by the West Bengal State Education Board that spanned from 18th February, 2020 to 13.3.2020. The Petitioner has submitted the copy of examination schedule issued by the West Bengal Board of Secondary Education.

iv. Worldwide Covid-19 pandemic (March, 2020 to June, 2020)

- (a) The Petitioner has submitted that the work was hampered due to onset of COVID-19 pandemic which impacted the work between March, 2020 to June,



2020. The Phase-I of Nationwide lockdown commenced w.e.f. 25.3.2020 which was finally lifted gradually from 1.6.2020 onwards and completely lifted w.e.f. 31.8.2020. Thus, the overall impact was about 3-4 months (end March, 2020 to June, 2020).

v. Shutdown issue (July, 2020 to June, 2021)

(a) After Covid-19 wave 1, the unlock process started in the month of July, 2020 in West Bengal and accordingly, WBSETCL applied for requisite shutdown approval from ERLDC. However, ERLDC denied the request of shutdown and held that the WBSETCL's 400 kV D/C Gokarna-Sagardighi transmission line must be completed before availing this shutdown. As per the Petitioner, the said line of WBSETCL was held up due to railway crossing shutdown issues and other payment issues with the Railways. After resolving railway crossing clearance issues, the 400 kV D/C Gokarna-Sagardighi transmission line of WBSETCL could be finally executed by the end of October, 2020.

(b) However, even after completion of Gokarna-Sagardighi transmission line, the shutdown could not be availed on regular basis as per requirement for carrying out various diversions and GIS duct charging purpose. The shutdown issue continued till completion of West Bengal assembly elections in May, 2021. Finally, the requisite shutdown was received on 19.6.2021 and the instant line was charged and declared under commercial operation w.e.f. 23.6.2021.

20. The Petitioner was directed to submit the chronological events leading to time over-run. In response, the Petitioner vide affidavit dated 31.3.2022 has reiterated its submissions made in the petition along with relevant documents. Further, the Petitioner



has submitted Form-2 which is as follows:

Sl. No.	Description of Work	Original Schedule (as planned)		Actual Achieved (as per actual)		Agency responsible and whether such time over-run was beyond the control of transmission licensee	Reason for delay/ Remarks
		Start Date	Completion Date	Start Date	Completion Date		
1	Investment Approval	2.4.2016	5.4.2016	5.4.2016	5.4.2016		No Delay
2	Forest Proposal/ Land Acquisition	Not Applicable					
3	LOA/Award-1	2.4.2016	2.6.2016	13.4.2016	11.5.2016	Unforeseen/ Uncontrollable reasons	No Delay. LOA was planned for issuance by 1-2 month from IA. The LOA for LILO line was issued timely as planned.
	LOA/Award-2	NA	NA	5.11.2018	5.11.2018		LOA-2 was awarded for additional works that had to be carried out due to space constraints. It was unforeseen at the FR/DPR stage hence no planned date can be mentioned for this. Note: Additional works were under scope of Petitioner but were carried out through consultancy works from WBSETCL, therefore LOA-2 was awarded by WBSETCL.
4	Supplies (Structures, Equipment etc.)	27.7.2016	30.11.2017	15.5.2016	31.12.2017	Unforeseen/ Uncontrollable reasons	Receipt of only minor supplies was delayed major supplies for LOA-I were timely.
5	Civil works/ Foundations/ Erection etc.	18.8.2016	15.11.2017	16.1.2019	30.9.2020	Unforeseen/ Uncontrollable reasons	Civil works or foundation works/ foundations and erections works were delayed as per planned schedule. The completion of civil works was affected by various issues of space constraints/shutdowns/ Covid-19 restriction etc.
6	Stringing (TL)	16.2.2017	28.2.2018	1.11.2020	30.12.2020	Unforeseen/ Uncontrollable reasons	Stringing was delayed as per planned schedule. The completion of civil works was affected by various issues of space constraints/shutdowns/ Covid-19 restrictions etc.
7	Testing and	1.3.2018	30.3.2018	19.5.2021	20.6.2021	Unforeseen/	T&C was delayed as per



	Commissioning		(revised to 20.2.2020)			Uncontrollable reasons	planned schedule. The completion of civil works got affected by various issues of space constraints/shutdowns/ Covid-19 restriction etc.
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21. The Petitioner has submitted that in view of the above stated events, the delay was beyond the control of the Petitioner and prayed to condone the delay in completion of transmission asset in line with Regulation 22(2) “uncontrollable factors” of the 2019 Tariff Regulations.

22. We have considered the submission of the Petitioner and have gone through the documents placed on record regarding time over-run. As per the IA dated 2.4.2016, the scheduled COD of the transmission project was 24 months. Accordingly, the original scheduled COD of the transmission project was 2.4.2018 against which the transmission asset was put into commercial operation on 23.6.2021 with a delay of 1178 days. The transmission asset consists of LILO of Sagardighi-Subhashgram 400 kV S/C line at Jeerat (WBSETCL) Sub-station and 2 numbers 400 kV GIS line bays at Jeerat sub-station of WBSETCL. The Petitioner has submitted that the transmission asset was delayed due to (i) space constraint at Jeerat Sub-station of WBSETCL, (ii) scope modification (addition) under ERSS-XV being approved at a later date, (iii) denial of shutdown due to Board examination, elections and (iv) COVID-19 Pandemic.

23. The Petitioner has submitted that during the course of execution of the transmission asset, it was found during December, 2016 that another scheme namely ERSS-XVIII was also being planned consisting of 400 kV D/C Jeerat (New)-Jeerat (WBSETCL) line under TBCB. It was observed that there was a constraint of space for termination of ongoing line namely, LILO of Sagardighi-Subhashgram 400 kV S/C line at Jeerat (WBSETCL) as a part of ERSS-XV by the Petitioner and the proposed TBCB



line as above, due to 4 numbers existing transmission lines emanating from Jeerat (WBSETCL) and connecting to Baharampur/Farakka and Rajarhat/Subhashgram Sub-stations of PGCIL and Barkeshwar and Kolaghat Sub-stations of WBSETCL. Accordingly, a joint inspection was carried out by a team of CEA, CTU, PFCCL, WBSETCL and PGCIL officials on 9.9.2016. Thereafter, the team met on 10.9.2016 and as decided during this meeting, a detailed survey was carried out by WBSETCL and report was submitted to CEA on 5.10.2016. It was expressed in the survey report that the crossing of existing 4 numbers lines by new lines is not feasible as it requires long tower extension parts as well as considerable space for maintaining required tower falling height. Again, a meeting of CEA, PGCIL and WBSETCL was held on 14.12.2016, wherein it was agreed that dismantling the crossing portion of the existing lines (ISTS and State lines) and termination of the existing lines through GIS bus duct would be appropriate proposal as the new lines can be directly terminated on a separate Double Circuit towers at normal height (about 45m) to new GIS extension area in Jeerat (WBSETCL) Sub-station. Subsequently, the Empowered Committee in its 2nd meeting held on 6.8.2018 approved that the additional scope shall be executed by PGCIL under RTM method. Meanwhile, it was expressed in the 1st Meeting of ERSCT dated 16.7.2018 that additional time may be required to carry out said modifications. Subsequently, during the 2nd meeting of ERSCT dated 5.7.2019, CTUIL stated that the additional work has been awarded in November, 2018 with expected commissioning schedule 15 months (February, 2020). Accordingly, in the 2nd meeting of ERSCT dated 5.7.2019, it was proposed to revise the timeline of ERSS-XV scheme and the revised completion schedule of ERSS-XV was agreed as February, 2020 (i.e. 29.2.2020). The relevant extracts of 2nd meeting of ERSCT dated 5.7.2019 portion is as follows of minutes of meeting is extracted hereunder as:



“2. Termination of 400 kV lines at Jeerat (WBSETCL) S/s under the ERSS-XV and ERSS-XVIII schemes

.....

2.3 He further stated that in the 1st meeting of ERSCT held on 16.7.2018 it was also decided that “after finalisation of implementing agency for the work, a separate meeting in CEA with CTU, POWERGRID, WBSETCL and implementing agency will be held to discuss the extension of completion schedule of ERSS-XV & ERSS-XVIII schemes”. In the 2nd meeting of ECT held on 06-08-2018, POWERGRID was entrusted with the works mentioned above at 2.2 (i) through RTM.

2.4 A meeting was held at CEA on 26-03-2019, wherein representative of CTU stated that the work has been awarded to JV of M/s Techno and M/s ABB in November 2018 with expected commissioning schedule of 15 months (i.e. Feb 2020) from award. He requested to approve revised completion schedule of ERSS-XV scheme as February 2020.

2.5 After deliberations, the revised completion schedule of ERSS-XV was agreed as February 2020.”

24. Taking into consideration of the approval of the 2nd meeting of ERSCT dated 5.7.2019, the revised scheduled COD of the transmission asset has been considered as 29.2.2020. It is further observed that as per the IDC statement submitted by the Petitioner, the Petitioner has infused the funds from 10.8.2018 i.e. after approval of scope modification under ERSS-XV.

25. As per the revised SCOD of 29.2.2020, the commercial operation of the instant transmission asset was declared with a time-over-run of 480 days. The Petitioner has submitted that the delay of 480 days is due to denial of shut down multiple times and Covid-19 pandemic.

26. The Petitioner faced delay due to multiple denial of shutdown requests. In the first instance the delay due to deferred shutdown on account of Secondary Examination conducted by West Bengal State Education Board from 18.2.2020 to 13.3.2020 (24 days) affected the execution of transmission asset. The time over-run of 24 days on account of shutdown issues was beyond the control of the Petitioner and



the same has been condoned.

27. The Petitioner has submitted that there was a delay on account of COVID-19 Pandemic. It is observed that the Phase-I of Nationwide lockdown commenced w.e.f. 25.3.2020 which was gradually lifted from 1.6.2020 onwards and completely lifted w.e.f. 31.8.2020. We are aware that Government of India did allow a time extension up to 5 months from 25.3.2020 to 24.8.2020 on account of COVID-19 for the projects under implementation as on the date of lockdown i.e. 25.3.2020. However, the Petitioner has claimed that the work has been affected between March, 2020 to June, 2020. Hence, we hold that the delay between 25.3.2020 to 1.6.2020 (68 days) on account of COVID-19 affected the execution of transmission asset. The time over-run of 68 days on account of COVID-19 Pandemic was beyond the control of the Petitioner.

28. In another instance of shutdown related issues, ERLDC during July, 2020 held that WBSETCL's 400 kV D/C Gokarna-Sagardighi line must be completed before availing the shutdown for carrying out various diversions and GIS duct charging purpose. As per the Petitioner, the said line of WBSETCL was held up due to Railway crossing shutdown issues and could be finally executed by the end of October, 2020. Thereafter, the shutdown was further denied due to completion of West Bengal Assembly Election in May 2021. Finally, the requisite shutdown was received on 19.6.2021 and the instant line was charged and declared under commercial operation w.e.f. 23.6.2021. Therefore, the delay due to deferred shutdown on account of non-completion of 400 kV D/C Gokarna-Sagardighi line and West Bengal Assembly Elections etc. from 1.7.2020 to 19.6.2021 (353 days) affected the execution of transmission asset. The time over-run of 353 days on account of shutdown issues was beyond the control of the Petitioner.



29. The summary of time over-run condoned/not condoned is as follows:

SCOD as per IA	Revised SCOD as per 2 nd ERSCT	Actual COD	Time over-run	Time over-run condoned	Time over-run not condoned
2.4.2018	29.2.2020	23.6.2021	480 days	480 days	Nil

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

30. The Petitioner has claimed IDC in respect of the transmission asset and has submitted the Auditor's Certificate dated 6.8.2021 in support of the same. The Petitioner has submitted the statement showing IDC claim, discharge of IDC liability as on date of commercial operation and thereafter as follows:

(₹ in lakh)			
IDC as per Auditor's Certificate	IDC discharged upto COD	IDC discharged during 2021-22	IDC discharged during 2022-23
550.95	424.84	118.34	7.77

31. We have considered the submissions of the Petitioner. The time over-run in execution of the transmission asset has been condoned. Accordingly, the IDC on cash basis up to the COD has been worked out on the basis of the loan details given in the statement showing discharge of IDC and Form-9C for the transmission asset. The IDC claimed and considered as on COD and summary of discharge of IDC liability up to COD and thereafter for the purpose of tariff determination subject to revision at the time of truing up is as follows:

(₹ in lakh)					
IDC as per Auditor's Certificate	IDC disallowed due to computational error	IDC allowed	IDC discharged as on COD	IDC discharged during	
				2021-22	2022-23
550.95	25.74	525.21	399.41	118.02	7.77

32. The Petitioner has claimed IEDC for the transmission asset as per Auditor's Certificate dated 6.8.2021. The Petitioner has submitted that the entire IEDC



mentioned in the Auditor Certificate is on cash basis and was paid up to the date of commercial operation. As the time over-run for transmission asset has been fully condoned, there is no dis-allowance of IEDC. The IEDC claimed as per Auditor's Certificate, IEDC considered and discharged up to COD is as follows:

(₹ in lakh)

IEDC claimed as per Auditor's certificate (A)	IEDC disallowed due to time over-run not condoned (B)	IEDC allowed (A-B)
92.23	0.00	92.23

Initial Spares

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

“(d) Transmission System

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

34. The Petitioner has claimed the following Initial Spares:

Particulars	Plant and Machinery Cost (₹ in lakh)	Initial Spares Claimed		Ceiling limit as per Regulations (in %)
		Amount (₹ in lakh)	Percentage (in %)	
	A	B		C
Transmission Line	703.74	6.00	0.85	1.00
Sub-station (GIS)	4785.78	147.03	3.07	7.00
PLCC	120.98	3.63	3.00	3.50

35. Further, the Petitioner in Form-13 has submitted the following details of Initial Spares:



Particulars	Plant & Machinery Cost up to cut-off date (excluding IDC and IEDC) (₹ in lakh)	Initial Spares Claimed (₹ in lakh)	Ceiling (in %)
Transmission Line	697.74	6.00	1.00
Sub-station (GIS)	4756.10	150.66	7.00

36. We have considered the submissions of the Petitioner. The Petitioner has claimed Initial Spares separately for PLCC. The Commission *vide* order dated 24.1.2021 in Petition No. 126/TT/2020 has already held that PLCC to be part of sub-station. Therefore, the Initial Spares have been computed by combining the cost of both PLCC and sub-station and allowed as per the norms specified for sub-station in the 2019 Tariff Regulations. The initial spares allowed for the transmission asset are as follows:

Particulars	Plant and Machinery Cost (excluding IDC and IEDC, land cost & cost of Civil Works) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2019 Tariff Regulations (in %)	Initial Spares allowable (₹ in lakh)	Initial spares disallowed (₹ in lakh)	Initial Spares allowed (₹ in lakh)
	A	B	C	$D = \frac{(A-B) \times C}{100-C}$	E=B-D	
Transmission Line	697.74	6.00	1	6.99	Nil	6.00
Sub-station (GIS)	4756.10	150.66	7	346.65	Nil	150.66

37. Since the Petitioner's claim of Initial Spares is within the ceiling limit, the same is allowed.

Capital Cost allowed as on COD

38. Accordingly, the capital cost allowed as on COD is as follows:



(₹ in lakh)

Capital Cost claimed as on COD (as per Auditor's Certificate) (A)	IDC disallowed due to computational errors (B)	Undischarged IDC (C)	Capital cost considered as on COD (D) = (A-B-C)
6082.00	25.74	125.79	5930.46

Additional Capital Expenditure ("ACE")

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

"24. Additional Capitalization within the original scope and up to the cut-off date:

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

- (a) Undischarged liabilities recognized to be payable at a future date;*
- (b) Works deferred for execution;*
- (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 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;*
- (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 cut-off date may be admitted by the Commission, subject to prudence check:*

- a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*
- b) Change in law or compliance of any existing law;*
- c) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- d) Liability for works executed prior to the cut-off date;*
- e) Force Majeure events;*



- f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and
g) Raising of ash dyke as a part of ash disposal system.

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

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

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

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

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

40. The Petitioner has submitted that the ACE incurred/ projected to be incurred for the transmission asset is mainly on account of balance/ retention payments within the cut-off date and is claimed under Regulation 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations. The Petitioner has claimed the following capital cost as on 31.3.2024:

Apportioned Approved cost as per FR	Capital cost as on COD	Projected ACE				Capital cost as on 31.3.2024
		2019-20	2020-21	2021-22	2022-23	
7453.67	6082.00	-	-	100.00	71.68	6253.68

41. The Petitioner, in response to TV letter, submitted that no ACE is expected beyond 2022-23 for the transmission asset. The Petitioner vide affidavit dated 31.3.2022 has submitted the package-wise and vendor-wise break-up in the liability flow statement. We have considered the submissions of the Petitioner. 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. Accordingly, the ACE allowed for 2019-24 period, subject to truing up, is as follows:



(₹ in lakh)			
ACE			
2019-20	2020-21	2021-22	2022-23
-	-	100.00	71.68

42. The capital cost considered for the transmission asset for 2019-24 tariff period is as follows:

(₹ in lakh)			
Capital Cost as on COD	ACE 2019-24		Total Capital Cost as on 31.3.2024
	2021-22	2022-23	
5930.46	218.02	79.45	6227.94

Debt-Equity Ratio

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

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

Provided that:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

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

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

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



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

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

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

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

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

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

Funding	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	4151.32	70.00	208.23	70.00	4359.56	70.00
Equity	1779.14	30.00	89.24	30.00	1868.38	30.00
Total	5930.46	100.00	297.47	100.00	6227.94	100.00

Depreciation

45. 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.”

46. We have considered the submissions of the Petitioner. The IT equipment has been considered as part of the Gross Block and depreciated using Weighted Average Rate of Depreciation (WAROD). WAROD has been worked out and placed as Annexure-I considering the depreciation rates of IT and non-IT assets as specified 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 for the transmission asset for the 2019-24 tariff period is as follows:

(₹ in lakh)				
	Particulars	2021-22 (Pro-rata 282 days)	2022-23	2023-24
A	Opening Gross Block	5930.46	6148.49	6227.94
B	ACE	218.02	79.45	0.00
C	Closing Gross Block (A+B)	6148.49	6227.94	6227.94
D	Average Gross Block (A+C)/2	6039.47	6188.21	6227.94
E	Average Gross Block (90% depreciable assets)	6032.65	6181.32	6221.04
F	Average Gross Block (100% depreciable assets)	6.82	6.90	6.90



	Particulars	2021-22 (Pro-rata 282 days)	2022-23	2023-24
G	Depreciable value (excluding IT equipment and software) (E*90%)	5429.39	5563.18	5598.93
H	Depreciable value of IT equipment and software (F*100%)	6.82	6.90	6.90
I	Total Depreciable Value (G+H)	5436.21	5570.08	5605.83
J	Weighted average rate of Depreciation (WAROD) (in %)	5.31	5.31	5.31
K	Elapsed useful life at the beginning of the year (Year)	0.00	0.00	1.00
L	Balance useful life at the beginning of the year (Year)	26.00	26.00	25.00
M	Depreciation during the year (D*J)	247.85	328.67	330.77
N	Cumulative Depreciation at the end of the year	247.85	576.52	907.29
O	Remaining Aggregate Depreciable Value at the end of the year	5188.36	4993.56	4698.54

Interest on Loan (“IoL”)

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

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

(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of 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”.

48. The weighted average rate of IoL (WAROI) has been considered on the basis of the rates prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up. The IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations for the transmission asset and it is as follows:

(₹ in lakh)				
	Particulars	2021-22 (Pro-rata 282 days)	2022-23	2023-24
A	Gross Normative Loan	4151.32	4303.94	4359.56
B	Cumulative Repayments up to Previous Year	0.00	247.85	576.52
C	Net Loan-Opening (A-B)	4151.32	4056.09	3783.03
D	Addition due to ACE	152.62	55.61	0.00
E	Repayment during the year	247.85	328.67	330.77
F	Net Loan-Closing (C+D-E)	4056.09	3783.03	3452.26
G	Average Loan (C+F)/2	4103.71	3919.56	3617.65
H	Weighted Average Rate of Interest on Loan (in %)	7.05	7.05	7.05
I	Interest on Loan (G*H)	223.67	276.16	255.10

Return on Equity (“RoE”)

49. 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 cut-off 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:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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:

$$\text{Rate of return on equity} = 15.50 / (1 - 0.2155) = 19.758\%$$

(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.”

50. The Petitioner has submitted that MAT rate is applicable to the Petitioner’s company. Accordingly, the MAT rate applicable in the year 2019-20 has been considered for the purpose of RoE, which shall be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. The RoE allowed in respect of the transmission asset is as follows:



(₹ in lakh)

	Particulars	2021-22 (Pro-rata 282 days)	2022-23	2023-24
	Return on Equity			
A	Opening Equity	1779.14	1844.55	1868.38
B	Addition due to ACE	65.41	23.83	0.00
C	Closing Equity (A+B)	1844.55	1868.38	1868.38
D	Average Equity (A+C)/2	1811.84	1856.46	1868.38
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472	17.472	17.472
G	Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782
H	Return on Equity (Pre-tax) (D*G)	262.92	348.68	350.92

Operation & Maintenance Expenses (“O&M Expenses”)

51. The O&M Expenses claimed by the Petitioner for the various elements included in the transmission asset for 2019-24 tariff period are as follows:

Particulars	2021-22 (Pro-rata 282 days)	2022-23	2023-24
Sub-station Bays (Numbers)			
400 kV (GIS): Jeerat : Sagardighi Bay	1	1	1
400 kV (GIS): Jeerat : Subhasgram Bay	1	1	1
Total	2	2	2
Norm (₹ lakh/bay)			
400 kV GIS	24.115	24.962	25.837
Total Sub-station Bays (A) (₹ in lakh)	37.26	49.92	51.67
Transmission Line (km)			
LILO of Sagardighi - Subhasgram 400 kV S/C Line at Jeerat (WBSETCL) Sub-station	1.754	1.754	1.754
Norms (₹ lakh/km)			
Double Circuit (Twin & Triple Conductor)	0.944	0.977	1.011
Total Transmission Line (B) (₹ in lakh)	1.28	1.71	1.77
Total O&M Expenses (C)= (A)+(B) (₹ in lakh)	38.54	51.64	53.45

52. Regulation 35(3)(a) of the 2019 Tariff Regulations provides as follows:

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

Particulars	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24
Norms for sub-station Bays (₹ Lakh per bay)					



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)</i>	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

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

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

(c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification.”

53. We have considered the submissions of the Petitioner. The O&M Expenses are



worked out for various elements of the transmission asset as per norms specified in the 2019 Tariff Regulations and the same are as follows:

Particulars	2021-22 (Pro-rata 282 days)	2022-23	2023-24
Sub-station Bays (Numbers)			
400 kV (GIS): Jeerat : Sagardighi Bay	1	1	1
400 kV (GIS): Jeerat : Subhasgram Bay	1	1	1
Total	2	2	2
Norm (₹ lakh/bay)			
400 kV GIS	24.115	24.962	25.837
Total Sub-station Bays (A) (₹ in lakh)	37.263	49.924	51.674
Transmission Line (km)			
LILO of Sagardighi - Subhasgram 400 kV S/C Line at Jeerat (WBSETCL) Sub-station	1.754	1.754	1.754
Norms (₹ lakh/km)			
Double Circuit (Twin & Triple Conductor)	0.944	0.977	1.011
Total Transmission Line (B) (₹ in lakh)	1.279	1.714	1.773
Total O&M Expenses (C)= (A)+(B) (₹ in lakh)	38.54	51.64	53.45

Interest on Working Capital (“IWC”)

54. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations provide 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. **Definition** - 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;”

55. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2021. The Petitioner has considered the Rate of Interest (RoI) as 10.50%.

56. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The RoI for 2021-22 onwards has been considered as 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points). The components of the working capital and interest allowed are as follows:

(₹ in lakh)				
	Particulars	2021-22 (Pro-rata 282 days)	2022-23	2023-24
	Interest on Working Capital			
A	Working Capital for O&M Expenses (O&M expenses for one month)	4.16	4.30	4.45
B	Working Capital for Maintenance Spares (15% of O&M expenses)	7.48	7.75	8.02
C	Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	125.12	125.71	123.51
D	Total Working Capital (A+B+C)	136.76	137.75	135.98
E	Rate of Interest for working capital (in %)	10.50	10.50	10.50
F	Interest of working capital (D*E)	11.09	14.46	14.28

Annual Fixed Charges for 2019-24 Tariff Period

57. The transmission charges allowed in respect of the transmission asset for 2019-24 tariff period is as follows:



(₹ in lakh)

	Particulars	2021-22 (Pro-rata 282 days)	2022-23	2023-24
A	Depreciation	247.85	328.67	330.77
B	Interest on Loan	223.67	276.16	255.10
C	Return on Equity	262.92	348.68	350.92
D	O&M Expenses	38.54	51.64	53.45
E	Interest on Working Capital	11.09	14.46	14.28
	Total (A+B+C+D+E)	784.08	1019.61	1004.51

Filing Fee and Publication Expenses

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

Licence Fee and RLDC Fees and Charges

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

Goods and Services Tax

60. 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.



61. 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

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

63. We have considered the above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on projected basis for 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

64. The Petitioner has sought reimbursement of capital spares at the end of 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

65. The billing, collection, and disbursement of transmission charges approved in this order for the transmission asset shall be in accordance with the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.



66. To summarise:

(a) AFC allowed in respect of the transmission asset for 2019-24 tariff period in this order are as follows:

Particulars	(₹ in lakh)		
	2021-22 (Pro-rata 282 days)	2022-23	2023-24
AFC	784.08	1019.61	1004.51

67. The Annexure-I to this order form part of the order.

68. This order disposes of Petition No. 9/TT/2022 in terms of the above discussions and findings.

sd/-
(Arun Goyal)
Member

sd/-
(I.S. Jha)
Member



Annexure - I

2019-24 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	ACE		Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations		
		2021-22 (₹ in lakh)	2022-23 (₹ in lakh)			2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Transmission Line	580.66	111.56	72.44	764.66	5.28	33.60	38.46	40.37
Sub-Station	5225.08	103.99	6.85	5335.91	5.28	278.63	281.56	281.74
PLCC	117.97	2.35	0.15	120.47	6.33	7.54	7.62	7.63
IT Equipment and software	6.76	0.13	0.01	6.90	15.00	1.02	1.03	1.04
Total	5930.46	218.02	79.45	6227.94		320.80	328.67	330.77
				Average Gross Block (₹ in lakh)		6039.47	6188.21	6227.94
				Weighted Average Rate of Depreciation (in %)		5.31	5.31	5.31

