

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 255/TT/2021

Coram:

**Shri I. S. Jha, Member
Shri Arun Goyal, Member
Shri P. K. Singh, Member**

Date of Order: 08.02.2023

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and determination of transmission tariff from COD to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of Asset-I: 02 nos. 220 kV line bays at Rajarhat GIS, Asset-II: 01 nos. 400/220 kV 500 MVA ICT (02nd) and associated bays at Rajarhat GIS, Asset-III: Purnea-Faraka Portion of 400 kV D/C Rajarhat-Purnea Line and Asset-IV: Rajarhat-Gokarna Portion of 400 kV D/C Rajarhat-Purnea Line and associated bays along with 02x80 MVAR line reactors at Rajarhat GIS under "Eastern Region Strengthening Scheme V (ERSS-V)" in the Eastern Region.

And in the matter of:

Power Grid Corporation of India Limited,
SAUDAMINI, Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

.....Petitioner

Versus

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,
Calcutta-700 091.
3. Grid Corporation of Orissa Limited,
Shahid Nagar, Bhubaneswar-751 007.
4. Damodar Valley Corporation,
DVC Tower, Maniktala,



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Civic Centre, VIP Road, Calcutta-700 054.

5. Power Department,
Government of Sikkim, Gangtok-737 101.
6. Jharkhand State Electricity Board,
In Front of Main Secretariat,
Doranda, Ranchi-834 002.
7. West Bengal State Electricity Transmission Company Limited,
Bidyut Bhawan, Bidhan Nagar,
Block DJ, Sector-II, Salt Lake City,
Calcutta-700 091.

...Respondent(s)

For Petitioner: Shri S.S. Raju, PGCIL
Shri A.K. Verma, PGCIL
Shri V.P. Rastogi, PGCIL
Shri D.K Biswal, PGCIL

For Respondent: None

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”) of the period from COD to 31.3.2024 in respect of the following transmission assets under “Eastern Region Strengthening Scheme V (ERSS-V)” in the Eastern Region(hereinafter referred to as the “transmission project”):

Asset-I: 02 numbers 220 kV line bays at Rajarhat GIS;

Asset-II: 01 numbers 400/220 kV 500 MVA ICT (02nd) and associated bays at Rajarhat GIS;

Asset-III: Purnea-Farraka Portion of 400 kV D/C Rajarhat-Purnea Line; and

Asset-IV: Rajarhat-Gokarna Portion of 400 kV D/C Rajarhat-Purnea Line and associated bays along with 02x80 MVAR line reactors at Rajarhat GIS.



2. The Petitioner has made the following prayers in the instant 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 as invoked for the subject Asset-I as 16.06.2019 and allow full tariff as claimed under instant petition.*
- 4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 as per para 8.3 above for respective block.*
- 5) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.*
- 6) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
- 7) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.*
- 8) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*
- 9) Allow interim tariff in accordance with Regulation 10(3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.
and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice"*

Background

3. The facts of the case succinctly stated as follows:

- a. The Investment Approval (IA) and expenditure sanction of the transmission project was accorded by Board of Directors (BoD) of the Petitioner's Company in the meeting held on 23.10.2013, and communicated vide Memorandum No. C/CP/ESV dated 31.10.2013 at an estimated cost of



₹136452.00 lakh including an IDC of ₹5911.00 lakh based on August, 2013 price level.

- b. The Revised Cost Estimate (RCE) approval was accorded by the BoD of the Petitioner's Company in the meeting dated 29.3.2017, and communicated vide Memorandum No.C/CP/PA1617-03-0AC-RCE017 dated 30.3.2017 for ₹189141.00 lakh including an IDC of ₹13969.00 lakh based on December, 2016 price level.
- c. The scope of work covered under the transmission project broadly includes as follows:

Transmission Lines

- (i) Rajarhat-Purnea 400 kV D/C line (with triple snowbird conductor) with LILO of one circuit at Gokarna (WBSETCL) and other circuit at Farakka (NTPC)
- (ii) LILO of Subhashgram-Jeerat 400 kV S/C line at Rajarhat.

Sub-station

- (i) Establishment of new 400/220 kV, 2x500 MVA Gas insulated Sub-station at Rajarhat in West Bengal.
- (ii) Extension of 400/220 kV Purnea (POWERGRID) Sub-station.
- (iii) Extension of 400 kV Gokarna (WBSETCL), Farakka (NTPC) and Chaibasa (POWERGRID) Sub-stations

Reactive Compensation

S. No	Transmission Line	From End	To End
1	Rajarhat- Farakka S/C line	1x80 MVAr (Switchable)	1x80 MVAr (Switchable)
2	Rajarhat – Gokarna S/C	1x80 MVAr (Switchable)	0
3	Purnea – Gokarna S/C	1x80 MVAr (Switchable)	0
4	Purnea-Farakka S/C	1x80 MVAr (Switchable)	0



Bus Reactor

- (i) 2x125 MVAR at Rajarhat;
- (ii) 1x80 MVAR at Gokarna

d. The details of the transmission assets covered under the transmission project are as follows:

Sl. No	Name of Asset	COD	Remarks
1	Faraka-Gokarna Portion of 400 kV D/C Rajarhat-Purnea Line including LILO at Farakka and Gokarna and associated line bays	31.3.2017 (actual)	Covered under Petition No. 212/TT/2020 (true- up of Petition No. 44/TT2017).
2	1X80 MVAR bus reactor along with associated bays at Gokarna Sub-station and 1X80 MVAR Switchable line reactor alongwith associated bays at Farakka Sub-station	30.4.2017 (actual)	
3	02 numbers of 400 kV Line bays for termination of LILO of 02 nd Ckt of Jamshedpur Rourkela 400 kV Line at Chaibasa Sub-station	22.11.2016 (actual)	
4	LILO of 400 kV S/C Subhasgram–Jeerat transmission line and associated bays at Rajarhat, 01 number 400/220 kV 500 MVA ICT (1st) and associated bays along with 04 numbers 220 kV line bays at Rajarhat GIS	3.2.2019 (actual)	Covered under Petition No. 462/TT/2020.
5	02 numbers 400 kV 80 MVAR Switchable Line Reactors (charged as Bus Reactors) along with associated bays at 400 kV Purnea Sub-station#	1.11.2018 (actual)	
6	125 MVAR Bus Reactor (1st) and associated bay at Rajarhat GIS	24.3.2019 (actual)	
7	125 MVAR Bus Reactor (2 nd) and associated bay at Rajarhat GIS	31.3.2019 (actual)	
8	Asset-I: 02 numbers 220 kV line bays* at Rajarhat GIS	16.6.2019 (invoked)	Covered under instant petition
9	Asset-II: 01 numbers 400/220 kV 500 MVA ICT (02 nd) and associated bays at Rajarhat GIS	18.8.2019 (actual)	
10	Asset-III: Purnea-Farraka Portion of 400 kV D/C Rajarhat-Purnea Line**	12.11.2019 (actual)	
11	Asset-IV: Rajarhat-Gokarna Portion of 400 kV D/C Rajarhat-Purnea Line and associated bays along with 02x80 MVAR line reactors at Rajarhat GIS***	16.7.2020 (actual)	

*Downstream lines for WBSETCL's 220 kV Rajarhat – New Town AA-II line

** Associated line bays at Purnea end already filed in Petition No. 462/TT/2020 and associated line bays at Farakka end already filed in Petition No. 212/TT/2020.

*** Associated line bays at Gokarna end already filed in Petition No. 212/TT/2020.

e. As per IA dated 23.10.2013, the transmission assets were scheduled to be put into commercial operation within 30 months from the date of IA i.e. by 23.4.2016. The details of the transmission assets including scheduled



commercial operation date (SCOD), date of commercial operation (COD) and time over-run are as follows:

Assets	SCOD	COD	Time over-run
Asset-I	23.4.2016	16.6.2019	1150 days
Asset-II		18.8.2019	1213 days
Asset-III		12.11.2019	1299 days
Asset-IV		16.7.2020	1546 days

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

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

6. The hearing in this matter was held on 26.7.2022 through video conference and the order was reserved.

7. This order is issued considering the submissions made by the Petitioner in the petition vide affidavit dated 17.11.2020, and affidavit dated 20.7.2022.

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 Petitioner has claimed the following transmission charges in respect of the transmission assets for 2019-24 tariff period:



Asset-I

(₹ in lakh)

Particulars	2019-20 (Pro-rata 290 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	43.00	59.17	60.49	60.49	60.49
Interest on Loan	39.92	51.36	48.23	43.75	39.27
Return on Equity	44.74	61.67	63.08	63.08	63.08
Interest on Working Capital	3.01	4.02	4.06	4.05	4.03
O&M Expenses	24.97	32.62	33.77	34.94	36.18
Total	155.64	208.84	209.63	206.31	203.05

Asset-II

(₹ in lakh)

Particulars	2019-20 (Pro-rata 227 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	107.96	184.34	188.30	188.30	188.30
Interest on Loan	113.86	182.75	171.74	156.25	140.76
Return on Equity	114.35	195.33	199.55	199.55	199.55
Interest on Working Capital	10.93	18.30	18.60	18.74	18.82
O&M Expenses	134.75	225.11	233.00	241.43	249.43
Total	481.85	805.83	811.19	804.27	796.86

Asset-III

(₹ in lakh)

Particulars	2019-20 (Pro-rata 141 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	667.65	1913.18	2117.58	2212.59	2260.10
Interest on Loan	689.70	1871.82	1927.97	1862.60	1732.92
Return on Equity	712.49	2041.67	2259.79	2361.19	2411.89
Interest on Working Capital	33.36	93.89	101.32	103.51	102.98
O&M Expenses	51.33	137.94	142.78	147.77	152.91
Total	2154.53	6058.50	6549.44	6687.66	6660.80

Asset-IV

(₹ in lakh)

Particulars	2020-21 (Pro-rata 259 days)	2021-22	2022-23	2023-24
Depreciation	2444.98	3503.53	3525.05	3525.05
Interest on Loan	1735.05	2283.92	2077.65	1870.00
Return on Equity	2608.94	3746.21	3772.28	3772.28
Interest on Working Capital	103.75	146.14	144.32	141.47
O&M Expenses	203.01	296.08	306.37	316.99
Total	7095.73	9975.88	9825.67	9625.79



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

Asset-I

(₹ in lakh)

Particulars	2019-20 (Pro-rata 290 days)	2020-21	2021-22	2022-23	2023-24
O&M Expenses	2.63	2.72	2.81	2.91	3.02
Maintenance Spares	4.73	4.89	5.07	5.24	5.43
Receivables	24.15	25.75	25.84	25.43	24.97
Total Working Capital	31.51	33.36	33.72	33.58	33.42
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	3.01	4.02	4.06	4.05	4.03

Asset-II

(₹ in lakh)

Particulars	2019-20 (Pro-rata 227 days)	2020-21	2021-22	2022-23	2023-24
O&M Expenses	18.11	18.76	19.42	20.12	20.79
Maintenance Spares	32.59	33.77	34.95	36.21	37.41
Receivables	95.52	99.35	100.01	99.16	97.97
Total Working Capital	146.22	151.88	154.38	155.49	156.17
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	10.93	18.30	18.60	18.74	18.82

Asset-III

(₹ in lakh)

Particulars	2019-20 (Pro-rata 141 days)	2020-21	2021-22	2022-23	2023-24
O&M Expenses	11.10	11.50	11.90	12.31	12.74
Maintenance Spares	19.99	20.69	21.42	22.17	22.94
Receivables	687.62	746.94	807.47	824.50	818.95
Total Working Capital	718.71	779.13	840.79	858.98	854.63
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	33.36	93.89	101.32	103.51	102.98



Asset-IV**(₹ in lakh)**

Particulars	2020-21 (Pro-rata 259 days)	2021-22	2022-23	2023-24
O&M Expenses	23.84	24.67	25.53	26.42
Maintenance Spares	42.91	44.41	45.96	47.55
Receivables	1232.85	1229.90	1211.38	1183.50
Total Working Capital	1299.60	1298.98	1282.87	1257.47
Rate of Interest (in %)	11.25	11.25	11.25	11.25
Interest on Working Capital	103.75	146.14	144.32	141.47

Data of Commercial Operation (“COD”)

11. The Petitioner has claimed the COD of Asset-I as 16.6.2019 under Regulation 5(2) of the 2019 Tariff Regulations as the associated transmission asset under the scope of WBSETCL have not been put into commercial operation.

12. The Petitioner has claimed actual dates of commercial operation in respect of Asset-II as 18.8.2019, for Asset-III as 12.11.2019 and for Asset-IV as 16.7.2020.

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.”*

14. We have considered the submissions of the Petitioner. As per Regulation 5(2) of the 2019 Tariff Regulations, the COD of a transmission system or an element thereof may be declared if the said system has been prevented from being put to regular service for reasons not attributable to the transmission licensee. In terms of Regulation 5(2), the date of commercial operation for transmission system shall be the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service.

15. In the instant case, the Petitioner has sought approval of COD of Asset-I as 16.6.2019 as its associated downstream asset under the scope of WBSETCL was not ready because of which the Petitioner was not able to declare the COD of Asset-I. However, there was no response from WBSETCL on the Petitioner's plea for approval of the COD of Asset-I under Regulation 5(2) of the 2019 Tariff Regulations and the status of the associated downstream assets under its scope. Accordingly, the Respondents, including WBSETCL, were directed to file their reply by 16.8.2022, and the Petitioner to file rejoinder, if any, by 23.8.2022. It was also further observed that if no reply and rejoinder are received within the specified time, the matter will be decided on the basis of the information already on record.



16. In spite of a clear direction, WBSETCL has not filed any reply. Accordingly, we deal with Petitioner's plea for approval of COD of Asset-I on the basis of the information on record.

17. The Petitioner has sought declaration of COD for the Asset-I as 16.6.2019 under the Regulation 5(2) of the 2019 Tariff Regulations. In support of COD of Asset-I, the Petitioner has submitted the CEA Energisation Certificates dated 30.1.2019 under Regulation 43 of Central Electricity Authority (CEA) (Measures relating to Safety and Electric Supply) Regulations, 2010, 'No-load' RLDC Charging Certificate dated 24.5.2019, self-declaration COD letter dated 12.4.2019 and CMD certificate as required under the Grid Code. Taking into consideration the CEA Energisation Certificate, 'No-load' RLDC Charging Certificate, CMD Certificate, COD of Asset-I is approved as 16.6.2019 under Regulation 5(2) of the 2019 Tariff Regulations.

18. In support of actual COD of Asset-II, the Petitioner has submitted CEA Energisation Certificates dated 14.8.2019 under Regulation 43 of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010, RLDC Charging Certificate dated 2.10.2019, self-declaration of COD letter dated 17.8.2019 and CMD certificate as required under the Grid Code.

19. In support of actual COD of Asset-III, the Petitioner has submitted CEA Energisation Certificates dated 3.6.2019 under Regulation 43 of Central Electricity Authority (CEA) (Measures relating to Safety and Electric Supply) Regulations, 2010, RLDC Charging Certificate dated 6.1.2020, self-declaration COD letter dated 6.12.2019 and CMD certificate as required under the Grid Code.



20. In support of actual COD of Asset-IV, the Petitioner has submitted CEA Energisation Certificates dated 9.7.2020 under Regulation 43 of Central Electricity Authority (CEA) (Measures relating to Safety and Electric Supply) Regulations, 2010, RLDC Charging Certificate dated 1.9.2020, self-declaration COD letter dated 21.7.2020 and CMD certificate as required under the Grid Code.

21. In view of the CEA Energisation Certificates, RLDC Charging Certificates, CMD Certificates as required under the Grid Code, COD of Asset-II, Asset-III and Asset-IV are approved as 18.8.2019, 12.11.2019 and 16.7.2020 respectively.

Capital Cost

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

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

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

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) *Capitalised initial spares subject to the ceiling rates in accordance with these regulations;*
- (f) *Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) *Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
- (i) *Capital expenditure on account of ash disposal and utilization including*



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



Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be de-capitalised only after its redeployment;

Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets.

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

23. The Petitioner vide Auditor’s Certificate dated 29.6.2020 has claimed capital cost incurred as on COD and Additional Capital Expenditure (ACE) projected to be incurred in respect of the transmission assets and the same are as follows:

(₹ in lakh)

Assets	FR apportioned approved cost	RCE apportioned approved cost	Expenditure up to COD	Projected ACE				Estimated completion cost
				2019-20	2020-21	2021-22	2022-23	
Asset-I	951.05	1199.40	974.75	94.80	50.00	0.00	0.00	1119.55
Asset-II	2878.44	3803.57	3172.98	218.59	150.00	0.00	0.00	3541.57
Asset-III	34934.74	45857.82	33338.60	468.68	5398.60	1799.53	1799.54	42804.95
Asset-IV	50226.28	70922.11	65085.15	0.00	1113.36	750.00	0.00	66948.51

Cost over-run

24. The Petitioner has submitted that the following reasons for cost variation with respect to FR:

Asset-I:

The cost over-run vis-à-vis the FR apportioned cost is approximately ₹168.50 lakh. The increase in the cost is mainly due to increase in actual expenditure towards foundation of structures (₹40.00 lakh) and increase in IDC (₹60.00 lakh) due to time over-run because of unforeseen reasons. Further, in addition to these



reasons the variation has been due to impact of market forces leading to price variation and quantity variations arising out during actual execution of the transmission project (₹72.00 lakh).

Asset-II

The cost over-run vis-à-vis the FR apportioned cost is approx. ₹663.10 lakh. The increase in the cost is mainly due to increase in actual expenditure regarding the foundation of structures (₹107.00 lakh) and increase in IDC (₹118.00 lakh) due to time over-run because of unforeseen reasons. Further, in addition to these reasons the variation has been due to impact of market forces leading to price variation and quantity variations arising out during actual execution of the transmission project (₹464.00 lakh).

Asset-III

The cost over-run vis-à-vis the FR apportioned cost is approx. ₹7870.21 lakh. The increase in the cost is mainly due to increase in the actual compensation paid (₹858.00 lakh) and increase in IDC (₹1048.00 lakh)/ IEDC (₹320.00 lakh) due to time over-run because of unforeseen reasons. Further, in addition to these reasons, the variation has been due to impact of market forces leading to price variation and quantity variations arising out during actual execution of the transmission project (₹4347.00 lakh) & taxes paid as per actual (₹1294.00 lakh).

Asset-IV

The cost over-run vis-à-vis the FR apportioned cost is approx. ₹16722.20 lakh. The increase in the cost is mainly due to increase in actual compensation paid (₹2850.00 lakh), FERV (₹2021.00 lakh) and increase in IDC (₹9120.00 lakh)/ IEDC (₹328.00 lakh) due to time over-run owing to unforeseen reasons. Further,



in addition to these reasons, the variation has been due to impact of market forces leading to price variation and quantity variations arising out during actual execution of the transmission project (₹ 2400.00 lakh).

25. The Petitioner has further submitted that the cost variation with respect to FR as follows:

- i **Price Variation:** The contracts for various packages under this project were awarded to the lowest evaluated and responsive bidder, on the basis of global/domestic competitive bidding, after publication of NITs in leading newspapers. Thus, the award prices represent the lowest prices available at the time of bidding of various packages. Further, during the period from October, 2013 (first OBD under the project) to August, 2016 (period of major supplies), there has been inflationary trend in the prices of various input items for the transmission project as per the following indices:

Name of Indices	September, 2013 (one month prior to first OBD)	March, 2014	March, 2015	August, 2016	(%) Increase from first OBD
Tower Steel (Blooms 150x150mm)	35002	35186	35549	35549	1.56%
HG Zinc	153700	159200	155600	173300	12.75%
EC Grade Al	157050	143883	151833	125998	(-) 19.77%
CRGO	176924	194009	226050	226050	27.77%
LME Copper	474975	422611	393972	338382	(-) 28.76%
WPI	180.7	178.9	176.1	183.1	1.33%
WPI for Ferrous metals	153.5	156.3	151.4	135.6	(-)11.66%
WPI for Fuel & Power	210.6	212.6	187.3	182.2	(-)13.49%
CPI	238	238	254	280	17.65%



The price variation under the project is attributable to the inflationary trend prevailing during execution of project and also market forces prevailing at the time of bidding process of various packages.

- **Variation in quantities of approved Items:** The line length for Asset-IV has increased. The line length for this portion was envisaged at 200 km. as per DPR. However, as per actual, the line length is 209.52 km which had resulted in slight increase of quantity of few associated equipment i.e. hardware fittings, auxiliary accessories etc. The variations mainly are as follows: Tower steel: tower steel increased due to increase in tension towers and total number of towers. As per FR, based on pro-rata for Rajarhat-Gokarna portion, number of suspension towers are 427 numbers and tension towers are 149 numbers making the total to be 576 numbers In actual, number of suspension towers is 402 numbers and tension towers is 186 numbers (B-25, C-37, D-124), totalling to 588 numbers.
- Insulators: Insulator quantity also increased due to increase in tension towers and total number of towers.
- ii. **Decrease/Increase in IEDC:** As per the Investment Approval, the IEDC including contingencies for the project was estimated on normative basis whereas in the RCE, IEDC under the project has been worked out based on actual/ anticipated expenditure resulting in a decrease of IEDC for Asset-I and Asset-II and increase in IEDC for Asset-III and Asset-IV.
- iii. **Increase in IDC:** As per the approved DPR cost, IDC for the Asset- I to Asset-IV under the transmission project was estimated at ₹6714.42 lakh, whereas, based on the actual and anticipated funds flow, the IDC for the said Assets



works out to ₹17062.37 lakh. Thus, there is an increase of ₹10348.00 lakh combined for all assets in IDC. The main reason for increase in IDC is:

- a. Increase in estimated completion cost of the project.
- b. Decrease in funding from the World Bank (RoI @ 7.0 %) from about 57% of total estimated cost of project in DPR to 9%.
- c. Increase in project time cycle due to unforeseen delays.

26. We have considered the submissions of the Petitioner. As compared with the FR cost, the estimated completion cost of Asset-I, Asset-II, Asset-III and Asset-IV has been in variance of about ₹168.5 lakh, ₹663.13 lakh, ₹7870.21 lakh and ₹16722.23 lakh respectively. As per the Form-5 submitted by the Petitioner, the variation in the capital cost of Asset-I is due to variation of cost towards foundation of structures, switchgear control, relay and protection panel; variation in the cost of Asset-II is due to foundation for structures, transformer, structure for switch yard; variation in the cost of Asset-III is due to preliminary investigation, RoW, forest clearance, PTCC, general civil works, transmission line materials; variation in the cost of asset-IV is due to preliminary investigation, RoW, forest clearance, PTCC, general civil works, transmission line materials, civil works, Sub-station equipment. As per the estimated completion cost, the Petitioner has submitted revised cost estimate (RCE) duly approved by the BoD in its 339th meeting held on 29.3.2017 with an estimated cost of ₹1891.41 cr. As per the RCE, the estimated completion cost of Asset-I, Asset-II, Asset-III and Asset-IV are within the apportioned approved RCE cost. Accordingly, the cost variation is approved.



Time over-run

27. As per the IA dated 23.10.2013, the transmission project was scheduled to be put into commercial operation within 30 months from the date of IA i.e. by 23.4.2016.

However, the actual COD of the transmission assets is as follows:

Assets	SCOD	COD	Time over-run
Asset-I	23.4.2016	16.6.2019	1150 days
Asset-II		18.8.2019	1213 days
Asset-III		12.11.2019	1299 days
Asset-IV		16.7.2020	1546 days

28. There is a time over-run of 1150 days, 1213 days, 1299 days and 1546 days in commissioning of Asset-I, Asset-II, Asset-III and Asset-IV respectively. The Petitioner has submitted that the delay is mainly because of severe law & order issues in and around Rajarhat Sub-station.

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

i. Land acquisition issues.

The land (13.44 acres) acquisition process for the transmission project started in July 2012 by the Petitioner i.e. much before the date of IA in order to complete the transmission project in a time bound manner. After the completion of all required compliances and process, the possession of land was finally given by the Government in February 2014.

Date of Investment approval:	October 2013
Land Acquisition request:	July 2012
Land Acquisition complete:	February 2014
LOA of LILO line (Asset-I):	March 2014



ii. Severe law & order situation at site of Rajarhat GIS

The Petitioner has submitted that for Asset- I, Asset-II and Asset-IV, there were severe law & order issues in and around Rajarhat Sub-station due to which the Asset I, II and IV were delayed. The Petitioner has mainly submitted the following in this regard:

- After 2-3 months of the start of the construction work, RoW problems in various sections of the LILO line and law & order issues at Rajarhat Sub-station were reported. Many such issues were initially handled and managed by the officials of the Petitioner. Gradually, such RoW issues started flaring up, wherein the local villagers nearby Rajarhat Sub-station (Dist. South Parganas) and in other districts vehemently opposed the construction work and stopped the work several times demanding exorbitant amount of compensation.
- To resolve this, the Petitioner sought help from local authorities and State administrations. A series of letters were written to State authorities to resolve the issues so as to be able to resume the construction activities at site. Further, in some cases landowners were demanding the diversion of transmission line from their land. In order to resolve this, the Petitioner conducted several meetings with village Pradhan/landowners and tried to convince them that diversion of transmission line is not possible on account of technical issues.
- Further, anti-social elements, mixing with the villagers, threatened the Petitioner's officials and, in some cases, manhandled them also. The matter was repeatedly taken up with the district administration and State



Government authorities. Several letters were written to authorities at State and district level.

- After intervention of administration through police and constant persuasion by the Petitioner's officials, work could resume at Rajarhat GIS. However, the work of 400 kV D/C Rajarhat-Purnea line is yet to be completed owing to still running RoW issues/ court cases.
- During construction of boundary wall, stiff resistance was faced from some villagers/ landowners. Some miscreants came suddenly inside the premises of construction site and threw some crude bombs in front of the main gate and ran away. Their main intention was to intimidate the construction workers and sabotage the work. The matter was reported to police and request for protection was applied.
- In May, 2016 again, 20-25 anti-social elements came inside the sub-station site and threatened the construction workers to stop the work and vacate the site immediately. Next day, some bombs were exploded by them at the site because of which workers panicked and left the site. Site activity was completely stopped after that. Further, a group of local people started spreading false rumours by distributing leaflets in the adjacent villages that livelihood of villagers will be destroyed if this sub-station is constructed etc. All these matters had been reported to district and State authorities and their help was sought to overcome the crisis.
- After a lot of deliberations and persuasions by various administrations at different levels and by the Petitioner's officials, construction work was resumed again.



- The chronology of related important events associated with RoW issues at Rajarhat GIS-associated with delay of Asset-I, Asset-III and Asset-IV is as follows:

Date	Remarks
19.5.2014	Mobilization of man and material on Sub-station. Threat and obstruction from local villagers for carrying out construction works.
19.6.2014	Letter from PGCIL to Block Development Officer (BDO), South 24 Parganas, Kolkata, intimating him about obstruction caused by local villagers against construction of boundary wall for upcoming sub-station and further requesting him to take action against miscreants.
16.8.2014	Letter (reminder) from PGCIL to Block Development Officer (BDO), South 24 Parganas, Kolkata, intimating him about obstruction caused by local villagers against construction of boundary wall for upcoming sub-station and further requesting him to take action against miscreants.
10.11.2014	Issue related to obstruction of boundary wall construction by villagers is resolved.
15.11.2014	Letter from PGCIL to Block Development Officer (BDO), South 24 Parganas, Kolkata, acknowledging their support in resolving the RoW issue (temporarily) of boundary wall.
1.12.2014	Boundary wall construction work against disrupted by land owners and brought to complete halt.
14.1.2015	Letter from PGCIL to Block Development Officer (BDO), South 24 Parganas, Kolkata, intimating him about obstruction caused by local villagers against construction of boundary (especially from owners of land adjacent to eastern and western side of site) wall for upcoming sub-station and further requesting him to take action against miscreants as valuable time is getting lost.
24.2.2015	Letter from PGCIL to Block Development Officer (BDO), South 24 Parganas, Kolkata, intimating him about obstruction caused by local villagers against construction of boundary wall for upcoming sub-station and further requesting him to take action against miscreants as valuable time is getting lost.
12.11.2015	Handmade bombs thrown at site by miscreants at sub-station site.
14.11.2015	Letter from PGCIL to Officer in charge (OIC), Police Station, South 24 Paragana, Kolkata, requesting him to take action against miscreants hampering the construction works who threw handmade bombs at site and created panic among workers.
16.11.2015	Letter from PGCIL to DM, South 24 Paragana, Kolkata, requesting him to take action against miscreants hampering the construction works who threw handmade bombs at site and created panic among workers.
4.5.2016	Letter from PGCIL to SP, Alipur, intimating him to take action regarding worsening law & order problem near Rajarhat GIS.
4.5.2016	Letter from PGCIL to OIC, Police Station, Kashipur, intimating him to take action regarding worsening law & order problem near Rajarhat GIS.



Date	Remarks
6.5.2016	Letter from PGCIL to OIC, Police Station, Kashipur-II, intimating about blasting of homemade bombs in Rajarghat GIS premises and requested to initiate necessary action.
9.5.2016	Letter from PGCIL to BDO, South 24 Parganas, Kolkata, intimating him about obstruction caused by local villagers and local journalists against construction works for upcoming Sub-station and further requesting him to take action against miscreants as valuable time is getting lost. (Local news paper clippings also enclosed)
14.5.2016	Letter from PGCIL to OIC, Kashipur, requesting him for his assistance in shipment of Sub-station equipment in the area affected by law & order situation.
14.5.2016	Letter from PGCIL to OIC, Rajarhat, requesting him for his assistance in shipment of Sub-station equipment in the area affected by law & order situation.
18.5.2016	Letter from PGCIL, to SP, Alipore, intimating him about the anti- PGCIL propaganda taking place near the Sub-station to deter the related construction work.
24.10.2016	Advisory by Chief Secretary, Government of West Bengal Office to furnish comments and agenda regarding RoW hindrances to be taken up in "Cabinet Committee on Investment" to be held on 8.11.2016.
02.12.2016	Villagers with support of Local MLA demonstrated in front of SDO (Baraipur) Office alleging that no or very marginal compensation has been paid.
10.12.2016	Letter from POWERGRID to Block Development Officer (BDO), South 24 Parganas, Kolkata, intimating him about obstruction caused by local villagers who gathered in large numbers (around 2000) against construction works for upcoming sub-station and further requesting him to take action against miscreants as valuable time is getting lost.
10.12.2016	Letter from POWERGRID to DM, South 24 Parganas, Kolkata, intimating him about obstruction caused by local villagers who gathered in large numbers (around 2000) against construction works for upcoming sub-station and further requesting him to take action against miscreants as valuable time is getting lost.
12.12.2016	Letter from PGCIL to OIC, Police Station, Kashipur, intimating him to take action regarding worsening law & order problem near Rajarhat GIS.
19.12.2016	Letter from PGCIL to SP, Kashipur, intimating him to take action regarding worsening Law & Order problem near Rajarhat GIS where few handmade bombs exploded.
6.1.2017 & 7.1.2017	Labourers manhandled by local villagers
7.1.2017	Letter from PGCIL to OIC, Police station, Kashipur, South 24 Paragana, intimating about continuous disruption, manhandling of workers and throwing of handmade bombs and requesting necessary help to resolve the matter.
7.1.2017	Letter from PGCIL to DM, South 24 Paragana, intimating about continuous disruption, manhandling of workers and throwing of handmade bombs and requesting necessary help to resolve the matter.



Date	Remarks
7.1.2017	Letter from PGCIL to SP, South 24 Paragana, intimating about continuous disruption, manhandling of workers and throwing of handmade bombs and requesting necessary help to resolve the matter.
13.1.2017	Letter from PGCIL to OIC, Police station, Kashipur, South 24 Paragana, intimating about continuous disruption, manhandling of workers and requesting necessary help to resolve the matter.
18.1.2017	Letter from PGCIL to DGP, Government of West Bengal, intimating about continuous disruption, manhandling of workers and requesting necessary help to resolve the matter. The work forced to be stopped completely since first week of January 2017.
19.1.2017	Letter from PGCIL to the Ministry of Power, Government of India, intimating about continuous disruption, manhandling of workers and requesting necessary help to resolve the matter through deployment of CISF or necessary security through Ministry of Home Affairs.
20.1.2017	Letter from PGCIL to OIC, Police Station, Kashipur, South 24 Paragana, intimating about continuous disruption, manhandling of workers and requesting necessary help to resolve the matter.
23.1.2017	Letter from PGCIL to SP, South 24 Paragana, intimating about continuous disruption of work, manhandling of workers and requesting necessary help to resolve the matter.
3.2.2017	Letter from PGCIL to SP, South 24 Paragana, intimating about continuous disruption of work, manhandling of workers and requesting necessary help to resolve the matter.
4.2.2017	Letter from PGCIL to OIC, Police Station, Kashipur, South 24 Paragana, intimating about continuous disruption, manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
27.2.2017	Letter from PGCIL to OIC, Police Station, Kashipur, South 24 Paragana, intimating about continuous disruption, theft and manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
4.3.2017	Letter from PGCIL to OIC, Police station, Kashipur, South 24 Paragana, intimating about continuous disruption, theft and manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
1.5.2017	Letter from PGCIL to SP, South 24 Paragana, intimating about continuous disruption, manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
17.5.2017	Letter from PGCIL to DM, South 24 Paragana, intimating about continuous disruption, and requesting necessary cooperation with villagers or landowners by calling a meeting to resolve the matter.
18.5.2017	Office Memorandum from Ministry of Home Affairs, Government of India asking Ministry of Power to demand adequate security from Government of West Bengal.



Date	Remarks
23.5.2017	Letter from Deputy SP, CID, West Bengal to PGCIL seeking status of site conditions and clarifications for compliance.
25.5.2017	Letter from PGCIL to Deputy SP, CID, West Bengal, intimating about continuous disruption, and requesting necessary cooperation with villagers and providing clarifications as sought from him.
12.6.2017	Meeting of PMG (Project Monitoring Group under aegis of Central Government Cabinet Secretariat), with the Chief Secretary, Government of West Bengal, wherein one of the critical agenda included the severe RoW issue plaguing the transmission project.
14.6.2017	Letter from POWERGRID to OIC, Police Station, Kashipur, South 24 Paragana, intimating about continuous disruption, theft, burning of equipment and manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
14.6.2017	Letter from POWERGRID to SP, Kashipur, South 24 Paragana, intimating about continuous disruption, theft, burning of equipment and manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
5.7.2017	Letter from PGCIL to OIC, Police station, Kashipur, South 24 Paragana, intimating about continuous disruption, assessment of theft, burning of equipment and manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
12.7.2017	Meeting of PMG (Project Monitoring Group under aegis of Central Government Cabinet Secretariat), with the Chief Secretary, Government of West Bengal, wherein one of the critical agendas included the severe RoW issue plaguing the transmission project.
10.8.2017	Letter from PGCIL to Member (Power System - CEA), intimating about continuous disruption, and requesting necessary help and cooperation through forthcoming Standing Committee Meeting of ER regarding no further construction of line around Rajarhat Sub-station.
25.8.2017	Letter from Secretary, Ministry of Power (MOP), to Chief Secretary, Government of West Bengal intimating about continuous disruption, and requesting necessary help and cooperation through Government of West Bengal.
22.11.2017	Letter from PGCIL to OIC, Police station, Kashipur, South 24 Paragana, intimating about continuous disruption, assessment of theft, burning of equipment and manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
22.11.2017	Letter from PGCIL to SP Kashipur, South 24 Paragana, intimating about continuous disruption, assessment of theft, burning of equipment and manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
27.11.2017	Letter from PGCIL CMD to Secretary, MoP, Government of India, intimating about continuous disruption, manhandling of workers and requesting necessary help to resolve the matter through deployment of CISF or necessary security through Ministry of Home Affairs.
29.11.2017	Letter to Secretary, MoP to Secretary (Home), Government of India, intimating about continuous disruption, manhandling of workers and requesting necessary help to resolve the matter through deployment of



Date	Remarks
	CISF or necessary security through Ministry of Home Affairs with expenditure to be undertaken by PGCIL.
29.11.2017	Agenda of Rajarhat Sub-station in Central PMG (Prime Minister Monitoring Group) meeting for resolving the RoW issue.
1.12.2017	Letter from PGCIL to SP, Baraipur, South 24 Paragana, intimating about continuous disruption, assessment of theft, manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
28.6.2018	Letter from PGCIL to OIC, Police station, Kashipur, South 24 Paragana, intimating about continuous disruption, assessment of theft, burning of equipment and manhandling of workers and requesting necessary help and deployment of police to resolve the matter. (Reference in letter dated 2.07.2018)
2.7.2018	Letter from OIC, Police station, Kashipur, South 24 Paragana to PGCIL intimating about reluctance of landowners/ villagers and asking if the matter may be taken by PGCIL though NGT (National Green Tribunal).
11.8.2018	Bengali language
Due to incessant violent agitations by local villagers/landowners, the balance works of the transmission line and Rajarhat Sub-station in the district of South Pargana & South Parganas had to be suspended from January, 2017 onwards.	
The matter had been taken up at the highest-level involving Government of India, Ministry of Home Affairs, MoP, and also the higher authorities of Government of West Bengal. Finally, after lot of persuasions an agreement was signed with State Government Administration (WB) and “ <i>Jomi Jivika Bastutantra O Parvesh Raksha Committee</i> ” for resuming works at Rajarhat Sub-station w.e.f. 14.8.2018	

- The first such reporting of law & order situation issue is dated 19.5.2014 and the last being an agreement with “*Jomi Jivika Bastutantra O Parvesh Raksha Committee*” for resuming works at Rajarhat Sub-station w.e.f. 14.8.2018. Multiple letters during the interim period reporting law and order issues that affected the construction of Rajarhat Sub-station under the scope of the transmission project. In view of the aforementioned, it is evident that there is a delay of around 51 months on account of law & order situation affecting the completion of Rajarhat GIS.
- The above-mentioned reasons for delay due to severe law & order issues at Rajarhat GIS location are applicable to the Asset-I, Asset-II and Asset-IV wherein Asset-I and Asset-II are line bays and ICT respectively; in case



of Asset-IV, 02 numbers 80 MVAR SLRs have been commissioned in Rajarhat GIS.

Description	Remarks
SCOD as per investment approval	23.4.2016
Date of first law & order issue reported	19.5.2014
Date of law & order issue resolved	14.8.2018
Date of completion of the line after considering working period in respect of Asset-I, Asset-II and Asset-IV	16.6.2019, 18.8.2019 and 16.7.2020 respectively
Period of delay due to law & order issue	1548 days
Period of delay after SCOD in respect of Asset-I, Asset-II and Asset-IV	1150 days, 1213 days, and 1546 days respectively

iii. **RoW Issues**

The Petitioner has submitted that the reason for delay in completion of the work related to Asset-III and Asset-IV has mainly been severe RoW issues plaguing the completion of 400 kV D/C Rajarhat-Purnea transmission line which could be completed in segmented portions. The Petitioner has mainly submitted the following:

- After 2-3 months of start of construction work, from May, 2014 onwards, RoW problems were reported in various sections of the Rajarhat-Gokarna line, especially locations near to Rajarhat Sub-station, Bhangar and Deganga block, and from many other locations of the line. Many such issues were initially handled and managed by the officials of the Petitioner. After lot of persuasion by the Petitioner's officials, the work was carried out but slowly. Most of the time our manpower and machines were idle resulting in delay in construction of the said line.
- Foundation work for some locations (13/0 to 17/0, 20/1 to 25/0, 36A/0 & 33/0), under North 24 Parganas district, could not be started from May



2014 onwards due to stiff resistance from villagers. Aggrieved by the continuous obstruction by villagers, the Petitioner's officials pursued the matter with OIC of Police Station, BDO, Pradhan etc. and held several meetings, but RoW issue was not resolved. On 15.7.2014, a letter was submitted to Deganga Police Station requesting for resolving the above RoW problem.

- Apart from above locations, there were RoW problems at location No. 7B/1, 20/0, 54/3, 54/4, 54/5 under N 24 Parganas district which also caused time over-run in case of transmission line.
- Many letters were submitted to the State administration at different levels on regular basis from July, 2014 to June, 2020. Several meetings were held with the Principal Secretary (Power), local MLA, MP, DM, SP, police officials, SDO, BDO, Sabhadhipati, land owners, etc during May, 2015 to June, 2020 to resolve RoW issue and to start construction activities at above locations. The transmission project was reviewed by PMG (Project Monitoring Group under the aegis of Central Government Cabinet Secretariat) under the chairmanship of Chief Secretary, Government of West Bengal on 8.11.2016, 12.6.2017 and 8.12.2017.
- In some cases, landowners were demanding the diversion of transmission line from their land. In order to resolve this, the Petitioner conducted several meetings with Village Pradhans/landowners and tried to convince them that diversion of transmission line is not possible on account of technical issues. The RoW issue at above locations under North 24 Parganas district continued up to June 2020. After lot of deliberations at



various levels by administration and the Petitioner's officials, the work at above locations under North 24 Parganas district was completed on 14.7.2020.

- There was continuous obstruction from local villagers against construction of Rajarhat Sub-station and transmission line adjacent to Rajarhat Sub-station under Bhangar block, South 24 Parganas (location no 1/0 to 5/2) ever since the beginning of construction activities in May 2014. After lot of persuasion by the Petitioner's officials, foundation works at few locations were completed. However, due to severe resistance from villagers, foundation work at location No. 1/0, 4/0, 5/0, 5A/0 & 5/2 could not be started. From November, 2015 onwards, the situation in the area became very tense. On 12.11.2015, some miscreants came suddenly inside the premises of construction site and threw some crude bombs in front of the main gate and ran away. Their intention was to intimidate the construction workers and sabotage the construction work of Sub-station and transmission line adjacent to Rajarhat Sub-station under Bhangar block. The matter was reported to police on 14.11.2015 with a request for protection. Again, in May, 2016, a number of anti-social elements came inside the sub-station site and threatened the construction workers to stop the work and vacate the site immediately. Next day, some bombs were exploded by them at the site because of which workers of sub-station and transmission line adjacent to Rajarhat Sub-station panicked and left the site. Construction activities at the Rajarhat Sub-station and also at the abovesaid locations of transmission line were completely stopped after



that. Further, a group of local people started spreading false rumours by distributing leaflets in the adjacent villages that livelihood of villagers will be destroyed if this sub-station and 400 kV Rajarhat-Purnea line is constructed etc. After reporting the matter to the district and State authorities immediately, their help was sought to overcome the crisis.

- After a lot of deliberations and persuasions at different levels, including by the Petitioner's officials, construction work of Rajarhat Sub-station and transmission line adjacent to Rajarhat Sub-station under Bhangar block, South 24 Parganas was resumed on 14.8.2018.
- Apart from North 24 Parganas a South 24 Parganas, there were many RoW problems at various locations spread over other districts of Rajarhat-Gokarna line, thereby causing delay in completion of transmission line.
- In addition to severe RoW problem at various locations of Rajarhat-Gokarna line as mentioned above, there were court cases at location No. 121/0 and 130/0-131A/0. The stay order for 22 months (29.9.2015 to 27.7.2017) by Hon'ble Katwa court caused further delay in commissioning of Rajarhat-Gokarna line.
- The chronology of related important events associated with RoW issues of 400 kV D/C Rajarhat-Purnea Transmission Line-associated with delay of Subject Asset-III and Asset-IV is as below:

Date	Remarks
15.7.2014 18.9.2014 19.11.2014 17.1.2015 27.4.2015	Letters from PGCIL to OIC, Degnaga Police Station (PS), North Parganas, intimating him of RoW issues and requesting him to take action against people obstructing the foundation work at locations 13/0 to 17/0 of Rajarhat-Gokarna line.



Date	Remarks
30.5.2015	Letter from PGCIL to Sabhadhipati (president - Zila Parishad), North Parganas, intimating of RoW issue at Loc. Nos 15A/0 – 17/0, 20/1 to 25/1, 36A/0 and 33/0 and further requesting him to intervene in the matter to resolve the issue
1.7.2015	Letter from PGCIL to OIC Habra Police Station (PS), North Parganas, intimating him of RoW issue at Loc. No. AP-14/0) and requesting him to take action against people obstructing the foundation work.
1.7.2015	Letter from PGCIL to OIC, Degnaga Police Station (PS), North Parganas, intimating him of RoW issue and requesting him to take action against people obstructing the foundation work.
6.7.2015	Letter from PGCIL to DM (District Magistrate), Nadia, requesting him to resolve the issue under Section 16 of Telegraph Act at Loc. No. AP 79/0 in the concerned area.
6.7.2015	Letter from PGCIL to SDM, North Parganas, requesting him to take action against miscreants hampering the foundation works at Loc. 54/3, 54/4, & 54/5.
8.9.2015	Letter from PGCIL to BDO (Block Development Officer), Bhuiagar, South Paraganas, requesting action against locals obstructing construction work at Loc. AP-14/0.
14.9.2015	Letter from PGCIL to DM, Nadia, requesting him to resolve the issue under Section 16 of Telegraph Act at Loc. No. 86/3, 85/0, 87/0 & 87/1 in the concerned area.
16.11.2015	Letter from PGCIL to DM, South 24 Paragana, Kolkata, requesting him to take action against miscreants hampering the construction works who threw hand made bombs at site and created panic among workers.
4.12.2015	Letter from PGCIL to BDO (Block Development Officer), North Parganas, intimating him of RoW issue at Loc. No. AP-14/0) and requesting him to take action against people obstructing the foundation work.
10.12.2015	Letter from PGCIL to DM, North Parganas, requesting him to take action against people obstructing the foundation works at various Loc.
22.12.2015	Letter from PGCIL to SDM, North Parganas, requesting him to take action against people obstructing the foundation works at Loc. 7B/1.
13.1.2016	Office order from SDM, North Parganas, requesting villagers, land owners, DSP, SDO, BDO, OIC(PS), Gram Panchayat to attend a meeting for amicable resolution to RoW issue.
14.1.2016	Letter from PGCIL to SDM, North Parganas, requesting him to take action against people obstructing the foundation works at Loc. 54/5.
9.2.2016	Letter from PGCIL to DM, Nadia, requesting him to resolve the issue under Section 16 of Telegraph Act at few locations in the concerned area as no outcome has been there pursuant to previous meetings of local administration.
10.2.2016	Letter from PGCIL to IIC (Inspector in charge), Farakka, West Bengal, requesting to resolve RoW at Loc. 7/3 and 8/0.
10.2.2016	Letter from PGCIL to DM, Nadia, requesting him to resolve the issue under Section 16 of Telegraph Act at few locations in the concerned area.



Date	Remarks
11.2.2016	Letter from PGCIL to SDM, North Parganas, requesting him to take action against miscreants hampering the construction works at Loc. 54/3, 54/4 and 54/5.
11.3.2016	Letters from PGCIL to OIC Hiranpur Police Station Jharkhand, requesting to resolve RoW at Loc.17/0.
24.4.2016	Letter from PGCIL to OIC, Khargram Police Station, West Bengal, requesting to resolve ROW at Loc. 145/0.
29.4.2016	Letter from PGCIL to DM, North Parganas, intimating him of RoW issues and requesting him to take action against people obstructing the work.
31.5.2016	Letter from PGCIL to OIC, Khargram Police Station, West Bengal, requesting to resolve ROW at Loc. 145/1.
9.6.2016	Office order from SDM, North Parganas, requesting villagers, land owners, PGCIL officials, BDO, OIC(PS), Gram Panchayat to attend a meeting on 15.06.2016 for amicable resolution to RoW issue.
10.6.2016	Letter from PGCIL to Home Secretary, Government of West Bengal, intimating him of recurring RoW issue during construction of Rajarhat-Purnea transmission line and requesting him to take up the matter with the concerned authorities for aiding in expediting the construction work.
14.6.2016	Letter from PGCIL to DM, South Parganas, requesting his intervention to resolve RoW issue at Loc. 1/0, 4/0, 5/0, 5A/0 & 5/2, 5/3.
14.6.2016	Letter from PGCIL to DM, Nadia, requesting his intervention to resolve RoW issue at Loc. 80/0, 81/0, 86/3, 86/4, 87/0, 84B/0 & 85/0.
20.6.2016	Meeting was convened by SDO (Baruipur) in presence of local villagers and their leaders and representatives wherein the locals were persuaded to be in favour of the construction of this project.
21.6.2016	Letter from PGCIL to SDO, Musrhidabad, West Bengal, requesting to resolve RoW at Loc. 4/0 and 6/1.
24.6.2016	Letter from Deputy Secretary, Government of West Bengal to DG & IG, Police, West Bengal requesting on behalf of PGCIL for taking necessary action in the related matter.
7.7.2016	Letter from PGCIL to OIC, Khargram Police Station, West Bengal, requesting to resolve RoW at Loc. 145/1.
15.7.2016	Letter from PGCIL to DM, North Parganas, intimating him of RoW issues and requesting him to provide assistance in completion of work and take action against people obstructing the work at various locations.
15.7.2016	Office order from BDO, Deganga block, requesting villagers, land owners, local MLAs, PGCIL, OIC(PS), Gram Panchayat to attend a meeting for amicable resolution to RoW issue.
22.7.2016	Letter from PGCIL to Block Land & Land Reforms Officer, North Paraganas, West Bengal, intimating the office about constructing of illegal structure in RoW of line and further requesting to resolve the issue through necessary action.
2.8.2016	Letter from POWERGRID to DM, North Parganas, West Bengal, requesting to resolve RoW at various locations.
12.8.2016	Letter from PGCIL to Additional Secretary (POWER), Government of West Bengal requesting his intervention to resolve RoW issue in the concerned construction area.



Date	Remarks
17.8.2016	Meeting of PGCIL officials with Principal Secretary, POWER, Government of West Bengal highlighting the concern regarding RoW and worsening of law & order situation.
22.8.2016	Meeting with Additional Secretary (POWER), Government of West Bengal seeking his help in timely completion of transmission project already plagued by RoW issues.
23.8.2016	Letter from PGCIL to Additional Secretary (POWER), Government of West Bengal requesting his kind intervention for early completion of this transmission project.
1.9.2016	Letter from Joint Secretary, Government of West Bengal to DM, Nadia/Parganas/ Murshidabad asking them to take necessary action for timely completion of the transmission project of PGCIL.
7.9.2016	Letter from PGCIL to DM, South Parganas, requesting his intervention for smooth completion of balance works of this transmission project.
7.9.2016	Letter from PGCIL to Superintendent of Police, South Parganas, requesting his intervention for smooth completion of balance works of this transmission project.
7.9.2016	Letter from PGCIL to Deputy Superintendent of Police (Crime), South Parganas, requesting his intervention for smooth completion of balance works of this transmission project.
10.9.2016	Letter from PGCIL to IIC, Farakka police station, West Bengal, requesting to resolve RoW at Loc. 4/0, 5/0, 5A/0, 6/0, 7/0, 7/3, 7/1 and 8/0.
10.9.2016	Letter from PGCIL to Superintendent of Police, South Parganas, requesting his intervention for smooth completion of 10% balance works of this transmission project.
10.9.2016	Letter from PGCIL to DM, South Parganas, requesting his intervention for smooth completion of 10% balance works of this transmission project.
14.9.2016	Letter from PGCIL to BDO, South 24 Paragana, Kolkata, requesting him to take action against miscreants hampering the construction works who manhandled the workers.
27.9.2016	Letter from ADM, Nadia to SDO, Nadia intimating him of comment of Joint Secretary, Government of West Bengal, asking to get the RoW issue resolved soon.
17.10.2016	Letter from PGCIL to DM, South Parganas, requesting his intervention for smooth completion of balance works of this transmission project in line with meeting/ hearing held in office of BDO, South Parganas on 05.10.2016.
20.10.2016	Office order from District Planning Officer, North Parganas intimating about next upcoming district level Monitoring Committee meeting to be held on 24.10.2016 for resolving the RoW issue related to Rajarhat line project.
24.10.2016	Advisory by Government of West Bengal, Chief Secretary Office to furnish comments and agenda regarding RoW hindrances to be taken up in "Cabinet Committee on Investment" to be held on 8.11.2016.
2.11.2016	Letters from Joint Secretary, Government of West Bengal to DM, Nadia/Parganas/ Murshidabad asking them to take necessary action for timely completion of the transmission project of PGCIL.
8.11.2016	Meeting held between PGCIL with Chief Secretary, Government of West Bengal.



Date	Remarks
2.12.2016	Letter from PGCIL to OIC, Deganga Police station, requesting to resolve RoW at Loc. 20/0 as also advised by DM to resume works from 3.12.2016.
9.12.2016	Letter from PGCIL to Landowners at Loc. No. 257/0 to 258/0, requesting them to cooperate regarding tree felling for line corridor.
10.12.2016	Letter from PGCIL to DM, South Parganas, requesting to resolve ROW wherein landowners have forcibly stopped the works.
19.12.2016	Letter from PGCIL to SP, South Paragana, intimating about continuous disruption in transmission line construction by means of crude bomb blasts nearby construction site and misguidance by anti-social elements by way of leaflet distribution among locals and further requesting him to investigate the matter and take suitable action promptly.
6.1.2017	Letter from PGCIL to IIC, Farakka Police station, West Bengal, requesting to resolve ROW at Loc. 3/0.
7.1.2017	Letter from PGCIL to SP, South 24 Paragana, intimating about continuous disruption, manhandling of workers and throwing of handmade bombs and requesting necessary help to resolve the matter.
7.1.2017	Letter from PGCIL to DM, South 24 Paragana, intimating about continuous disruption, manhandling of workers and throwing of handmade bombs and requesting necessary help to resolve the matter.
10.1.2017	Letter from PGCIL to DM, Katihar, Bihar requesting to resolve ROW wherein landowners have forcibly stopped the works at Loc. No. 252/4.
12.1.2017	Letter from PGCIL to DC, Godda, Jharkhand, requesting to resolve ROW wherein landowners have forcibly stopped the works at Loc. No. 224A/1, 226/1 and 226/4.
11.3.2017	Letter from PGCIL to DM, Purnea, Bihar requesting to resolve ROW wherein landowners have forcibly stopped the works at Loc. No. 280/0.
The matter had been taken up with higher authority of Government of West Bengal. Appreciating the complexity, Government of WB had assured that the matter is under consideration. State administration had taken several steps to mitigate agitation and took proactive action for resolving the statement such that the balance work could be completed at the earliest. However, aggrieved by the slow pace of progress, PGCIL had to request Central Government for intervention in the matter.	
11.6.2017	Letter from PGCIL to DC, Godda, Jharkhand, requesting to resolve RoW on Lohsigna village.
8.7.2017	Letter from PGCIL to SDM, Godda, Jharkhand, requesting to resolve RoW wherein landowners have forcibly stopped the works at Loc. No. 222/0 and 221B/0.
12.7.2017	Meeting of PMG (Project Monitoring Group under aegis of Central Government Cabinet Secretariat), with the Chief Secretary, Government of West Bengal, wherein one of the critical agenda included the severe RoW issue plaguing the transmission project.
9.8.2017	Meeting Notice issued by Under Secretary, Government of India (GOI), requesting Chief Secretary of various states including West Bengal for review of critical and severely affected power projects.
10.8.2017	Letter from PGCIL to Member (Power System - CEA), intimating about continuous disruption, and requesting necessary help and cooperation



Date	Remarks
	through forthcoming Standing Committee Meeting of ER regarding no further construction of line around Rajarhat Sub-station.
5.9.2017	Letter from PGCIL to BDO, Hoogly, West Bengal, intimating that compensation has been duly paid as per norms and that absurd claims of compensation may not be settled without meeting.
7.9.2017	Letter from PGCIL to DM, North 24 Paragana, intimating about continuous disruption and standstill status of project due to severe RoW and that necessary help may be extended to PGCIL.
6.11.2017	Meeting notice from DM, North 24 Paragana, intimating meeting scheduled for 7.11.2017 in order to resolve the RoW issue.
29.11.2017	Meeting notice issued from PMO, PMG group to State of West Bengal regarding review of pending power projects to be held on 8.12.2017.
1.12.2018	Letter from PGCIL to DM, Katihar, Bihar requesting to resolve RoW wherein landowners have forcibly stopped stringing works.
25.1.2018	Meeting held between PGCIL, landowners, villagers and chamber of Savapati Gaighata Panchayat Samiti regarding resolving the RoW issue.
13.3.2018	Letter from PGCIL to DC, Godda, Jharkhand, requesting to resolve RoW wherein landowners have forcibly stopped the works at Loc. No. 222/0 and 221B/0.
23.4.2018	Letter from PGCIL to DC, Godda, Jharkhand, requesting to resolve RoW wherein landowners have forcibly stopped the works at Loc. No. 222/0, 221/0, 221A/0 and 221B/0.
12.6.2018	Letter from PGCIL to SP, Katihar, Bihar requesting to resolve RoW wherein landowners have forcibly stopped stringing works at Loc. No. 241/3.
18.6.2018	Meeting notice from DM, North 24 Paragana, intimating meeting scheduled for 21.6.2018 in order to resolve the RoW issue.
27.7.2018	Letter from PGCIL to IIC, Balagarh Police station, West Bengal, requesting to resolve RoW between Locs. 96B/2 where villagers are demanding absurd amount of compensation.
7.8.2018	Notice from BDO, Balagarh, asking villagers to let PGCIL do work smoothly and avoid claim of absurd compensation.
23.8.2018	Letter from PGCIL to DM, North 24 Paraganas, requesting to resolve RoW between Locs. 33/0 where villagers are demanding absurd amount of compensation.
23.9.2018	Letter from PGCIL to BDO, North 24 Paragana, requesting to resolve RoW where villagers are demanding absurd amount of compensation.
5.9.2018	Letter from PGCIL to Village samiti members requesting to acknowledging the amount of compensation and cooperate in the completion transmission line.
4.10.2018	Letter from PGCIL to DM, North 24 Paraganas, requesting to resolve RoW matter as no fruitful result has been yield from meeting held on 25.1.2018 and 18.1.2018.
12.10.2018	Letter from PGCIL to DM, North 24 Paraganas, requesting to resolve RoW matter as no fruitful result has been yield from meeting held on 25.1.2018 and 18.1.2018.



Date	Remarks
17.1.2019	Letter from PGCIL to Sr. SP, North 24 Paraganas, requesting to resolve RoW matter and provide adequate police protection.
22.1.2019	Letter from PGCIL to DM, North 24 Paraganas, requesting to resolve RoW plaguing the stringing works.
23.1.2019	Letter from PGCIL to the Hon'ble Minister in Charge, Government of Bengal intimating of the severe RoW issue and requesting to provide necessary assistance.
8.5.2019	Office order from SDO, Ranaghat, asking the landowners, PGCIL, and local administration to attend a meeting on 14.5.2019 for arriving at solution of persistent RoW issues.
27.5.2019	Office order from DM, North 24 Paraganas, Barasat, asking the landowners, PGCIL, and local administration to attend a meeting on 3.6.2019 for arriving at solution of persistent RoW issues related to stringing of transmission line.
4.6.2019	Office order from DM, North 24 Paraganas, Barasat, asking the landowners, PGCIL, and local administration to attend an urgent meeting on 7.6.2019 for arriving at solution of persistent RoW issues related to stringing of transmission line.
7.6.2019	Minutes of the meeting dated 7.6.2019
14.6.2019	Office order from SDO, Ranaghat, asking the landowners, PGCIL, and local administration to attend a meeting on 19. 6.2019 for arriving at solution of persistent RoW issues.
19.6.2019	Office order from SDO, Ranaghat, asking the landowners, PGCIL, and local administration to attend a meeting on 24. 6.2019 for arriving at the solution of persistent RoW issues.
27.7.2019	Letter from Additional Secretary, MOP to the Chief Secretary, Government of West Bengal intimating of the severe RoW issue and requesting to provide necessary assistance.
29.8.2019	Office order from SDO, North 24 Paraganas, Barasat, asking the landowners, PGCIL, and local administration to attend a meeting on 24.9.2019 for arriving at solution of persistent RoW issues.
4.9.2019	GM, Rajarhat attend the meeting at the chamber of SDO, Barasat. In the meeting MLA, Madhyamgram and MLA, De-Ganga was also present along with other admin officers. In the meeting MLA, Madhyamgram instructed Sabhapati, De-Ganga to start the work of string between Loc. No. 13/0 to 15/0 by resolving RoWs and ask all the other admin officers to help him accordingly. MLA, Madhyamgram also requested to deposit the compensation as decided through a meeting with the affected landowners of Arijullapur in presence of BDO & I/C De-ganga as early as possible. It was decided that all compensation disbursement will be done through Gram Panchayet. MLA, Madhyamgram also suggested to wait regarding the Gamvirgachhi RoW (Loc. No. 15A/0 & 16/0) till the completion of the stringing patch from 13/0 to 15/0. SDO,Barasat issued a MOM in this regard on 5.9.19.
27.8.2019	DM, N. 24 Parganas issued 1st notice for hearing on 3.9.2019 at the chamber of DM, N-24-Parganas as per direction of Hon'ble High Court, Calcutta order dtd 28.2.19 regarding the Witt Petition of Kalam Mallick (Gambhargachhi RoW, Loc. No. 15A & 16). DM served notice more than 6 months after high court order because petitioner Kalam Mallick submitted his representation only on 8. 8.19.



Date	Remarks
3.9.2019	All except Kalam Mallick were present and filed attendances. The proceeding was stalled.
19.9.2019	GM, Rajarhat attended the hearing regarding the Writ Petition of Kalam Mallick (Gamvirgachhi RoW, Loc. No. 15A & 16) at the chamber of DM, N-24-Parganas in the presence of S.P, N.24-Parganas and other admin officers. As the Petitioner failed to submit the comprehensive representation as directed by DM during the hearing, a last chance to submit the same by 23rd Sep 2019 was given to the Petitioner assuring a quick hearing date.
27.9.2019	GM, Rajarhat attend the hearing related to RoW of Loc. No. 15A/0 & 16/0 at the Chamber of DM, N-24-Pargana. In the hearing SP, N. 24-Parganas, Sabhapati, De-Ganga and other administrative officials were present including the lawyer of the Petitioner. In the hearing the Petitioner blamed about change of route against which PGCIL described and denied to change the route. Sabhapati, Deganga also describe that the statement of PGCIL is true.
8.11.2019	Meeting with PGCIL officials and Food & supplies minister, Governemnt of W.B., local MLA of N-24-Parganas; DM, N-24-Parganas; SDO, Barasat; BDO, Deganga, Block Savapati to resolve the issue at Arijullapur village under Deganga block (minutes Dtd 14.11.19).
12.11.2019	Both circuits of Farakka- Purnea portion of Rajarhat-Purnea line and associated line bays successfully charged on 12.11.2019.
15.11.2019	Meeting with PGCIL officials & local MP, MLA of N-24-Parganas, SDO, Barasat, BDO, De-Ganga, Block Savapati to resolve the issue at Arijullapur/Gambhargachhi village under Deganga block. Minutes issued on 2.12.19.
18.11.2019	Letter from PGCIL to DM, N-24-Parganas to resolve the RoW issue at Arijullapur and Gambhargachhi village under Deganga block for completion of balance foundation and erection of 2 nos locations and about 3 km stringing.
27.11.2019	Letter from CGM(I/C), ER-II, PGCIL to DM & Collector, Barasat regarding confirmation of presence of appropriate PGCIL official in the meeting called by DM& Collector, Barasat on 28.11.19. CGM(I/C) also requested him to review status and direct administrative officers and police officers to immediately facilitate PGCIL to complete construction of Rajarhat-Gokarna line.
28.11.2019	DM, N. 24 Parganas issued order on 28.11.19 directing PGCIL to continue their project and to take cooperation of the police authority and local administration, if required. However, ROW problem continued.
30.11.2019	Letter from Additional Secretary, MOP to the Chief Secretary, Government of Bengal intimating of the severe RoW issue and requesting to provide necessary assistance.
2.12.2019	Minutes issued on 2.12.19 for meeting Dtd 15.11.19 with PGCIL officials & local MP, MLA of N-24-Parganas, SDO, Barasat, BDO, Deganga, Block Savapati to resolve the issue at Arijullapur/Gambhargachhi village under Deganga block. PGCIL was directed to deposit compensation amount for location no 13/0 to 15/0 in the account of BDO, Deganga.
9.12.2019	Deposit of compensation (loc. 13/0 to 15/0) by PGCIL in the account of BDO, Deganga as per above minutes dtd 2.12.19 for meeting Dtd 15.11.19.



Date	Remarks
11.12.2019	Letter from SDO, Barasat to BDO, Deganga regarding forwarding of PGCIL letter dtd 9.12.19 and take necessary action for resolving RoW issue.
24.12.2019	Letter from PGCIL to SP, North 24 Paragana for deployment of police at village-Basnadenapore, Arijullapur and Gambhirgachhi under Deganga block for resumption of work at loc no. 13/0 to 17/0.
9.1.2020	Letter from PGCIL to SDO, Barasat Sadar to provide assistance to resume work from loc no. 13/0 to 15/0 under Deganga block.
17.2.2020	Letter from SDO, Barasat to MP, Barasat; MLA, Madhyamgram; MLA, Deganga; Karmadhakshya, Bon O Bhumi Sanskar Sthayee Samiti; DSPO, Barasat; GM, PGCIL for convening a meeting on 19.2.20 to resolve the issue at Gambhirgachhi under Deganga block
14.3.2020	Letter from SDO, Barasat to SDPO, Barasat to deploy police personnel for completion of stringing of Rajarhat-Purnea line at Gambhirgachhi under Deganga block.
25.4.2020	Letter from PGCIL to O.C., Deganga PS, North 24 Paragana to provide assistance to clear obstruction at Baxirati village (loc no. 29/0 to 30/0) for tit-bit rectification work.
22.6.2020	After patrolling and confirmation of no problem in the line, PGCIL tried to charge Rajarhat-Gokarna ckt first time on 20.6.2020 and failed for some dead fault. Upon checking it was found that the fault occurred due to shorting of conductor with the OPGW wire with rope by some unknown person which causes severe fault between Tower no. 16/0 to 17/0 at Gavirgachhi village. When PGCIL employees went to the site, some miscreants captured our departmental cars and humiliated our employees and captured 5 nos. fitters and tried to open the jumper connection by heavily threatening our fitters but failed due to prompt action from Deganga Police Station. FIR was lodged by PGCIL at Deganga PS, North 24 Paragana for short of Rajarhat-Gokarna line which causes severe electrical fault, humiliation of PGCIL employees and attempt to open the jumpers by some miscreants at Gambhirgachhi village.
29.6.2020	Letter from PGCIL to SP, Barasat to provide assistance for rectification work for safety of transmission line at Nunihati village (loc 17/0) under Deganga block.
14.7.2020	Both circuits of Rajarhat-Gokarna portion of Rajarhat-Purnea line and associated line bays successfully charged on 14.7.2020.

- The first such letter reporting RoW issues is dated July, 2014. Thereafter, multiple letters for the interim period reporting RoW issues that affected the construction of Rajarhat Sub-station under the scope of transmission project. It is evident from the tabulated chronology above that RoW issue had plagued this transmission line for a long time incessantly which is yet to be resolved at various locations.



- The delay summary is as follows:

Description	Remarks
SCOD as per investment approval	23.4.2016
Date of RoW reported	15.7.2014
Date of RoW resolved	12.11.2019 and 16.7.2020
Date of completion of the line after considering working period	16.6.2019, 18.8.2019 and 16.7.2020
Period of delay due to RoW issue	1946 days and 2183 days
Period of delay after SCOD	1299 days and 1546 days

iv. Delay due to court cases

- In addition to severe RoW problems at various locations of Rajarhat-Gokarna line as mentioned above, there were court cases at location No. 121/0 and 130/0-131A/0 and stay order for 22 months (29.9.15 to 27.7.2017) by Hon'ble Katwa court which caused further delay in commissioning of Rajarhat-Gokarna line.

i) Location No. 121/0:

A case was filed against the Petitioner at Katwa court on 28. 9.15 by Smt. Kushum Ghosh, the land owner at location No. 121/0. The court issued interim stay order on 29.9.15 and final stay order on 9.5.2016. After several hearings court issued an order on 27.7.2017 setting aside above stay order dated 9.5.2016. Therefore, there was a delay of 22 months (29.9.2015 to 27.7.2017) due to court case at location No. 121/0.

ii) Location No. 130/0 to 131A/0:

A case was filed against the Petitioner at Katwa court on 4.3.2016 by Nizanul Kabir & others, the landowners at location No. 130/0 to 131A/0. The court issued interim stay order on 5.3.2016 and final stay order on 2.1.2017. After several hearings court issued an order on 21.7.2017



setting aside above stay order dated 2.1.2017. Therefore, there was a delay of 16 months 16 days (5.3.2016 to 21.7.2017) due to court case at location No. 130/0 to 131A/0.

- Therefore, it is evident that due to court cases at above locations, COD of above line was delayed by 22 months (29.9.2015 to 27.7.2017). The delay summary is as follows:

Description	Remarks
SCOD as per investment approval	23.4.2016
Date of first stay order	29.9.2015
Date of removal of stay order	27.7.2017
Date of completion of the line after considering working period	16.7.2020
Period of delay due to court order	667 days
Period of delay after SCOD	1546 days

30. 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 assets on merit of the same being out of the control of the Petitioner in line with Regulation 22(2) “uncontrollable factors” of the 2019 Tariff Regulations.

31. 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 23.10.2013, the scheduled COD of the transmission project was 30 months. Accordingly, the scheduled COD of the transmission project was 23.4.2016 against which Asset-I, Asset-II, Asset-III and Asset-IV were put into commercial operation on 16.6.2019, 18.8.2019, 12.11.2019 and 16.7.2020 with a delay of 1150 days, 1213 days, 1299 days and 1546 days respectively. The asset wise time over-run is analysed and the same is as follows:



Asset-I and Asset-II:

32. Asset-I consists of 02 numbers 220 kV line bays at Rajarhat GIS and Asset-II consists of 01 number of 400/220 kV 500 MVA ICT (02nd) and associated bays at Rajarhat GIS Sub-station. The Petitioner has submitted that it has encountered law & order problems and RoW issues between 19.5.2014 to 14.8.2018 which has affected the construction work of Rajarhat Sub-station. The Petitioner has furnished details of correspondences exchanged with various authorities along with supporting documents. The Commission vide order dated 4.2.2021 in Petition No. 462/TT/2020 has approved the tariff for LILO of 400 kV S/C Subhasgram-Jeerat transmission line and associated bays at Rajarhat, 1 number 400/220 kV 500 MVA ICT (1st) and associated bays along with 4 nos. 220 kV line bays at Rajarhat GIS and condoned the time over-run of 1016 days due to law & order and RoW issues. The relevant portion of the order dated 4.2.2021 is as follows:

“42. This additional time of 1548 days due to law & order and ROW issues had a cascading effect on construction of sub-station and LILO. However, the Petitioner squeezed the execution time due to which the overall delay of Asset-I, Asset-III and Asset-IV came down to 1016 days, 1065 days and 1072 days, respectively. Therefore, the time over-run of 1016 days, 1065 days & 1072 days in Asset-I, Asset-III and Asset-IV, respectively was beyond the control of the Petitioner and is condoned in line with Regulation 12(2) of 2014 Tariff Regulations.”

33. Asset-I and Asset-II in the instant petition are installed in Rajarhat GIS. The Petitioner has submitted that severe law and order problems and RoW issues affected the completion of Rajarhat GIS from 19.5.2014 to 14.8.2018 and has submitted series of correspondence made by the Petitioner with various authorities to resolve the issues. The delay in completion of the Rajarhat Sub-station has already been considered, as stated above, by the Commission in order dated 4.2.2021 in Petition No. 462/TT/2020.



The Commission in order dated 4.2.2021 approved the COD of the bays and ICT in Rajarhat GIS as 3.2.2019 and condoned the time over-run of around 1016 days as it was considered to be beyond the control of the Petitioner. The Asset-I and Asset-II in the instant petition are also installed in the Rajarhat GIS. Accordingly, we are of the view that Asset-I and Asset-II should have also been installed on 3.2.2019 alongwith the other related assets. However, the COD of Asset-I and Asset-II is 16.6.2019 and 18.8.2019 respectively. The Petitioner has taken additional time to install Asset-I and Asset-II. We are not inclined to condone the additional time taken by the Petitioner for completion Asset-I and Asset-II beyond 3.2.2019. Therefore, the time over-run of 1016 days upto 3.2.2019 is only condoned in case of instant Asset-I and Asset-II associated with Rajarhat Sub-station. The Petitioner is directed to submit the reasons for additional time taken beyond 3.2.2019 to COD in case of Asset-I and Asset-II at the time of truing-up and the same will be reviewed at the time of truing-up.

34. Based on the above discussions, out of the total delay of 1150 days, time delay of 1016 days has been condoned in case of Asset-I and Asset-II.

Asset-III and Asset-IV:

35. Asset-III consists of Rajarhat-Gokarna 400 kV D/C portion of the Rajarhat-New Purnea line (resulting in formation of Farakka-Rajarhat and Farakka-Gokarna-Rajarhat 400 kV S/C lines) and Asset-IV consists of Farakka-New Purnea 400 kV D/C portion of the Rajarhat-New Purnea line (resulting in formation of planned lines viz. New Purnea-Farakka-Rajarhat and New Purnea-Gokarna-Rajarhat 400 kV S/C lines). The Petitioner has submitted that Asset-III and Asset-IV are delayed due to RoW problems in



construction of transmission line and court cases pertaining to construction of transmission line.

36. The Petitioner has submitted that the Petitioner faced RoW problems from 15.7.2014 to 12.11.2019 in case of Asset-III. As per the submissions of the Petitioner, the Petitioner has faced RoW problems at locations 1/0, 3/0, 4/0, 5/0, 5A/0, 5/2, 5/3,7B/1, 7/3,8/0,13/0 to 17/0, AP 14/0, AP-79/0, 15A/0-17/0, 20/1 to 25/1, 36A/0, 33/0, 54/3, 54/4, 54/5, 86/3, 85/0, 87/0, 87/1, 145/0,145/1, 224A/1, 226/1, 226/4, 280/0. The last such RoW problem faced by the Petitioner was on 8.11.2019.

37. The Petitioner has furnished details of correspondences exchanged with various authorities along with supporting documents. From the submissions of the Petitioner, it is apparent that RoW issues from 15.7.2014 to 8.11.2019 (1942 days) at various locations affected the execution of transmission asset. The time over-run of 1942 days on account of RoW problems was beyond the control of the Petitioner. However, the Petitioner has compressed the execution time and executed the transmission asset with overall time over-run of 1299 days. Therefore, the overall time over-run of 1299 days in execution of the Asset-III is hereby condoned.

38. As regards Asset-IV, the Petitioner has submitted that the Petitioner further faced RoW problems from 15.11.2019 to 29.6.2020 at location numbers 13/0 to 17/0 and Loc. No. 29/0 to 30/0 associated with Rajarhat-Gokarna transmission line. The Petitioner has furnished details of correspondences exchanged with various authorities along with supporting documents. From the submissions of the Petitioner, it is seen that the Petitioner faced severe RoW issues from 15.7.2014 to 29.6.2020 (2176 days) at various locations and it affected the execution of transmission asset. The time over-run of 2176



days on account of RoW problems was beyond the control of the Petitioner. However, the Petitioner has compressed the execution time and executed the transmission asset with overall delay of 1546 days. Therefore, the overall time over-run of 1546 days in execution of the Asset-IV is hereby condoned.

39. The summary of the time over-run condoned/not condoned are as follows:

Assets	Schedule COD as per IA	Actual COD	Time over-run	Time over-run condoned	Time over-run not condoned
Asset-I	23.4.2016	16.6.2019	1150 days	1016 days	134 days
Asset-II		18.8.2019	1213 days	1016 days	197 days
Asset-III		12.11.2019	1299 days	1299 days	Nil
Asset-IV		16.7.2020	1546 days	1546 days	Nil

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

40. The Petitioner vide affidavit dated 17.11.2020 has claimed IDC of the transmission assets covered in the instant petition and has submitted the statement showing IDC claim, discharge of IDC liability as on date of commercial operation and thereafter as follows:

(₹ in lakh)					
Asset	IDC as per Auditor Certificate	IDC discharged upto COD	IDC discharged during 2019-20	IDC discharged during 2020-21	IDC discharged during 2021-22
Asset-I	101.21	61.23	39.98	0.00	0.00
Asset-II	243.50	223.18	20.32	0.00	0.00
Asset-III	5421.09	4465.49	411.52	544.08	0.00
Asset-IV	11296.57	10692.35	0.00	428.99	175.23

41. We have considered the submissions of the Petitioner. As discussed above in this order, the time over-run in the commissioning of the transmission assets has been condoned as mentioned in the Para 40. 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 assets. 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)

Assets	IDC as per Auditor Certificate	IDC disallowed due to computational error / time over-run not condoned	IDC allowed	IDC discharged upto COD	IDC discharged during 2019-20	IDC discharged during 2020-21	IDC discharged during 2021-22
Asset-I	101.21	20.35	80.86	58.69	22.18	0.00	0.00
Asset-II	243.50	99.14	144.36	143.07	1.29	0.00	0.00
Asset-III	5421.09	0.00	5421.09	4465.49	411.52	544.08	0.00
Asset-IV	11296.57	28.07	11268.50	10657.83	0.00	428.99	181.69

42. The Petitioner has claimed IEDC for the transmission assets as per the Auditor Certificate. 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 Asset-I, Asset-II, Asset-III and Asset-IV 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)

Assets	IEDC claimed as per Auditor certificate (A)	IEDC disallowed due to time over-run not condoned (B)	IEDC allowed (A-B)
Asset-I	63.56	4.13	59.43
Asset-II	176.31	16.34	159.97
Asset-III	1658.10	0.00	1658.10
Asset-IV	3883.96	0.00	3883.96



Initial Spares

43. 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%”*

44. The Initial Spares as claimed by the Petitioner are as follows:

Assets	Particulars	Plant and Machinery Cost	Initial Spares claimed		Ceiling limit as per Regulations (in %)
			Amount (₹)	Percentage (in %)	
		A	B		C
Asset-I	Sub-station (GIS- G/F)	954.78	29.04	3.04	5.00
Asset-II	Sub-station (GIS- G/F)	3121.76	91.09	2.92	5.00
Asset-III	Transmission Line	33667.21	310.00	0.92	1.00
Asset-IV	Transmission Line	44072.44	425.26	0.96	1.00
	Sub-station (GIS- G/F)	6856.11	241.53	3.52	5.00
	PLCC	91.56	6.25	6.83	3.50

45. The Petitioner has claimed the Initial Spares of PLCC separately. The Commission vide order dated 24.1.2021 in Petition No. 126/TT/2020 has already considered PLCC to be a part of Sub-station. Therefore, the Initial Spares have been computed by combing the cost of both PLCC and Sub-station and allowed as per the norms specified for Sub-station in the 2019 Tariff Regulations. Further, in the instant



case, all assets covered in the transmission project have been put into commercial operation during the 2019-24 period, but they are not combined in the 2019- 24 tariff period. Accordingly, the Initial Spares are allowed on the basis of the individual capital cost of the transmission assets in the 2019-24 tariff period. The Initial Spares allowed for the transmission assets are as follows:

Assets	Particulars	Plant and Machinery cost (excluding IDC/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	$D=(A-B)*C/(100-C)$	E=B-D	
Asset-I	Sub-station	954.78	29.04	5.00	48.72	Nil	29.04
Asset-II	Sub-station	3121.76	91.09	5.00	159.51	Nil	91.09
Asset-III	Transmission line	33667.21	310.00	1.00	336.94	Nil	310.00
Asset-IV	Transmission Line	44072.44	425.26	1.00	440.88	Nil	425.26
	Sub-station and PLCC	6947.67	247.78	5.00	352.63	Nil	247.78

46. Since the Petitioner's claim of Initial Spares is within the ceiling limit, the Petitioner's claim of Initial Spares in case of Asset-I, Asset-II and Asset-III and Asset-IV is allowed.

Capital Cost allowed as on COD

47. The capital cost allowed as on COD is as follows:

Assets	Capital Cost claimed as on COD (Auditor Certificate) (A)	Undischarged IDC (B)	IDC disallowed (C)	IEDC disallowed (D)	Capital cost considered as on COD E=(A-B-C-D)
Asset-I	974.75	22.18	20.35	4.13	928.09
Asset-II	3172.98	1.29	99.14	16.34	3056.20
Asset-III	33338.60	955.60	0.00	0.00	32383.00
Asset-IV	65085.15	610.68	28.07	0.00	64446.41



Additional Capital Expenditure (ACE)

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

“24. Additional Capitalisation within the original scope and upto the cut-off date

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

- (a) *Undischarged liabilities recognized to be payable at a future date;*
- (b) *Works deferred for execution;*
- (c) *Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 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 additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:*

- (a) *Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*
- (b) *Change in law or compliance of any existing law;*
- (c) *Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (d) *Liability for works executed prior to the cut-off date;*
- (e) *Force Majeure events;*
- (f) *Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;*
- (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.”*

49. The Petitioner has submitted that the ACE incurred/projected to be incurred for the transmission assets is mainly on account of balance/retention payments 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:

Assets	Capital Cost as on COD	Projected ACE 2019-24				Capital Cost as on 31.3.2024
		2019-20	2020-21	2021-22	2022-23	
Asset-I	974.75	94.80	50.00	0.00	0.00	1119.55
Asset-II	3172.98	218.59	150.00	0.00	0.00	3541.57
Asset-III	33338.60	468.68	5398.60	1799.53	1799.54	42804.95
Asset-IV	65085.15	0.00	1113.36	750.00	0.00	66948.51

50. The Petitioner, in response to TV letter, submitted that there no ACE is expected beyond 2022-23 as of now for the transmission assets.

51. The Petitioner vide affidavit dated 17.11.2020 has submitted the package-wise and vendor-wise break-up. We have considered the submissions made by the Petitioner. The ACE claimed by the Petitioner for the transmission assets has been allowed under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations. Accordingly, the ACE allowed for the 2019-24 period is as follows:

Assets	ACE			
	2019-20	2020-21	2021-22	2022-23
Asset-I	116.98	50.00	0.00	0.00



Assets	ACE			
	2019-20	2020-21	2021-22	2022-23
Asset-II	219.88	150.00	0.00	0.00
Asset-III	880.20	5942.68	1799.53	1799.54
Asset-IV	0.00	1542.35	950.98	0.00

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

(₹ in lakh)

Assets	Capital Cost as on COD	ACE 2019-24				Capital Cost as on 31.3.2024
		2019-20	2020-21	2021-22	2022-23	
Asset-I	928.09	116.98	50.00	0.00	0.00	1095.07
Asset-II	3056.20	219.88	150.00	0.00	0.00	3426.08
Asset-III	32383.00	880.20	5942.68	1799.53	1799.54	42804.95
Asset-IV	64446.41	0.00	1542.35	931.69	0.00	66920.44

Debt-Equity ratio

53. 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.”

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

Asset-I

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	649.67	70.00	116.88	70.00	766.55	70.00
Equity	278.43	30.00	50.09	30.00	328.52	30.00
Total	928.10	100.00	166.98	100.00	1095.07	100.00



Asset-II

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	2139.35	70.00	258.91	70.00	2398.26	70.00
Equity	916.86	30.00	110.96	30.00	1027.83	30.00
Total	3056.21	100.00	369.88	100.00	3426.08	100.00

Asset-III

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	22668.10	70.00	7295.37	70.00	29963.47	70.00
Equity	9714.90	30.00	3126.59	30.00	12841.49	30.00
Total	32383.00	100.00	10421.95	100.00	42804.95	100.00

Asset-IV

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	45112.49	70.00	1731.83	70.00	46844.32	70.00
Equity	19333.92	30.00	742.21	30.00	20076.13	30.00
Total	64446.41	100.00	2474.04	100.00	66920.45	100.00

Depreciation

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

“33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.



(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

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

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

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

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

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

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

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

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

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

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



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

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

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

56. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The weighted average rate of depreciation (WAROD) has been worked (Annexure-I, Annexure-II, Annexure-III and Annexure-IV) as per the rates of depreciation prescribed in the 2019 Tariff Regulations. The depreciation allowed for the transmission assets is as follows:

Asset-I

(₹ in lakh)

Particulars	2019-20 (pro-rata 290 days)	2020-21	2021-22	2022-23	2023-24
Depreciation					
Opening Gross Block	928.10	1045.07	1095.07	1095.07	1095.07
ACE	116.98	50.00	0.00	0.00	0.00
Closing Gross Block	1045.07	1095.07	1095.07	1095.07	1095.07
Average Gross Block	986.58	1070.07	1095.07	1095.07	1095.07
Weighted average rate of Depreciation (WAROD) (in %)	5.41	5.41	5.40	5.40	5.40



Particulars	2019-20 (pro-rata 290 days)	2020-21	2021-22	2022-23	2023-24
Balance useful life of the asset (Year)	25.00	25.00	24.00	23.00	22.00
Elapsed life at the beginning of the year (Year)	0.00	0.00	1.00	2.00	3.00
Aggregate Depreciable Value	889.29	964.45	986.95	986.95	986.95
Combined Depreciation during the year	42.33	57.84	59.16	59.16	59.16
Aggregate Cumulative Depreciation	42.33	100.17	159.34	218.50	277.67
Remaining Aggregate Depreciable Value	846.97	864.28	827.61	768.45	709.28

Asset-II

(₹ in lakh)

Particulars	2019-20 (pro-rata 227 days)	2020-21	2021-22	2022-23	2023-24
Depreciation					
Opening Gross Block	3056.21	3276.08	3426.08	3426.08	3426.08
ACE	219.88	150.00	0.00	0.00	0.00
Closing Gross Block	3276.08	3426.08	3426.08	3426.08	3426.08
Average Gross Block	3166.15	3351.08	3426.08	3426.08	3426.08
Weighted average rate of Depreciation (WAROD) (in %)	5.32	5.32	5.32	5.32	5.32
Balance useful life of the asset (Year)	25.00	25.00	24.00	23.00	22.00
Elapsed life at the beginning of the year (Year)	0.00	0.00	1.00	2.00	3.00
Aggregate Depreciable Value	2850.83	3017.27	3084.77	3084.77	3084.77
Combined Depreciation during the year	104.47	178.20	182.16	182.16	182.16
Aggregate Cumulative Depreciation	104.47	282.66	464.82	646.98	829.14
Remaining Aggregate Depreciable Value	2746.36	2734.61	2619.95	2437.79	2255.63

Asset-III

(₹ in lakh)

Particulars	2019-20 (pro-rata 141 days)	2020-21	2021-22	2022-23	2023-24
Depreciation					
Opening Gross Block	32383.00	33263.20	39205.88	41005.41	42804.95



ACE	880.20	5942.68	1799.53	1799.54	0.00
Closing Gross Block	33263.20	39205.88	41005.41	42804.95	42804.95
Average Gross Block	32823.10	36234.54	40105.65	41905.18	42804.95
Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28	5.28
Balance useful life of the asset (Year)	35	35	34	33	32
Elapsed life at the beginning of the year (Year)	0	0	1	2	3
Aggregate Depreciable Value	29540.79	32611.09	36095.08	37714.66	38524.46
Combined Depreciation during the year	667.65	1913.18	2117.58	2212.59	2260.10
Aggregate Cumulative Depreciation	667.65	2580.84	4698.42	6911.01	9171.11
Remaining Aggregate Depreciable Value	28873.14	30030.25	31396.66	30803.65	29353.34

Asset-IV

(₹ in lakh)

Particulars	2020-21 (pro-rata 259 days)	2021-22	2022-23	2023-24
Depreciation				
Opening Gross Block	64446.41	65988.76	66920.44	66920.44
ACE	1542.35	931.69	0.00	0.00
Closing Gross Block	65988.76	66920.44	66920.44	66920.44
Average Gross Block	65217.58	66454.60	66920.44	66920.44
Freehold Land	0.00	0.00	0.00	0.00
Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.27	5.27	5.27
Balance useful life of the asset (Year)	34	34	33	32
Elapsed life at the beginning of the year (Year)	0	0	1	2
Aggregate Depreciable Value	58699.62	59812.96	60232.23	60232.23
Combined Depreciation during the year	2443.68	3501.88	3523.57	3523.57
Aggregate Cumulative Depreciation	2443.68	5945.56	9469.13	12992.70
Remaining Aggregate Depreciable Value	56255.95	53867.40	50763.10	47239.53

Interest on Loan (IoL)

57. 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



Order in Petition No. 255/TT/2021

Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.

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

(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered;

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(5a) The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.”

58. The weighted average rate of IoL (WAROI) has been considered on the basis of rate 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 the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, will be considered at the



time of true-up. Therefore, the IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. The IoL has been allowed as follows:

Asset-I

(₹ in lakh)

Particulars	2019-20 (Pro-rata 290 days)	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	649.67	731.55	766.55	766.55	766.55
Cumulative Repayments upto Previous Year	0.00	42.33	100.17	159.34	218.50
Net Loan-Opening	649.67	689.22	666.38	607.21	548.05
Additions	81.88	35.00	0.00	0.00	0.00
Repayment during the year	42.33	57.84	59.16	59.16	59.16
Net Loan-Closing	689.22	666.38	607.21	548.05	488.89
Average Loan	669.45	677.80	636.80	577.63	518.47
Weighted Average Rate of Interest on Loan (in %)	7.41	7.40	7.40	7.40	7.40
Interest on Loan	39.30	50.19	47.15	42.77	38.39

Asset-II

(₹ in lakh)

Particulars	2019-20 (Pro-rata 227 days)	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	2139.35	2293.26	2398.26	2398.26	2398.26
Cumulative Repayments upto Previous Year	0.00	104.47	282.66	464.82	646.98
Net Loan-Opening	2139.35	2188.79	2115.59	1933.44	1751.28
Additions	153.91	105.00	0.00	0.00	0.00
Repayment during the year	104.47	178.20	182.16	182.16	182.16
Net Loan-Closing	2188.79	2115.59	1933.44	1751.28	1569.12
Average Loan	2164.07	2152.19	2024.51	1842.36	1660.20
Weighted Average Rate of Interest on Loan (in %)	8.21	8.21	8.21	8.20	8.20
Interest on Loan	110.17	176.65	166.15	151.16	136.18

Asset-III

(₹ in lakh)

Particulars	2019-20 (Pro-rata 141 days)	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	22668.10	23284.24	27444.12	28703.79	29963.47



Cumulative Repayments upto Previous Year	0.00	667.65	2580.84	4698.42	6911.01
Net Loan-Opening	22668.10	22616.59	24863.28	24005.37	23052.46
Additions	616.14	4159.88	1259.67	1259.68	0.00
Repayment during the year	667.65	1913.18	2117.58	2212.59	2260.10
Net Loan-Closing	22616.59	24863.28	24005.37	23052.46	20792.35
Average Loan	22642.34	23739.93	24434.32	23528.91	21922.40
Weighted Average Rate of Interest on Loan (in %)	7.91	7.88	7.89	7.92	7.90
Interest on Loan	689.70	1871.82	1927.96	1862.60	1732.92

Asset-IV

(₹ in lakh)

Particulars	2020-21 (Pro-rata 259 days)	2021-22	2022-23	2023-24
Gross Normative Loan	45112.49	46192.13	46844.32	46844.32
Cumulative Repayments upto Previous Year	0.00	2443.68	5945.56	9469.13
Net Loan-Opening	45112.49	43748.45	40898.76	37375.19
Additions	1079.65	652.18	0.00	0.00
Repayment during the year	2443.68	3501.88	3523.57	3523.57
Net Loan-Closing	43748.45	40898.76	37375.19	33851.62
Average Loan	44430.47	42323.61	39136.98	35613.41
Weighted Average Rate of Interest on Loan (in %)	5.5004	5.3938	5.3065	5.2487
Interest on Loan	1734.13	2282.84	2076.82	1869.22

Return on Equity (RoE)

59. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide as under:

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

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

Provided that return on equity in respect of additional capitalization after cutoff date beyond the original scope, excluding additional capitalization on 7 account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission



system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.

Provided further that:

- i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;
- ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;
- iii. in case of a thermal generating station, with effect from 1.4.2020:
 - a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
 - b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

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

“31. Tax on Return on Equity. (1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

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

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 ₹ 1,000 crore;
- (b) Estimated Advance Tax for the year on above is ₹ 240 crore;
- (c) Effective Tax Rate for the year 2019-20 = ₹ 240 Crore / ₹ 1000 Crore = 24%;
- (d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis."

60. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. Accordingly, the MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which will be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. The RoE allowed for the transmission assets has been worked out and allowed as follows:



Asset-I

(₹ in lakh)

Particulars	2019-20 (Pro-rata 290 days)	2020-21	2021-22	2022-23	2023-24
Opening Equity (A)	278.43	313.52	328.52	328.52	328.52
Additions (B)	35.09	15.00	0.00	0.00	0.00
Closing Equity (C) = (A+B)	313.52	328.52	328.52	328.52	328.52
Average Equity (D) = (A+C)/2	295.98	321.02	328.52	328.52	328.52
Return on Equity (Base Rate) (in %)	15.50	15.50	15.50	15.50	15.50
MAT Rate for respective year (in %)	17.47	17.47	17.47	17.47	17.47
Rate of Return on Equity (in %)	18.78	18.78	18.78	18.78	18.78
Return on Equity	44.05	60.29	61.70	61.70	61.70

Asset-II

(₹ in lakh)

Particulars	2019-20 (Pro-rata 227 days)	2020-21	2021-22	2022-23	2023-24
Opening Equity (A)	916.86	982.83	1027.83	1027.83	1027.83
Additions (B)	65.96	45.00	0.00	0.00	0.00
Closing Equity (C) = (A+B)	982.83	1027.83	1027.83	1027.83	1027.83
Average Equity (D) = (A+C)/2	949.84	1005.33	1027.83	1027.83	1027.83
Return on Equity (Base Rate) (in %)	15.50	15.50	15.50	15.50	15.50
MAT Rate for respective year (in %)	17.47	17.47	17.47	17.47	17.47
Rate of Return on Equity (in %)	18.78	18.78	18.78	18.78	18.78
Return on Equity	110.65	188.82	193.05	193.05	193.05

Asset-III

(₹ in lakh)

Particulars	2019-20 (Pro-rata 141 days)	2020-21	2021-22	2022-23	2023-24
Opening Equity (A)	9714.90	9978.96	11761.76	12301.62	12841.49
Additions (B)	264.06	1782.80	539.86	539.86	0.00



Closing Equity (C) = (A+B)	9978.96	11761.76	12301.62	12841.49	12841.49
Average Equity (D) = (A+C)/2	9846.93	10870.36	12031.69	12571.55	12841.49
Return on Equity (Base Rate) (in %)	15.50	15.50	15.50	15.50	15.50
MAT Rate for respective year (in %)	17.47	17.47	17.47	17.47	17.47
Rate of Return on Equity (in %)	18.78	18.78	18.78	18.78	18.78
Return on Equity	712.49	2041.67	2259.79	2361.19	2411.89

Asset-IV

(₹ in lakh)

Particulars	2020-21 (Pro-rata 259 days)	2021-22	2022-23	2023-24
Opening Equity (A)	19333.92	19796.63	20076.13	20076.13
Additions (B)	462.71	279.51	0.00	0.00
Closing Equity (C) = (A+B)	19796.63	20076.13	20076.13	20076.13
Average Equity (D) = (A+C)/2	19565.27	19936.38	20076.13	20076.13
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782
Return on Equity	2607.56	3744.45	3770.70	3770.70

Operation & Maintenance Expenses (O&M Expenses)

61. The O&M expenses claimed by the Petitioner for the transmission assets for the 2019-24 period are as follows:

Asset-I

Particulars	2019-20 (Pro-rata 290 days)	2020-21	2021-22	2022-23	2023-24
Bays:					
400 kV GIS					
i. Rajarhat: 220 kV Line Bays for WBSECTL (2 numbers)					
400 kV (numbers)	2	2	2	2	2
Norms (₹ lakh/bay)	15.757	16.31	16.884	17.472	18.088
Total O&M expenses	24.97	32.62	33.77	34.94	36.18



Asset-II

Particulars	2019-20 (Pro-rata 227 days)	2020-21	2021-22	2022-23	2023-24
Sub-station:					
400 kV					
i. Rajarhat: 500 MVA ICT-II (1 numbers)					
400 KV (MVA)	0.358	0.371	0.384	0.398	0.411
Norms (₹ Lakh per MVA)	500	500	500	500	500
Bays:					
400 kV					
i. Rajarhat: 400 kV bay for ICT-II (1 numbers)					
220 kV					
i. Rajarhat: 220 kV bay for ICT-II (1 numbers)					
220 kV (numbers)	1.00	1.00	1.00	1.00	1.00
Norms (₹ lakh/bay)	15.757	16.31	16.884	17.472	18.088
400 kV (numbers)	1.00	1.00	1.00	1.00	1.00
Norms (₹ lakh/bay)	22.505	23.296	24.115	24.962	25.837
Total O&M expenses	134.75	225.11	233.00	241.43	249.43

Asset-III

Particulars	2019-20 (Pro-rata 141 days)	2020-21	2021-22	2022-23	2023-24
Transmission Line:					
400 kV					
i. 400 kV D/C (triple) AC station-Purnea-Farakka Portion of Main Line (151.25 km)					
400 kV (km)	151.25	151.25	151.25	151.25	151.25
Norms (₹ lakh/MVA)	0.881	0.912	0.944	0.977	1.011
Total O&M expenses	51.33	137.94	142.78	147.77	152.91

Asset-IV

Particulars	2020-21 (Pro-rata 259 days)	2021-22	2022-23	2023-24
Transmission Line:				
400 kV				
i. 400 kV D/C (triple) AC station-Rajarhat Gokarna Portion of 400 kV D/C Rajarhat-Purnea transmission line (209.52 km)				
400 KV (km)	209.52	209.52	209.52	209.52
Norms (₹ lakh/km)	0.912	0.944	0.977	1.011
Sub-station				
400 kV GIS				
i. Rajarhat:02 numbers 400 kV Line Bays For 400 kV D/C Rajarhat - Purnea transmission line (2 numbers)				



Particulars	2020-21 (Pro-rata 259 days)	2021-22	2022-23	2023-24
ii. Rajarhat: 02 numbers 80 MVA SLR At Rajarhat for 400 kV D/C Rajarhat - Purnea transmission line (2 numbers)				
400 kV (numbers)	4	4	4	4
Norms (₹ lakh/number)	23.296	24.115	24.962	25.837
PLCC (@ 2% of Capital Cost)				
Original Project cost (₹ lakh)	91.56	91.56	91.56	91.56
Total O&M expenses	203.01	296.08	306.37	316.99

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

“35. Operation and Maintenance Expenses:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433



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

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

Provided further that:

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



operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

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

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

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

*(4) **Communication system:** The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up.”*

63. We have considered the submissions of the Petitioner. The Petitioner has claimed O&M Expenses separately for Asset-I for PLCC under Regulation 35(4) of the 2019 tariff Regulations @2% of its original project cost in the instant petition. The Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2019 Tariff Regulations and norms for sub-station have been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No. 126/TT/2020 has already concluded that no separate O&M expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M expenses for PLCC @2% is not allowed.



64. The O&M expenses are worked out for various elements of the transmission assets as per the norms specified in the 2019 Tariff Regulations and the same are as follows:

Asset-I

Particulars	2019-20 (Pro-rata 290 days)	2020-21	2021-22	2022-23	2023-24
Bays:					
400 kV GIS					
i. Rajarhat: 220 kV Line Bays for WBSECTL (2 numbers)					
400 kV (nos.)	2	2	2	2	2
Norms (₹ lakh/bay)	15.757	16.31	16.884	17.472	18.088
Total O&M expenses	24.97	32.62	33.77	34.94	36.18

Asset-II

Particulars	2019-20 (Pro-rata 227 days)	2020-21	2021-22	2022-23	2023-24
Sub-station:					
400 kV					
i. Rajarhat: 500 MVA ICT-II (1 numbers)					
400 kV (MVA)	0.358	0.371	0.384	0.398	0.411
Norms (₹ Lakh per MVA)	500	500	500	500	500
Bays:					
400 kV					
i. Rajarhat:400 kV bay for ICT-II (1 numbers)					
220 kV					
i. Rajarhat:220 kV bay for ICT-II (1 numbers)					
220 kV (numbers)	1.00	1.00	1.00	1.00	1.00
Norms (₹ lakh/bay)	15.757	16.31	16.884	17.472	18.088
400 kV (numbers)	1.00	1.00	1.00	1.00	1.00
Norms (₹ lakh/bay)	22.505	23.296	24.115	24.962	25.837
Total O&M expenses	134.75	225.11	233.00	241.43	249.43

Asset-III

Particulars	2019-20 (Pro-rata 141 days)	2020-21	2021-22	2022-23	2023-24
Transmission Line:					
400 kV					
i. 400 kV D/C (triple) AC station-Purnea - Farakka Portion of main line (151.25 km)					



Particulars	2019-20 (Pro-rata 141 days)	2020-21	2021-22	2022-23	2023-24
400 kV (km)	151.25	151.25	151.25	151.25	151.25
Norms (₹ lakh/MVA)	0.881	0.912	0.944	0.977	1.011
Total O&M expenses	51.33	137.94	142.78	147.77	152.91

Asset-IV

Particulars	2020-21 (Pro-rata 259 days)	2021-22	2022-23	2023-24
Transmission Line:				
400 kV				
i. 400 kV D/C (triple) AC station-Rajarhat Gokarna Portion of 400 kV D/C Rajarhat-Purnea TL (209.52 km)				
400 kV (km)	209.52	209.52	209.52	209.52
Norms (₹ lakh/km)	0.912	0.944	0.977	1.011
Sub-station				
400 kV GIS				
i. Rajarhat:02 Nos 400 kV Line Bays For 400 kV D/C Rajarhat - Purnea transmission line (2 numbers)				
ii. Rajarhat: 02 numbers 80 Mvar SLR At Rajarhat for 400 kV D/C Rajarhat - Purnea transmission line (2 numbers)				
400 kV (numbers)	4	4	4	4
Norms (₹ lakh/numbers)	23.296	24.115	24.962	25.837
Total O&M expenses	201.71	294.25	304.55	315.17

Interest on Working Capital (IWC)

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

“34. Interest on Working Capital: (1) The working capital shall cover:

.....

(c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:

- (i) Receivables equivalent to 45 days of annual fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
- (iii) Operation and maintenance expenses, including security expenses for one month.

“(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff



period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.

(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency.”

“3. Definitions. - In these regulations, unless the context otherwise requires:-

‘Bank Rate’ means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;”

66. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%.

67. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (ROI) considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, ROI for 2020-21 has been considered as 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) whereas, 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 thereon allowed are as follows:

Asset-I

Particulars	(₹ in lakh)				
	2019-20 (Pro-rata 290 days)	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M expenses for 1 month)	2.63	2.72	2.81	2.91	3.01



Working Capital for Maintenance Spares (15% of O&M Expenses)	4.73	4.89	5.07	5.24	5.43
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	23.84	25.23	25.31	24.91	24.45
Total Working Capital	31.19	32.84	33.19	33.06	32.89
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	2.98	3.69	3.48	3.47	3.45

Asset-II

(₹ in lakh)

Particulars	2019-20 (Pro-rata 227 days)	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M expenses for 1 month)	18.11	18.76	19.42	20.12	20.79
Working Capital for Maintenance Spares (15% of O&M Expenses)	32.59	33.77	34.95	36.22	37.41
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	93.33	96.85	97.43	96.64	95.53
Total Working Capital	144.02	149.38	151.80	152.98	153.73
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	10.76	16.80	15.94	16.06	16.14

Asset-III

(₹ in lakh)

Particulars	2019-20 (Pro-rata 141 days)	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M expenses for 1 month)	11.10	11.50	11.90	12.31	12.74
Working Capital for Maintenance Spares (15% of O&M Expenses)	19.99	20.69	21.42	22.17	22.94
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	687.62	746.16	805.84	822.84	817.30
Total Working Capital	718.71	778.35	839.15	857.32	852.98
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	33.36	87.56	88.11	90.02	89.56



Asset-IV

(₹ in lakh)

Particulars	2020-21 (Pro-rata 259 days)	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M expenses for 1 month)	23.69	24.52	25.38	26.26
Working Capital for Maintenance Spares (15% of O&M Expenses)	42.64	44.14	45.68	47.28
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	1231.98	1227.89	1209.46	1181.61
Total Working Capital	1298.31	1296.55	1280.52	1255.15
Rate of Interest (in %)	11.25	10.50	10.50	10.50
Interest on Working Capital	103.64	136.14	134.46	131.79

Annual Fixed Charges for the 2019-24 Tariff Period

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

Asset-I

(₹ in lakh)

Particulars	2019-20 (Pro-rata 290 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	42.33	57.84	59.16	59.16	59.16
Interest on Loan	39.30	50.19	47.15	42.77	38.39
Return on Equity	44.05	60.29	61.70	61.70	61.70
O & M Expenses	24.97	32.62	33.77	34.94	36.18
Interest on Working Capital	2.98	3.69	3.48	3.47	3.45
Total	153.63	204.63	205.26	202.04	198.88

Asset-II

(₹ in lakh)

Particulars	2019-20 (Pro-rata 227 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	104.47	178.20	182.16	182.16	182.16
Interest on Loan	110.17	176.65	166.15	151.16	136.18
Return on Equity	110.65	188.82	193.05	193.05	193.05
O&M Expenses	134.75	225.11	233.00	241.43	249.43



Interest on Working Capital	10.76	16.80	15.94	16.06	16.14
Total	470.80	785.58	790.30	783.86	776.96

Asset-III

(₹ in lakh)

Particulars	2019-20 (Pro-rata 141 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	667.65	1913.18	2117.58	2212.59	2260.10
Interest on Loan	689.70	1871.82	1927.96	1862.60	1732.92
Return on Equity	712.49	2041.67	2259.79	2361.19	2411.89
O&M Expenses	51.33	137.94	142.78	147.77	152.91
Interest on Working Capital	33.36	87.56	88.11	90.02	89.56
Total	2154.53	6052.17	6536.22	6674.17	6647.38

Asset-IV

(₹ in lakh)

Particulars	2020-21 (Pro-rata 259 days)	2021-22	2022-23	2023-24
Depreciation	2443.68	3501.88	3523.57	3523.57
Interest on Loan	1734.13	2282.84	2076.82	1869.22
Return on Equity	2607.56	3744.45	3770.70	3770.70
O&M Expenses	201.71	294.25	304.55	315.17
Interest on Working Capital	103.64	136.14	134.46	131.79
Total	7090.72	9959.56	9810.10	9610.45

Filing Fee and the Publication Expenses

69. 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 & RLDC Fees and Charges

70. The Petitioner shall be entitled for 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 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

71. 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 will be borne and additionally paid by the Respondent(s) to the Petitioner and the same will be charged and billed separately by the Petitioner. Further, additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/ Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

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

Security Expenses

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

74. 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

75. 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

76. The COD of Asset-I, i.e. 2 numbers 220 kV line bays at Rajarhat GIS is approved as 16.6.2019 under Regulation 5(2) of the 2019 Tariff Regulations as the associated downstream system of WBSETCL was not ready. Therefore, the transmission charges determined in this order from 16.6.2019 to till COD of the downstream transmission system shall be borne by WBSETCL. Thereafter, shall be governed by the applicable Sharing Regulations.

77. The COD of Asset-II, Asset-III and Asset-IV has been approved as 18.8.2019, 12.11.2019 and 16.7.2020 respectively. With effect from 1.7.2011, sharing of transmission charges for Inter-State transmission systems was governed by the 2010 Sharing Regulations and with effect from 1.11.2020 (after repeal of the 2010 Sharing Regulations), sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the billing, collection and disbursement of the transmission charges of Asset-II, Asset-III and Asset-IV shall be recovered in terms of provisions of the 2010 Sharing Regulations and 2020 Sharing Regulations as provided in Regulation



43 of the 2014 Tariff Regulations and Regulation 57 of the 2019 Tariff Regulations respectively.

78. To summarise:

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

Asset-I

(₹ in lakh)

Particulars	2019-20 (Pro-rata 290 days)	2020-21	2021-22	2022-23	2023-24
AFC	153.63	204.63	205.26	202.04	198.88

Asset-II

(₹ in lakh)

Particulars	2019-20 (Pro-rata 227 days)	2020-21	2021-22	2022-23	2023-24
AFC	470.80	785.58	790.30	783.86	776.96

Asset-III

(₹ in lakh)

Particulars	2019-20 (Pro-rata 141 days)	2020-21	2021-22	2022-23	2023-24
AFC	2154.53	6052.17	6536.22	6674.17	6647.38

Asset-IV

(₹ in lakh)

Particulars	2020-21 (Pro-rata 259 days)	2021-22	2022-23	2023-24
AFC	7090.72	9959.56	9810.10	9610.45

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



80. This order disposes of Petition No. 255/TT/2021 in terms of the above findings and discussions.

**sd/-
(P. K. Singh)
Member**

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

**sd/-
(I. S. Jha)
Member**



ANNEXURE-I

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019/COD (₹ in lakh)	Projected ACE (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2019-20	2020-21	2021-22	2022-23	Total			2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station	914.59	116.65	50.00	-	-	166.65	1081.24	5.28%	51.37	55.77	57.09	57.09	57.09
IT Equipment (Incl. Software)	13.51	0.32	-	-	-	0.32	13.83	15.00%	2.05	2.08	2.08	2.08	2.08
Total	928.10	116.98	50.00	-	-	166.98	1095.07		53.42	57.84	59.16	59.16	59.16
Average Gross Block (₹ in lakh)									986.58	1070.07	1095.07	1095.07	1095.07
Weighted Average Rate of Depreciation									5.41%	5.41%	5.40%	5.40%	5.40%

ANNEXURE-II

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019/COD (₹ in lakh)	Projected ACE (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2019-20	2020-21	2021-22	2022-23	Total			2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station	3043.23	219.87	150.00	-	-	369.87	3413.10	5.28%	166.49	176.25	180.21	180.21	180.21
IT Equipment (Incl. Software)	12.97	0.01	-	-	-	0.01	12.98	15.00%	1.95	1.95	1.95	1.95	1.95
Total	3056.21	219.88	150.00	-	-	369.88	3426.08		168.43	178.20	182.16	182.16	182.16
Average Gross Block (₹ in lakh)									3166.15	3351.08	3426.08	3426.08	3426.08
Weighted Average Rate of Depreciation									5.32%	5.32%	5.32%	5.32%	5.32%



ANNEXURE-III

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019/COD (₹ in lakh)	Projected ACE (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)					
		2019-20	2020-21	2021-22	2022-23	Total			2019-20	2020-21	2021-22	2022-23	2023-24	
Transmission Line	32383.00	880.20	5942.68	1799.53	1799.54	10421.95	42804.95	5.28%	1733.06	1913.18	2117.58	2212.59	2260.10	
Total	32383.00	880.20	5942.68	1799.53	1799.54	10421.95	42804.95		1733.06	1913.18	2117.58	2212.59	2260.10	
									Average Gross Block (₹ in lakh)	32823.10	36234.54	40105.65	41905.18	42804.95
									Weighted Average Rate of Depreciation	5.28%	5.28%	5.28%	5.28%	5.28%

ANNEXURE-IV

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019/COD (₹ in lakh)	Projected ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2020-21	2021-22	Total			2020-21	2021-22	2022-23	2023-24	
Building Civil Works & Colony	-	447.87	300.00	747.87	747.87	3.34%	7.48	19.97	24.98	24.98	
Transmission Line	55449.45	614.10	406.32	1020.43	56469.87	5.28%	2943.94	2970.88	2981.61	2981.61	
Sub-station	8868.40	479.52	225.00	704.52	9572.93	5.28%	480.91	499.51	505.45	505.45	
PLCC	90.66	0.60	0.26	0.86	91.52	6.33%	5.76	5.79	5.79	5.79	
IT Equipment (Incl. Software)	37.89	0.25	0.11	0.36	38.25	15.00%	5.70	5.73	5.74	5.74	
Total	64446.41	1542.35	931.69	2474.04	66920.44		3443.79	3501.88	3523.57	3523.57	
							Average Gross Block (₹ in lakh)	65217.58	66454.60	66920.44	66920.44
							Weighted Average Rate of Depreciation	5.28%	5.27%	5.27%	5.27%

