

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 15/TT/2023

Coram:

**Shri Jishnu Barua, Chairperson
Shri Ramesh Babu V., Member**

Date of Order : 11.01.2025

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-1:** Bypassing of 400 kV D/C Farakka - Kahalgaon (Ckt-3 & Ckt-4) and 400 kV S/C Farakka - Durgapur (Ckt-1 & Ckt-2) existing transmission line from NTPC, Farakka so as to form 400 kV D/C Kahalgaon - Durgapur along with upgraded bays at Durgapur Sub-station and Kahalgaon Sub-station, **Asset-2:** 01 No. 500 MVA, 400/220 kV Transformer (4th ICT) along with 01 No. 400 kV ICT bay (AIS) and 01 No. 220 kV ICT bay (GIS) along with 220 kV cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV Sub-station and **Asset-3:** LILO of both circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa New (POWERGRID) Sub-station along with associated 04 nos. 400 kV line bays at Saharsa New (POWERGRID) Sub-station under "Eastern Region Strengthening Scheme-XXIII" in the Eastern Region.

And in the matter of:

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

.....Petitioner

Versus

1. **Bihar State Power (Holding) Company Limited,**
Vidyut Bhawan, Bailey Road,
Patna-800001.
2. **West Bengal State Electricity Distribution Company Limited,**
Bidyut Bhawan, Bidhan Nagar,
Block DJ, Sector-II, Salt Lake City,
Calcutta-700091.



3. **Grid Corporation of Orissa Limited**,
Shahid Nagar,
Bhubaneswar-751007.
4. **Damodar Valley Corporation**,
DVC Tower, Maniktala,
Civic Centre, VIP Road,
Calcutta-700054.
5. **Power Department, Government of Sikkim**,
Gangtok-737101.
6. **Jharkhand Bijli Vitran Nigam Limited**,
Engineering Building, H.E.C., Dhurwa,
Ranchi-834004.
7. **National Thermal Power Corporation Limited (NTPC)**,
NTPC Bhawan, Core-7, Scope Complex,
7, Institutional Area, Lodhi Road,
New Delhi-110003.

...Respondent(s)

Parties Present: Ms. Roshini Prasad, Advocate, BSPHCL
Shri Anup Kashyap, Advocate, BSPHCL
Shri Mohd. Mosin, PGCIL
Shri Zafrul Hasan, PGCIL
Ms. Suchitra, PGCIL

ORDER

The Petitioner, Power Grid Corporation of India Limited (PGCIL), has filed the instant Petition for the determination of transmission tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) for the period from COD to 31.3.2024 in respect of the following assets (hereinafter referred to as “the transmission assets”) under “Eastern Region Strengthening Scheme-XXIII” (hereinafter referred to as “the transmission project”) in the Eastern Region:



- Asset-1:** Bypassing of 400 kV D/C Farakka - Kahalgaon (Ckt-3 and Ckt-4) and 400 kV S/C Farakka - Durgapur (Ckt-1 & Ckt-2) existing transmission line from NTPC, Farakka so as to form 400 kV D/C Kahalgaon - Durgapur along with upgraded bays at Durgapur Sub-station and Kahalgaon Sub-station;
- Asset-2:** 01 No. 500 MVA, 400/220 kV Transformer (4th ICT) along with 01 No. 400 kV ICT bay (AIS) and 01 No. 220 kV ICT bay (GIS) along with 220 kV Cable from ICT to GIS bay at Muzaffarpur (Powergrid) 400/220 kV Sub-station; and
- Asset-3:** LILO of both circuits of Kishanganj (Powergrid) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa New (Powergrid) Sub-station along with associated 04 nos. 400 kV line bays at Saharsa New (Powergrid) Sub-station.

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 for the subject Assets as claimed and allow full tariff as claimed under instant petition.*
- 4) Approve the initial spares as claimed in the instant petition.*
- 5) Allow the Petitioner to claim the overall security expenses and consequential IOWC on that security expenses separately.*
- 6) Allow the Petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation as per para 8.3 above 2019 for respective block.*
- 7) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.*
- 8) Allow the Petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
- 9) Allow the Petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.*
- 10) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any*



statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

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

Background

3. The brief facts of the case are as under:
- a. The Investment Approval (IA) and expenditure sanction for the transmission project was accorded by the Board of Directors (BoD) of the Petitioner's Company on 11.7.2020 and has been communicated vide Memorandum No. C/CP/PA2021-04-0F-IA006 dated 15.7.2020 at an estimated cost of ₹23989 lakhs, including an IDC of ₹688 lakhs based on the March 2020 price level. The project was scheduled to be commissioned within 11 months from the date of the IA.
 - b. The Petitioner vide affidavit dated 6.9.2023 has submitted a Revised Cost Estimate (RCE) approved by the competent authority on 8.8.2023 and communicated vide Memorandum Ref No. C/CP/PA2324-05-0T-RCE006 dated 9.8.2023 with the revised cost estimate of ₹23177 lakhs, including an IDC of ₹2.03 lakhs based on the March 2020 price level.
 - c. The scope of work covered under the transmission project broadly includes as under:

Transmission Lines:

- (i) LILO of both circuits of Kishanganj (Powergrid) – Darbhanga (DMTCL)
 - a. 400 kV D/C (Quad) line at Saharsa (New) - 41 km



(ii) Bypassing of Farakka – Kahalgaon (Ckt-3 and Ckt-4) and Farakka – Durgapur

a. 400 kV D/C lines of Powergrid so as to form Kahalgaon – Durgapur 400 kV D/C line – 3.17 km

Sub-station

(i) Extension at Muzaffarpur (Powergrid) 400/220 kV Sub-station

i. Transformer Bays

a. 1 No. 400 kV ICT Bay in AIS

b. 1 No. 220 kV ICT bays in GIS

ii. 500 MVA, 400/220 kV transformer (4th ICT): 1 No.

iii. 220 kV cable from ICT to GIS bay

(ii) Extension at Saharsa (New) 400/220/132 kV Sub-station

a. 400 kV Line Bays: 4 nos. (for termination of LILO of both circuits of Kishanganj (Powergrid) – Darbhanga (DMTL) 400 kV D/C line at Saharsa – New)

(iii) Extension at Kahalgaon 400/132 kV Switchyard

a. Upgradation of 400 kV line bays equipment: 2 nos. for termination of Kahalgaon – Durgapur line section formed after bypassing of the line.

(iv) Extension at Durgapur 400/220 kV Sub-station

a. Upgradation of 400 kV line bays equipment: 2 nos. for termination of Kahalgaon – Durgapur line section formed after bypassing of the line.

d. 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	Asset Details	SCOD	COD	Time over-run
Asset-1	Bypassing of 400 kV D/C Farakka - Kahalgaon (Ckt-3 & Ckt-4) and 400 kV S/C Farakka - Durgapur (Ckt-1 & Ckt-2) existing transmission line from NTPC, Farakka so as to form 400 kV D/C Kahalgaon - Durgapur along with upgraded bays at Durgapur Sub-station and Kahalgaon Sub-station	10.6.2021	2.1.2022	206 days
Asset-2	01 No. 500 MVA, 400/220 kV Transformer (4 th ICT) along with 01 No. 400 kV ICT bay (AIS) and 1 No. 220 kV ICT bay (GIS) along with 220 kV cable from ICT to GIS bay at Muzaffarpur (Powergrid) 400/220 kV Sub-station		8.4.2022	302 days
Asset-3	LILO of both Circuits of Kishanganj (Powergrid) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa New (Powergrid) sub-station along with associated 04 nos. 400 kV Line Bays at Saharsa New (Powergrid) Sub-station		28.4.2022	

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

5. The Petitioner has served a copy of the Petition on the Respondents, and notice regarding the filing of this Petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner. Respondent No. 1 Bihar State Power (Holding) Company Limited (BSHPCL) has submitted its reply vide affidavit dated 16.10.2023 highlighting issues of time over-run, cost over-run with respect to Asset-2, Additional Capital Expenditure (ACE), Capital Cost, Return on Equity (RoE), tax on RoE, Interest on Loan (IoL), Recovery of Statutory Charges, Filing Fees and Sharing of Transmission Charges. The Petitioner has filed a rejoinder, vide affidavit dated



13.12.2023. The issues raised by BSPHCL and the clarifications thereto given by the Petitioner are considered in the relevant portions of this order.

6. This order is issued considering the submissions made by the Petitioner in the Petition and subsequent affidavits dated 3.3.2023, 6.9.2023, 26.9.2023, and 20.11.2023, the reply of BSPHCL vide affidavit dated 16.10.2023 and rejoinder of the Petitioner to the reply of BSPHCL vide affidavit dated 13.12.2023.

7. The hearing in this matter was held on 20.12.2023 through video conference, and the order was reserved. However, the order could not be issued prior to Shri P.K. Singh, a Member, demitting the office. Consequently, the matter was listed for hearing on 16.7.2024, and the order was reserved.

8. Having heard the representatives of the Petitioner and the learned counsel for BSPHCL and after perusing the material on record, we proceed to dispose of the Petition.

Determination of Annual Fixed Charges for 2019-24 Tariff Period

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

Asset-1

(₹ in lakh)

Particulars	2021-22 (pro-rata 89 days)	2022-23	2023-24
Depreciation	23.22	107.66	120.90
Interest on Loan	18.04	79.90	83.53
Return on Equity	24.63	114.29	128.40
Interest on Working Capital	0.89	4.08	4.48
O&M Expenses	0.73	3.12	3.23
Total	67.51	309.05	340.54



Asset-2

(₹ in lakh)

Particulars	2022-23 (pro-rata for 358 days)	2023-24
Depreciation	202.58	226.12
Interest on Loan	154.04	159.74
Return on Equity	216.18	241.30
Interest on Working Capital	16.90	18.08
O&M Expenses	247.41	260.62
Total	837.11	905.86

Asset-3

(₹ in lakh)

Particulars	2022-23 (pro-rata for 338 days)	2023-24
Depreciation	724.24	840.57
Interest on Loan	554.42	597.12
Return on Equity	767.71	889.91
Interest on Working Capital	33.39	37.76
O&M Expenses	172.85	193.21
Total	2252.61	2558.57

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

Asset-1

(₹ in lakh)

Particulars	2021-22 (pro-rata 89 days)	2022-23	2023-24
O&M Expenses	0.25	0.26	0.27
Maintenance Spares	0.45	0.47	0.48
Receivables	34.14	38.10	41.87
Total Working Capital	34.84	38.83	42.62
Rate of Interest (in %)	10.50	10.50	10.50
Interest on Working Capital	0.89	4.08	4.48

Asset-2

(₹ in lakh)

Particulars	2022-23 (pro-rata for 358 days)	2023-24
O&M Expenses	21.02	21.72
Maintenance Spares	37.84	39.09



Particulars	2022-23 (pro-rata for 358 days)	2023-24
Receivables	105.22	111.38
Total Working Capital	164.08	172.19
Rate of Interest (in %)	10.50	10.50
Interest on Working Capital	16.90	18.08

Asset-3

(₹ in lakh)

Particulars	2022-23 (pro-rata for 338 days)	2023-24
O&M Expenses	15.56	16.10
Maintenance Spares	28.00	28.98
Receivables	299.90	314.58
Total Working Capital	343.46	359.66
Rate of Interest (in %)	10.50	10.50
Interest on Working Capital	33.39	37.76

Date of Commercial Operation (“COD”)

11. The Petitioner has claimed actual dates of commercial operation in respect of Asset-1 as 2.1.2022, Asset-2 as 8.4.2022 and Asset-3 as 28.4.2022.

12. Regulation 5 of the 2019 Tariff Regulations provides as follows:

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

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

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

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



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

(3) The date of commercial operation in case of integrated mine(s), shall mean the earliest of —

- a) the first date of the year succeeding the year in which 25% of the Peak Rated Capacity as per the Mining Plan is achieved; or
- b) the first date of the year succeeding the year in which the value of production estimated in accordance with Regulation 7A of these regulations, exceeds total expenditure in that year; or
- c) the date of two years from the date of commencement of production:

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

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

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

13. The Petitioner has submitted the following documents in support of the COD of the transmission assets:



Assets	COD	Document Submitted
Asset-1	2.1.2022	(a) Notification of COD vide Ref. No. ER-II/KOL/DOCO/C-1/ dated 7.1.2022 issued by the Executive Director of the Petitioner Company. (b) CEA Regional Inspectoral Organisation Energization certificates dated 13.12.2021 for Ckt-3 and Ckt-2 and 25.3.2022 for Ckt-4 and Ckt-1. (c) ERLDC certificates dated 7.6.2022 against successful completion of trial run operation on load charging dated 19.12.2021 & 1.1.2022. (d) CMD certificate to confirm the capability of operation of asset to their full capacity as per requirement of COD w.e.f. 16:00 Hrs of 1.1.2022.
Asset-2	8.4.2022	(a) Notification of COD vide Ref. No. E/PT/COML/DOCO/2022-23/1854 dated 20.4.2022 issued by the Executive Director of the Petitioner Company (b) CEA Regional Inspectoral Organisation Energization certificate dated 26.3.2022. (c) ERLDC certificate dated 22.4.2022 against successful completion of trial run operation on load charging dated 7.4.2022.
Asset-3	28.4.2022	(a) Notification of COD vide Ref. No. E/PT/COMML/DOCO/2022-23/860 dated 29.4.2022 issued by the Executive Director of the Petitioner Company. (b) CEA Regional Inspectoral Organisation Energization certificates dated 11.4.2022 for extension bays, 12.4.2022 for LILO OUT of double circuit line, and 20.4.2022 for LILO IN of double circuit line. (c) ERLDC certificate dated 13.5.2022 against successful completion of trial run operation on load charging dated 23.4.2022 and 27.4.2022.

14. BSPHCL has submitted that a perusal of approval for energization dated 26.3.2022 and 11.4.2022 shows that approval was accorded to energize 500 MVA ICT and associated bays at 400/220 kV (the Petitioner's company), Muzaffarpur Sub-station and electrical installations of 400 kV extension bays of the Petitioner's company at 400 kV Saharsa Sub-station, respectively, subject to certain additional conditions mentioned in the said approvals. The Petitioner is required to give details regarding compliance with those conditions.

15. In response, the Petitioner has submitted that the contentions raised by BSPHCL are misconceived. The Petitioner has further submitted that the certain additional conditions mentioned in the Central Electricity Authority (CEA) approvals had been



complied with and carried out in a timely manner as stated by the CEA in the approval for energization dated 26.3.2022 and 11.4.2022.

16. We have considered the submissions made by the Petitioner and BSPHCL.

17. It is noticed that the Petitioner has submitted the CEA Energisation Certificate dated 13.12.2021 and 25.3.2022. We deem it proper to make the CEA Energisation Certificates as part of this order, which are as follows:





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MINISTRY OF POWER, CENTRAL ELECTRICITY AUTHORITY
क्षेत्रीय निरीक्षण संगठन
REGIONAL INSPECTORIAL ORGANISATION

No. RIO/ER/Approval (1)/Powergrid-Farakka/2021/510

Dated: 13th December, 2021

Shri. Mukulendu Pandey,
DGM, POWERGRID
400KV Berhampore Switching Station, Dakshingram
Polsanda, Murshidabad, West Bengal -742238

Subject: Approval for energization of Bypassing of 400 kV Farakka-Kahalgaon Ckt-3 and 400 kV S/C Farakka Durgapur Ckt-2 existing Transmission lines from NTPC, Farakka so as to form 400 kV D/C Kahalgaon-Durgapur Transmission Line under Reg.43 of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulation 2010


- Ref:** i) Your application no. B/2021/00942 Dated: 07/12/2021
ii) Inspection Report : RIO/ER/Ins. Report/Powergrid-Farakka/2021/495 Dated: 07/12/2021
iii) Compliance uploaded in Application Portal.

Whereas the inspection of bypassing of 400 kV Farakka-Kahalgaon Ckt-3 and Ckt-4 and 400 kV S/C Farakka Durgapur Ckt-1 and Ckt-2 existing Transmission lines from NTPC, Farakka so as to form 400 kV D/C Kahalgaon-Durgapur Transmission Line was carried by the undersigned on 06/12/2021 and inspection report was issued vide letter in Ref.(ii). Now compliance of our observation has been received vide letter in Ref.(iii)

Approval is hereby granted to energize Bypassing of 400 kV Farakka-Kahalgaon Ckt-3 and 400 KV S/C Farakka Durgapur Ckt-2 existing Transmission lines from NTPC, Farakka so as to form One Circuit of 400 KV D/C Kahalgaon-Durgapur Transmission Line. The approval is subject to Consistent compliance of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulation 2010 as amended till date.

The above installation shall be due for periodical inspection under Reg. 30 within two years from the date of issue of this approval




(S.R. Tudu)
Electrical Inspector
to Government Of India





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MINISTRY OF POWER, CENTRAL ELECTRICITY AUTHORITY
क्षेत्रीय निरीक्षण संगठन
REGIONAL INSPECTORIAL ORGANISATION

No. RIO/ER/Approval (2)/Powergrid-Farakka/2021/ 783

Dated: 25th March, 2022

Shri. Mukulendu Pandey,
DGM, POWERGRID
400KV Berhampore Switching Station, Dakshingram
Polsanda, Murshidabad, West Bengal -742238

Subject: Approval for energization of Bypassing of 400 kV Farakka-Kahalgaon Ckt-3 and 400 kV S/C Farakka Durgapur Ckt-2 existing Transmission lines from NTPC, Farakka so as to form 400 kV D/C Kahalgaon-Durgapur Transmission Line under Reg.43 of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulation 2010

- Ref:** i) Your application no. B/2021/00942 Dated: 07/12/2021
ii) Inspection Report : RIO/ER/Ins. Report/Powergrid-Farakka/2021/495 Dated: 07/12/2021
iii) Approval for Ckt-II: RIO/ER/Approval(1)/Powergrid-Farakka/2021/510 Dated:13/12/2021
iv) Compliance submitted for Circuit-II : ER-II/BHP/ERSS-XXII/CEA/4303 Dated:28/12/2021
v) Provisional Approval for Ckt-I issued vide email dated: 29th December, 2021

Whereas the inspection of bypassing of 400 kV Farakka-Kahalgaon Ckt-3 and Ckt-4 and 400 kV S/C Farakka Durgapur Ckt-1 and Ckt-2 existing Transmission lines from NTPC, Farakka so as to form 400 kV D/C Kahalgaon-Durgapur Transmission Line was carried by the undersigned on 06/12/2021 and inspection report was issued vide letter in Ref.(ii). Now compliance of our observation for Kahalgaon-Durgapur Circuit-I has been received vide letter in Ref.(iv)

Approval is hereby granted to energize Bypassing of 400 kV Farakka-Kahalgaon Ckt-4 and 400 KV S/C Farakka Durgapur Ckt-I existing Transmission lines from NTPC, Farakka so as to form 400KV D/C Kahalgaon-Durgapur Circuit-I Transmission Line. The approval is subject to Consistent compliance of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulation 2010 as amended till date.

The above installation shall be due for periodical inspection under Reg. 30 within two years from the date of issue of this approval.



25/03/2022
Electrical Inspector
to Government Of India

18. The Petitioner has submitted the Eastern Regional Load Despatch Centre (ERLDC) Charging Certificate dated 7.6.2022 wherein it has been indicated that the trial run of 400 kV Durgapur-Kahalgaon-1 line had been completed on 31.12.2021 and



successful trial run of 400 kV Durgapur-Kahalgaon-1 line had been completed on 1.1.2022 and the Petitioner has claimed the COD of Asset-1 as 2.1.2022. The Petitioner has also submitted the Self-declaration Certificate dated 7.1.2022 in support of the claimed COD of Asset-1.

19. The Petitioner is directed to clarify how the COD of Asset-1 was claimed on 2.1.2022, when the CEA Energisation Certificate was issued on 25.3.2022 at the time of truing-up. We provisionally approve the COD of Asset-1 as 2.1.2022, and the same will be reviewed at the time of truing-up after the Petitioner submits the clarification of the CEA energisation certificate.

20. Taking into consideration the CEA Energisation Certificate, RLDC Charging Certificate, and Self-declaration Certificate, the COD of the Asset-2 and Asset-3 is approved as 8.4.2022 and 28.4.2022, respectively.

21. It has been observed that the Petitioner has not submitted the CMD Certificate in the case of Assets-1, 2, and 3. The Petitioner is directed to submit the same at the time of truing-up.

Capital Cost

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

“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:
- 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
 - 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:
- The assets forming part of the project, but not in use, as declared in the tariff petition;
 - 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.

- 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;
- Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- 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 has submitted the Auditor's Certificate dated 16.6.2022 and 29.6.2022 and has claimed the Capital Cost incurred as on COD and Additional Capital Expenditure (ACE) projected to be incurred in respect of the transmission assets, which are as follows:

Assets	FR Appportioned Approved Cost	RCE Appportioned Approved Cost	Expenditure up to COD	Projected ACE			Estimated Completion Cost as on 31.3.2024
				2021-22	2022-23	2023-24	
Asset-1	2434.45	2296.63	1716.80	151.89	319.35	181.50	2369.54
Asset-2	3176.42	4400.95	3598.66	0.00	626.38	114.90	4339.94
Asset-3	18378.34	16479.20	14021.98	0.00	1423.95	695.64	16141.57
Total	23989.21	23176.78	19337.44	151.89	2369.68	992.04	22851.05

(₹ in lakh)



Cost Overrun

24. The Petitioner has submitted that the total apportioned approved cost as per FR of ₹23989.21 lakh against the estimated completion cost as on 31.3.2024 is ₹22851.05 lakh. There was a cost overrun with respect to the FR apportioned approved cost in the case of Asset-2. However, there was no cost overrun on an overall basis. The Petitioner, in this regard, has submitted that the cost variation was mainly due to actual site conditions, awarded rate, and other associated factors that were beyond the control of the Petitioner.

25. Further, the Petitioner has submitted the RCE vide affidavit dated 6.9.2023. The Petitioner has submitted that with respect to RCE apportioned cost, there is no cost overrun in the Asset-II. However, with respect to Asset-I, there is an apparent cost overrun with respect to the RCE apportioned cost, whereas there is no cost overrun with respect to the FR apportioned approved cost. The reason for the same is the decrease in the amount of actual ACE incurred as against the higher estimated amount as provided in the Auditor's Certificate. There is a net decrease in the project cost wherein FR cost was ₹23989 lakh, and the subsequent RCE cost is ₹23177 lakh. The following table shows the comparison of the RCE cost against the FR-approved cost:

Sr. No.	Variation on account of:	Variation	
		(₹ in lakh)	(in %)
(i)	Price Variation		
a	<i>DPR to LOA for approved scope (on competitive bidding while awarding)</i>	(-) 867	(-) 3.61
b	<i>Provision presently kept as per contract price variation clause by Region.</i>	834	3.47
	Sub-Total (PV)	(-) 33	(-) 0.14
(ii)	Variation in quantity of approved items	(-) 650	(-) 2.71
(iii)	Variation in infrastructure items	368	1.53
(iv)	Compensation	(-) 901	(-) 3.76



Sr. No.	Variation on account of:	Variation	
		(₹ in lakh)	(in %)
	Sub-Total (i to ii)	(-) 1217	(-) 5.07
(iv)	Other Reasons (IEDC and IDC)		
A	IEDC (incl. Contingencies)	889	3.70
b	IDC	(-) 485	(-) 2.02
	Sub- Total (IEDC & IDC)	404	1.68
	GRAND TOTAL	(-) 813	(-) 3.39

26. The Petitioner has submitted the reasons for cost overrun/under-run/variation for the transmission project as under:

(a) Price Variation (PV) (Net decrease of ₹33 lakh: (-)0.14 %)

There has been a decrease in the cost of the transmission project by **₹33 lakhs** on this account, which works out to (-)0.14% of the approved cost as per the following details:

- (i) It has been noted from the above table that the amount of (-) **₹867 lakhs** has been incurred from the time of IA of the transmission project till the award of various contracts (DPR to LoA) for approved scope based on prices received as per transparent, competitive bidding and further price variation amount of **₹834 lakhs** is kept in line with the contract price variation clause.
- (ii) With respect to PV from DPR to LoA, the contracts for all the packages under the transmission project were awarded only after the approval of the competent authority as per the DoP to the lowest evaluated and responsive bidder on the basis of competitive bidding by the Petitioner.



(iii) Further, a provision of ₹834 lakhs has been envisaged for price variation, ranging from @ 7% to 10% on balance PV applicable supply items, as per a contractual clause in LoAs.

(b) Variation in quantity of approved items (Net decrease of ₹650 lakh: 2.71 %)

(i) In the RCE, the quantities of various Sub-station and transmission line equipment and civil works have been considered as per the actual site requirement and the latest amendments.

(ii) With respect to the transmission line, the line length and type of various towers and foundations in the DPR were estimated on the basis of a walk-over/preliminary survey. However, during the execution of the transmission project, there has been a decrease in the line length from 44 km to 42 km, and the quantities of tower steel, foundation, etc., are considered as per the actual site conditions and design.

(iii) The overall major variation due to the change in the quantities is as under:

• Tower Steel (Supply and erection)	: (-) ₹366 lakhs
• Conductor & Insulators	: (-) ₹237 lakhs
• Concreting & Reinforcement	: (-) ₹195 lakhs
• Excavation	: (-) ₹38 lakhs
• Stringing	: (-) ₹12 lakhs
• Destraining	: (-) ₹5 lakhs
• OPGW Cable	: (-) ₹2 lakhs

(iv) With respect to the Sub-station, there has been an increase in the quantities of the civil works like RCC, PCC, reinforcement steel, etc. with respect to DPR (FR) envisaged quantities, resulting in a net increase in the cost of the transmission project by ₹61 lakhs.



(v) Further, there has been an increase in project cost by ₹144 lakhs due to the increase in the cost of the infrastructure works. In the DPR, there was a lump sum provision of ₹80 lakhs (₹20 lakhs per Sub-station) as per the standard norms for miscellaneous infrastructure works at various Sub-stations in the transmission project. In the RCE, an amount of ₹224 lakh has been provisioned for the site as per the actual requirement against the various works like construction of a boundary wall, repairing of the damaged roads, construction of brick pedestal, etc.

(vi) Further, there is an increase in the project cost by ₹368 lakhs due to the addition of cost against the certain infrastructure works pertaining to the store, open store yard, platform with earth filling, etc.

(c) Compensation for Transmission Lines (Net decrease of ₹901 lakh:(-) 3.76 %)

(i) From the approved DPR cost of ₹1957 lakhs under this head, an amount of ₹1056 lakhs has been incurred/likely to be incurred, resulting therein a decrease of ₹901 lakhs in the cost of the transmission project as under:

(₹ in lakh)			
Description	As per DPR	As per RCE	Remarks
i) Compensation towards Crop, Tree, PTCC, Hutment, etc.	241	912	Crop and Tree compensation of ₹ 241 lakhs in DPR was approved @ 5 lakh/km on a normative basis, which now in RCE works out to ₹912 lakhs.
ii) Compensation towards Forest	26	63	Based on the actual payment for 2.1904 Ha of forest area encountered. There has been an increase in the forest area from 1 Ha envisaged as per DPR to 2.1904 Ha as per the actual forest area encountered. Further, the rate for compensatory afforestation has



Description	As per DPR	As per RCE	Remarks
			also substantially increased from 1.4 lakh per Ha as considered in DPR to 4.45 lakh per Ha as per the demand note of Additional PCCF (CAMPA) cum Nodal Officer (FCA), Bihar.
iii) Compensation towards Tower Base and diminution of land value in the width of the Right of Way (RoW) Corridor	1690	81	As per actual/anticipated amount.
TOTAL	1957	1056	

(d) Variation in IDC/IEDC (Net increase of ₹404 lakhs: 1.68%)

Total IDC and IEDC under the transmission project had increased by **₹265 lakhs** in comparison to the approved cost, which works out to 10.81% as per the following break-up:

A. Increase in Incidental Expenditure During Construction (IEDC)

As per the IA, the IEDC, including contingencies for the transmission project, was estimated at ₹250 lakhs on total COD cost (i.e., IEDC @10.75% and contingency @3% on total COD cost), whereas, in the RCE, it is had been considered as actual up to Q-II of 2022-23, and further on element-wise amount @ 13.75% (10.75%-IEDC+3%-Contingency) up to commissioning (i.e. up to January 2023) and contingency @ 3% on balance expenditure after commissioning of the project for FY-2022-23, FY- 2023-24 and 2024-25, now works out to ₹557 lakhs (20.71% of the total COD cost) resulting therein an increase of ₹307 lakhs.



B. Decrease in Interest During Construction (IDC)

IDC for the transmission project as per the IA was estimated at ₹110 lakhs, whereas, based on the actual and envisaged funds flow, the IDC for the transmission project in the RCE works out to ₹68 lakhs. Thus, there is a decrease of (-) ₹42 lakhs in IDC.

27. BSPHCL has submitted that the reason given by the Petitioner for the cost overrun of Asset-2 is vague, and the details and supporting documents in this regard have not been provided; thus, cost overrun with respect to Asset-2 may not be considered. Further, the claims contrary to the applicable regulation may not be considered.

28. *Per contra*, the Petitioner has submitted that all details along with supporting documents have been provided along with the Petition. The Petitioner has further submitted that there is the cost overrun in the case of Asset-2 only; there is no overall cost overrun in comparison to FR-approved cost. The cost variation was mainly due to the actual site conditions, awarded rate and other associated factors which were beyond the control of the Petitioner. The item-wise cost variation/ over-run is provided in the Form-5 of the individual assets. Further, the RCE of the transmission project has been submitted vide affidavit dated 6.9.2023 along with the detailed justification of cost variation/ overrun. Therefore, the tariff may be allowed on the estimated completion cost up to 31.3.2024.

29. We have considered the submissions made by the Petitioner and BSPHCL.

30. As compared with the FR-approved cost, the estimated completion cost as on 31.3.2024 of Asset-1 and Asset-3 are within FR cost. As compared with FR cost, the



estimated completion cost as on 31.3.2024 of Asset-2 is at variance for about ₹1163.52 lakhs. The Petitioner has placed on record the copy of the RCE duly approved by the CMD on 8.8.2023. The RCE of the transmission project is ₹23177 lakh, including an IDC of ₹203 lakh based on the March 2023 price level. Based on the RCE, the Petitioner has re-apportioned the cost of the individual assets, according to which the estimated completion cost of Asset-1 is at variance for about ₹104.84 lakh, and the estimated completion cost as on 31.3.2024 of Asset-2 and Asset-3 is within the RCE approved cost. The Capital Cost of Asset-1 is restricted to the revised apportioned approved cost.

31. As per the IA, the FR apportioned approved cost of the transmission project is ₹23989 lakh, and as per the RCE, the RCE approved cost of the transmission project is ₹23177 lakh. It has been observed that as compared with the FR-approved cost, the overall project cost has been reduced by ₹812 lakh. The Petitioner is directed to submit the reasons for taking approval of RCE when the cost for the overall project has been reduced, at the time of truing-up.

32. In the case of Asset-3, we have reviewed Form-5 and observed that the cost variation is on the higher side, and the Petitioner is directed to clarify the reasons for the higher cost with the valid documentary proof at the time of the truing-up.

(₹ in lakh)			
Particulars	Cost as per original estimate	Actual capital expenditure	Variation
Sub-station Auxiliaries	438.12	722.05	283.93
Overheads (Establishment, Audit and Accounts, contingency, other over heads)	378.08	766.85	388.77



Time Overrun

33. As per the IA dated 11.7.2020, the SCOD for the transmission assets was within 11 months from the date of IA. However, the transmission assets were put into commercial operation as follows:

Assets	SCOD	COD	Time over-run
Asset-1	10.6.2021	2.1.2022	206 days
Asset-2		8.4.2022	302 days
Asset-3		28.4.2022	322 days

34. The Petitioner has submitted the following reasons for the delay in commissioning of the transmission assets:

Asset-1:

35. The Petitioner has submitted the following major reasons for the delay in the construction of the transmission line associated with Asset-1.

(i) Delay due to the COVID-19 Pandemic

Due to the outbreak of the COVID-19 pandemic, the Government (Centre and State) imposed the lock down in all the cities and restricted the movement from one place to another. The movement restriction affected the critical supply chain, transportation, worker/ labour absenteeism due to illness/quarantine/ migration, etc, which resulted in a complete halt of ongoing projects and voluntary step back of construction workers, which was unforeseen and unavoidable. The sites were closed or access was largely restricted as a result of measures to contain the COVID-19 outbreak. The contractors, thus, were not able to carry out the works as a result of actions by governments to prevent the spread of the outbreak. Specific COVID-19 related challenges, delivery issues, worker absenteeism due to illness, delayed issuance of permits, travel instructions, and loss of time or



inefficiencies due to the need to practice social distancing on the job site are just a few of the issues that had schedule consequences. The lack of engineering and technical support and supply chain disruptions were the major factors impacting the project schedule and implementations. Thus, the commissioning of various projects, including the subject project, faced delays due to the squeezing of supply lines and construction activities. When the construction resumed, additional delays and inefficiencies further pushed back the completion dates as the construction could not be started immediately. The biggest hurdle is that the supply chain is not fully restored. Besides considering the scenario that if anybody gets infected on the construction site after the work has started, the area would be sealed and all related people will be quarantined for 14-28 days. Therefore, the construction pace plummeted or came to a grinding halt. The administrative action/FIR lodged against the sub-contractors added to the lethargic pace of progress. With the halting of various line construction activities, the work was at a standstill position for almost 4-5 months (i.e., from the end of March 2020 to July 2020) and gradually gathered speed in line with Government directives. Also, in April 2021, the same situation arose, and similar measures were taken by State/UT governments to curb the pandemic, which disrupted the supply chain and manpower and again, the Ministry of Power (MoP), Government of India, vide circular No. 3.1.2020 Trans. dated 12.6.2021 stated that all Inter-state projects which are under construction with SCOD after 1.4.2021, will get an extension of 3 months in respect of the SCOD.

36. The Petitioner vide affidavit dated 20.11.2023 has submitted the status of the transmission project as on 25.3.2020 and 1.4.2021 in accordance with the MoP letters



dated 27.7.2020 and 12.6.2021, respectively, along with the percentage of work completed pre-COVID-19 pandemic and activities impacted due to the COVID-19 Pandemic. The details of the same are as follows:

Status as on 25.3.2020:

(a) The IA dated 11.7.2020 was granted during the COVID-19 Pandemic in 2020 to the Petitioner and the Petitioner had to face a lot of hurdles due to the 2020 lockdown situation. The majority of the work completion was affected during the COVID-19 lockdown; the displacement of migrant workers left the factories and workplaces shutdown. Due to limited social movement, there were restrictions on transportation, and the work could not be initiated at the required place, leading to a delay in the completion of the transmission project on time.

Status as on 1.4.2021

(b) The status of work completed with respect to Asset-1 is as under:

Activity	Unit	Total Quantity	Actual Completed	Balance
Route Alignment	km	3.19	3.19	0.00
Detailed survey	km	3.19	3.19	0.00
Check survey	km	3.19	3.19	0.00
Foundation	nos.	13.00	13.00	0.00
Tower Erection	nos.	13.00	4.00	9.00
Stringing	km	3.19	0.00	3.19

After the resolution of the RoW issues due to high compensation demand on 22.3.3021, the balance tower erection and stringing work commenced. However, due to the sudden rise of 2nd wave of the COVID-19 Pandemic from the month of May, 2021 onwards, the construction work was again severely hampered, which was beyond the control of the Petitioner.



(i) Non-working conditions at the site due to severe Water logging and increase in water level in the feeder canal.

The transmission line construction working site was situated just near to Farakka Feeder Canal. Due to the continuous heavy rainfall in the nearby areas of Farakka during the last week of September 2021, the water level in the Farakka feeder canal increased drastically, and the complete working site was severely waterlogged due to a flash flood-like situation. The work was completely halted from 25.9.2021 to 5.10.2021. The same situation was again encountered during the last week of October 2021.

(ii) Delay due to serve RoW issues faced during the foundation works:

From the commencement of the construction work of the transmission line, severe RoW issues had been encountered by the farmers/landowners, and the work had been completely halted from 31.10.2021 due to high compensation demand, which was communicated to the district administration from time to time. The work resumed on 11.11.2021 but again stopped due to severe RoW issues at Loc 3/0 on 18.11.2021. The foundation work again resumed on 2.12.2021.

(iii) Delay due to stoppage of Tower erection work at Loc 1/0 by Local miscreants.

Tower erection at Loc 1/0 was stopped on 8.1.2021 by local miscreants with their illegitimate demand of money, which was communicated to the SDO, Jangipur, SDPO, Jangipur and I/C-Farakka PS. After the intervention of the local administration, the work was resumed on 28.1.2021.

(iv) Delay due to high compensation demand by the land owners.

The work was regularly stopped by the landowner on the grounds of high compensation demand. As per the India Telegraph Act 1885 Part-II, the



compensation amount is only payable for standing crops and trees damaged in the RoW issues of the transmission line. Moreover, the recommendation of the MoP issued through the guidelines dated 15.10.2015 for compensation for the damages due to RoW issues has not been implemented by the Government of West Bengal. However, considering the severe local agitation on the grounds of compensation and stoppage of work from 5.2.2021, the Petitioner approached various local authorities for the determination of the market value of the lands falling under various Mouzas in which the transmission line was constructed. The work was completely stopped from 5.2.2021 to 22.3.2021.

(v) Delay in stringing work between AP 7/0 to AP 8/0 due to severe ROW by land owners.

The Stringing work commenced between AP 7/0 to AP 8/0. The work in the said section was stopped by the landowners from 6.7.2021 to 7.7.2021 and again from 10.7.2021 to 29.7.2021. The matter was taken up with SDPO, Farakka, and I/C-Farakka and was resolved with the intervention of I/C-Farakka, and subsequently work resumed.

(vi) Delay due to Bharat Bandh, Assembly Election in Murshidabad (West Bengal) etc.:

The work was stopped on 8.12.2020 and 26.3.2021 due to Bharat Bandh and on 26.4.2021 due to the assembly election in Murshidabad (West Bengal).

(vii) Delay due to repeated thefts in the under-construction transmission line.

The repeated thefts at various towers, i.e., parts and hardware fittings of the transmission line, were encountered during the month of October 2021. An FIR has been lodged by the executing agency at Farakka PS on 3.11.2021 regarding the theft of a huge quantity of tower members at Loc AP 5/0. Due to specific



designs supplied by the agencies, the arrangement of extra materials for replenishment of theft led to a delay in the final completion of the transmission line.

37. The Petitioner has submitted the chronology to justify the delay in the execution of Asset-1 as under:

Sr. No.	Issue for stoppage	Affected period		Days
		From	To	
1	Bharat Bandh	8.12.2020	8.12.2020	1
2	RoW	8.1.2021	28.1.2021	21
3	RoW	5.2.2021	22.3.2021	46
4	Elections in Murshidabad	26.4.2021	26.4.2021	1
5	Bharat Bandh	26.3.2021	26.3.2021	1
6	COVID-19	16.5.2021	30.6.2021	46
7	RoW	6.7.2021	7.7.2021	2
8	RoW	10.7.2021	29.7.2021	20
9	COVID-19	5.8.2021	12.9.2021	39
10	Water Logging	25.9.2021	5.10.2021	11
11	Water Logging	22.10.2021	31.10.2021	10
12	Theft	26.10.2021	26.11.2021	32
13	RoW	31.10.2021	11.11.2021	12
14	RoW	18.11.2021	2.12.2021	15

38. BSPHCL has submitted that the reasons for delay given by the Petitioner do not explain the delay that has been occasioned in the instant Petition, and the same may not be condoned.

39. BSPHCL has further submitted as under:

- a. The claim of delay on account of the COVID-19 Pandemic is not available to the Petitioner in as much as the IA of the transmission project was accorded by the BoD of the Petitioner on 11.7.2020, when the unlock guidelines came in place and, admittedly, the work gathered speed in line with the government directives. The alleged halting of the work from the



end of March 2020 to July 2020 may not be considered. The Petitioner, in the instant Petition, has also not demonstrated how the particular assets/project was impacted and has submitted only generalized statements. Further, despite the relaxations granted by various government circulars from time to time, the failure of the contractors to work cannot be said to be an uncontrollable factor. Nothing has been mentioned about the mitigative steps taken by the Petitioner, especially at the time of the IA; the Petitioner was already aware of the pandemic situation and fixed the SCOD being fully cognizant of the situation. Further, if at all, the MoP circular dated 12.6.2021 granted an extension of three months, but the delay claimed with respect to Asset-1, Asset-2, and Asset-3 are 206, 302, and 322 days, respectively.

- b. The reason for water-logging and increase in water level in the feeder canal, with respect to Asset-1 is only an excuse for the inefficient planning and execution on the part of the Petitioner. Therefore, the same may not be accepted. This reason pertaining to the period 25.9.2021 to 5.10.2021 was much after the SCOD. The Petitioner was always aware of the situation of the construction work site and ought to have had the necessary preparedness in place to deal with the alleged eventuality. The Petitioner has neither stated anything about the reasonable care and prudent utility practices adopted by it nor has he furnished any supporting document regarding the adverse weather condition.
- c. The reason given for the RoW issues faced during the foundation work with respect to Asset-1 is unacceptable as the Petitioner does not explain



the delay for the claimed time period. The letters submitted in the Petition are for the year 2020, and the claims of the Petitioner are for the year 2021, which is unsubstantiated. Some resistance on account of RoW issues ought to be in contemplation of the Petitioner and it cannot be claimed as a completely unforeseeable circumstance. Therefore, the delay due to ROW issues may not be condoned.

- d. The delay due to the alleged stoppage of tower erection work at Loc 1/0 due to high compensation demand by the landowners and the delay in the stringing work between AP 7/0 and 8/0 due to RoW issues by the landowners are problems usually encountered in the construction and cannot be said to be unforeseeable. These alleged problems were neither prolonged nor continuous. Therefore, the claim of the delay on these grounds is not liable to be considered.
- e. The claim of delay due to Bharat Bandh, Assembly Elections, etc., is not liable to be condoned. The Petitioner has not demonstrated how the concerned assets/project were impacted on these counts.
- f. The claim of delay due to alleged repeated thefts in the under-construction transmission line is also not liable to be condoned as only one alleged incident has been cited by the Petitioner, and the claim of the repeated thefts is unsubstantiated. Additionally, it was the Petitioner and its contractor's responsibility to have the necessary security arrangements at the sites to avoid such eventuality. Nothing has been mentioned by the Petitioner regarding the site management, despite which the alleged incident occurred.



40. In response, while denying the submissions of BHPHCL, the Petitioner has reiterated its submissions made in the Petition. In addition, the Petitioner has submitted as follows:

- a) The reasons and justifications for the delay given in the instant Petition were beyond the control of the Petitioner as the events associated with the delay were unforeseen. Though the various problems occurring concurrently could have delayed the transmission project enormously, the experience and expertise of the Petitioner in the project planning and execution curtailed the delay through efficient and relentless efforts. Accordingly, the delay in the completion of the transmission assets may be condoned.
- b) Keeping in view the situation of the COVID-19 pandemic, the MoP vide its letter dated 27.7.2020, stated that the construction activities at various project sites had been severely affected and granted 5 months extension to the ISTS projects. In extension to the above, the MoP vide its letter dated 12.6.2021 again stated that the construction activities at various project sites have been severely affected by the second wave, measures like night curfew, imposition of Section 144, and weekend and complete lockdown steps taken by the Government. Hence, all the ISTS projects under construction with SCOD after 1.4.2021 will get an extension of 3 months in respect of the SCOD.
- c) The delay due to water logging was a consequence of an increase in the water level in the feeder canal at Farakka due to unprecedented rainfall from September 2021 to October 2021, which was usually the lean rainfall



season, i.e., post-monsoon period. Thus, the rainfall was not only unprecedented but was also unseasonal, which could not have been envisaged at the planning stage.

- d) The RoW issues have been classified as a force majeure event, and thus, the contention of BSPHCL that the delay due to RoW is liable to be rejected is highly misplaced. The movement of vehicles was restricted as a precautionary measure as normally major roads were blocked by locals and miscreants during the elections and Bharat bandh, which hampered the work at the construction site. The detailed reasons for the delay, along with relevant annexures, have already been provided in the Petition.

41. As per the documents provided by the Petitioner, it is observed that for limiting the fault level at the Farakka 400 kV generation switchyard, the transmission project was approved in the 2nd meeting of the Eastern Region Standing Committee of Transmission (ERSCT) held on 5.7.2019. Further, in the 6th meeting of the National Committee on Transmission (NCT) held on 30.9.2019, it was agreed that the works may be recommended to be implemented under the RTM route. The said scheme was also agreed upon in the 1st meeting of the Eastern Region Power Committee (Transmission Planning) (ERPCTP) held on 14.2.2020. The prior approval of the government under Section 68 of the Electricity Act 2003 for transmission lines, including the Eastern Region System Strengthening -XXIII, was accorded by CEA on 13.5.2020.

Time overrun analysis and decision in the case of Asset-1

42. We have considered the submission of the Petitioner and BSPHCL and have gone through the documentary evidence produced on record to justify the time overrun.



43. As per the IA dated 11.7.2020, the SCOD of Asset-1 was 10.6.2021 and it was commissioned on 2.1.2022 with a time overrun of 206 days. The Petitioner has claimed delay on account of the COVID-19 pandemic, water logging issues, RoW issues, stoppage of erection work due to nuisance created by the landowners and high compensation demand by the landowners, delay due to stringing work, Bharat bandh, assembly elections and thefts of various equipment. The item-wise time over-run has been analysed in the succeeding paragraphs.

Delay due to the COVID-19 Pandemic:

44. The Petitioner has submitted that Asset-1 was delayed due to the COVID-19 (2nd wave) related lockdown and restrictions. The MoP vide letter dated 12.6.2021 has extended the SCOD of the Inter-State transmission projects by three months due to the COVID-19 Pandemic. The relevant portion of the letter dated 12.6.2021 is as follows:

“Sub: Extension to TSP/Transmission Licensees for completion of under construction inter-State transmission projects - reg.

Sir,

I am directed to state that transmission utilities have approached this Ministry stating that construction activities at various transmission project sites have been severely affected by the current second wave of COVID-19 pandemic and various measures have been taken by the State/UT Governments to contain the pandemic such as night curfew, imposition of Section 144, weekend lockdown and complete lockdown. In this regard they have requested for extension of Scheduled Commercial Operation Date (SCOD) to mitigate the issues of disruption in supply chains and manpower, caused due to COVID-19 pandemic.

2. The matter has been examined in the Ministry and it has been noted that unlike last year complete lockdown in the entire Country, this time different States/UTs have ordered lock-down in their States/UTs as per their own assessments. Therefore, after due consideration, it has been decided that;

i. All inter-state transmission projects, which were under construction with SCOD coming after 01 April 2021, shall get an extension of three (3) months in respect of their SCOD.

ii. The commencement date of Long Term Access (LTA) to a generator by CTU based on completion of transmission line, whose SCOD is extended by three (3) months due to COVID-19 as mentioned above at point (i), shall also be automatically extended by three (3) months.”



45. The IA of the transmission project was approved on 11.7.2020 with the SCOD within 11 months, i.e., by 10.6.2021. Also, as per Form-5A, as submitted by the Petitioner, the work for the transmission project was awarded to Larsen and Toubro Limited (L&T) Chennai on 15.7.2020. Therefore, as the transmission project was under construction as on 1.4.2021 and with SCOD of 10.6.2021, the relief granted under the MoP letter dated 12.6.2021 is applicable to the present case, and the 3-month delay (92 days) on account of the COVID-19 pandemic is condoned.

Delay Due to severe water-logging & increase in water level in the Feeder Canal:

45. The Petitioner has submitted that the time period from 25.9.2021 to 5.10.2021 (11 days) and 22.10.2021 to 31.10.2021 (10 days) is affected due to water-logging. The Petitioner has not submitted any documentary evidence in support of the same. Due to the non-submission of any documentary evidence, the time overrun from 25.9.2021 to 5.10.2021 and 22.10.2021 to 31.10.2021, i.e., approx. 21 days claimed by the Petitioner is not condoned.

Delay due to Severe RoW issues faced during the construction activities:

46. The Petitioner has submitted that the construction work was hampered at various stages due to severe RoW issues created by the local miscreants and land owners for their illegitimate demands of money. The Petitioner took up the matter with the Local administrative and police authorities vide letter dated 9.11.2020, 18.11.2020, 11.1.2021, 13.1.2021 and 10.7.2021. The Petitioner vide letter dated 8.2.2021 also requested the local administrative authority to issue the directive regarding categorisation and rate of affected land in line with the guidelines issued by the MoP dated 15.10.2015 for modalities to be adopted for payment of compensation towards damage in regard to RoW, as the said guidelines were not implemented by the Government of West Bengal.



The Petitioner vide letter dated 22.2.2021 also requested the local concerned authority to provide land value based on the market value for the mouzas coming in alignment for the construction of the transmission line at Farakka in Murshidabad District. The Petitioner had made all the efforts to resolve the issue of local miscreants and the land owners under the RoW issues with the help of local administration and the police department. However, it is observed that the Petitioner has not submitted any documentary evidence that the matter of RoW issues for the period from 31.10.2021 to 11.11.2021 and 18.11.2021 to 2.12.2021 was taken up by the Petitioner with the local administration to resolve the issue.

47. The Petitioner has claimed a delay of about 116 days on account of RoW problems in the case of Asset-1. It is noted that we had already condoned the time overrun up to 10.9.2021 on account of the COVID-19 (2nd wave) Pandemic. The time period beyond 10.9.2021 impacted on account of RoW problems, i.e., from 31.10.2021 to 11.11.2021 (12 days) and 18.11.2021 to 2.12.2021 (15 days) has not been condoned due to non-submission of the documentary evidence.

Delay due to Bharat Bandh, Assembly Election in Murshidabad (West Bengal)

etc.:

48. The Petitioner has submitted that due to Bharat Bandh on 8.12.2020 and 26.3.2021 called by the farmers and declaration of assembly elections in Murshidabad (West Bengal) on 26.4.2021, the work was temporarily halted. We observe that the progress of work may have been disrupted due to Bharat Bandh call on 8.12.2020 and 26.3.2021. The progress of work may have also been affected due to the participation of the local manpower/workforce in casting the votes on the election day, i.e., on 26.4.2021. Therefore, in view of the facts, the time period of 3 days i.e. 8.12.2020, &



26.3.2021 due to Bharat Bandh and 26.4.2021 due to elections in Murshidabad (West Bengal) is hereby condoned.

Delay due to Theft:

49. The Petitioner has submitted that due to the specific design supplied by the agencies, the arrangement of extra material due to theft led to the delay in the final completion of the transmission line. The FIR was also lodged by the executing agency. However, the arrangement of proper security of materials during the construction activities is the responsibility of the executing agency, and any theft of material at the site is due to security lapses. Therefore, the time overrun of 32 days i.e. from 26.10.2021 to 26.11.2021, as claimed by the Petitioner, is not condoned.

50. Keeping in view the above-stated reasons and considering the overlapping of time periods of different constraints and having analysed the submissions of the Petitioner and BSPHCL, the summary of the time overrun condoned and not condoned with respect to Asset-1 is as under:

Asset-1	SCOD as per IA	Actual COD	Time over-run claimed	Time over-run condoned	Time overrun not condoned
	10.6.2021	2.1.2022	206 days	92 days	114 days

Reasons for time over-run in case of Asset-2

51. The Petitioner has submitted the following major reasons for the delay of 302 days in commissioning of Asset -2 vis-à-vis the SCOD.

Delay due to the COVID-19 Pandemic:

52. The Petitioner has submitted similar facts and hurdles faced during the execution of Asset -2 with respect to the COVID-19 pandemic, which were submitted earlier under Asset-1. The same has not been repeated here for the sake of brevity.



53. The Petitioner has also submitted the status of the transmission project as on 25.3.2020 and 1.4.2021, along with the percentage of work completed pre-COVID-19 pandemic and activities impacted due to the COVID-19 pandemic vide affidavit dated 20.11.2023 which are discussed in the succeeding paragraphs.

Status as on 25.3.2020:

54. The IA was granted during the COVID-19 Pandemic in 2020 to the Petitioner and they had to face a good deal of hurdles due to the 2020 lockdown situation.

Status as on 1.4.2021

55. Yard levelling and approximately 70% of foundation work were completed by 1.4.2021. The balance foundation, erection of equipment, and commissioning activities were pending.

Delay due to Bihar Assembly Elections 2020:

56. Bihar Assembly Elections 2020 in Muzaffarpur district constituencies were held on 3.11.2020. During the election period, construction work was disturbed and delayed due to the non-availability of manpower and difficulties in the free movement of the vehicles in the last 7 days the Bihar elections (3.11.2020 to 10.11.2020).

Delay due to the YASS cyclone:

57. Due to the YASS cyclone, heavy rainfall occurred in Saharsa and Supal District on 26.5.2020 and 27.5.2022, and most of the locations became waterlogged; as a result, the work was delayed from 26.5.2021 to 31.5.2021 for total 6 days.

Delay due to waterlogging and flooding:

58. During the monsoon in the State of Bihar, which extended from May 2021 to August 2021, particularly, high rainfall was experienced. This resulted in flooding of the



construction site in Muzaffarpur. All the civil construction activities were at a complete standstill during the said period owing to cable trench flooding. The events in chronological manner justifying the delay in execution of Asset-2 as submitted by the Petitioner are as under:

Sr. No.	Issue for stoppage	Affected period		Days
		From	To	
1	Bihar Assembly Elections	3.11.2020	10.11.2020	7
2	YASS Cyclone	26.5.2021	31.5.2021	6
3	Water Logging and Flooding	1.7.2021	31.8.2021	56
4	2 nd wave of COVID-19 Pandemic	1.4.2021	30.6.2021	91

59. BSPHCL, vide affidavit dated 16.10.2023, has submitted that the delay claimed on account of Bihar Assembly Elections in 2020 with respect to Assets-2 is not liable to be condoned as the assembly elections are not unanticipated events and the Petitioner ought to have factored it. Further, the impact on the assets/project concerned has not been stated. Similarly, the claim of delay on account of the gram panchayat election in the Supaul and Saharsa districts is liable to be rejected. The same also pertains to the period much after SCOD. BSPHCL has further submitted that the Petitioner should have demonstrate the reasons for the delay claimed on account of the YASS cyclone, failing which, the delay on YASS cyclone, should not be condoned. Further, as per the Petitioner, its impact was limited. BSPHCL has submitted that the reasons for water-logging and flooding given are not liable to be considered, since the Petitioner has not stated that the rains were unanticipated. Therefore, the necessary preparations to deal with the monsoon had not been made by the Petitioner. Further, there are no supporting documents with respect to the alleged claim of flooding.



60. In response, the Petitioner has reiterated its submission with respect to Bihar Assembly Elections as it has stated for Asset-1. The Petitioner has further submitted that the cyclonic disturbances and rains could not be foreseen, and thus, anticipating the same and envisaging the preparedness of works on this event was not plausible. Thus, the contention of BSPHCL in this regard is unwarranted.

Time overrun analysis and decisions in the case of Asset-2:

61. We have considered the submissions of the Petitioner and BSPHCL. We have gone through the documentary evidence produced on record by the Petitioner to justify the time overrun. As per the IA dated 11.7.2020, the SCOD of the transmission project was 11 months. Accordingly, the SCOD of the transmission project works out to be 10.6.2021, against which the instant asset is put into commercial operation on 8.4.2022 with a delay of 302 days.

62. The Petitioner has claimed a delay on account of the COVID-19 pandemic, waterlogging and flooding issues, Bihar Assembly Elections, and the YASS cyclone.

Delay due to the COVID-19 Pandemic:

63. With respect to the delay claimed by the Petitioner on account of the COVID-19 pandemic, it has been observed that the MoP vide letter dated 12.6.2021 has extended the SCOD of the inter-State transmission projects by 3 months respectively due to the COVID-19 Pandemic. The relevant portion of the letter dated 12.6.2021 has been mentioned in the analysis part of Asset-1 above.

64. As per the affidavit dated 20.11.2023 filled by the Petitioner, yard levelling and approximately 70% of the work was completed on 1.4.2021. Balance foundation, erection, and commissioning activities were pending as of dated 1.4.2021 in



accordance with the MoP letter 12.6.2021. Therefore, it has been observed that the work was under progress, and the SCOD of the transmission asset was scheduled on 10.6.2021 (as per the IA), i.e., after 1.4.2021 and, hence, the extension of 3 months as per the MoP letter dated 12.6.2021, in respect of SCOD is applicable for the instant case. Therefore, the time period of 92 days is condoned.

Delay due to Bihar Assembly Election 2020 (in Muzaffarpur district constituencies):

65. The Petitioner has submitted that the construction work was hampered for 7 days, i.e., from 3.11.2020 to 10.11.2020, due to Bihar Assembly Election 2020 in Muzaffarpur district constituencies.

66. It is observed that the documentary evidence to show how the General Assembly Election affected the construction activities for 7 days has not been submitted by the Petitioner. However, considering that the progress of work may have been affected due to the participation of the local manpower/workforce in casting their votes on the election day, i.e., on 3.11.2020, One (01) Day on account of delay due to Bihar Assembly Election 2020 is hereby condoned.

Delay due to the YASS cyclone:

67. The Petitioner has submitted that due to the YASS cyclone, there was heavy rainfall on 26.5.2021 and 27.5.2021, and most of the locations became waterlogged; as a result, the work was delayed from 26.5.2021 to 31.5.2021, i.e., for 6 days. However, no documentary evidence has been submitted by the Petitioner to show that the said event may be considered a Force Majeure event as per the 2019 Tariff Regulations. Therefore, the time overrun 6 days claimed by the Petitioner is not condoned.



68. It further has been observed that the time overrun of the transmission asset due to the second wave of the COVID-19 pandemic has already been condoned, and the revised SCOD after the consideration of three months is 10.9.2021. Therefore, the time over-run on this count did not impact the commissioning of the transmission asset. Accordingly, the time overrun of 6 days is not condoned.

Delay due to waterlogging and flooding:

69. The Petitioner has submitted that all the civil construction activities were at a standstill due to flooding at the construction site in Muzaffarpur for 56 days owing to cable trench flooding during the monsoon in the state of Bihar, which extended from May 2021 to August 2021, particularly high rainfall was experienced. However, no documentary evidence for the same has been submitted by the Petitioner. Therefore, the time period of 56 days claimed by the Petitioner is not condoned.

70. Further, it has been observed that the time overrun of the transmission asset due to the second wave of the COVID-19 pandemic has already been condoned, and the revised SCOD after the consideration of three months is 10.9.2021. Therefore, the time overrun on this count did not impact the commissioning of the transmission asset. Accordingly, the time overrun of 56 days is not condoned.

71. Keeping in view the above-stated reasons and having analysed the submissions of the Petitioner and BSPHCL, the summary of the time overrun condoned and not condoned is as under:

Asset-2	SCOD as per IA	Actual COD	Time over-run claimed	Time over-run condoned	Time overrun not condoned
	10.6.2021	8.4.2022	302 days	93 days	209 days



Reasons for Time overrun in the case of Asset-3:

72. The Petitioner has submitted the following major reasons for the delay of 322 days in the commissioning vis-à-vis the SCOD for Asset-3:

Delay due to the COVID-19 Pandemic:

73. The Petitioner has submitted similar facts and hurdles faced during the execution of Asset-3 due to the COVID -19 pandemic, which has been mentioned under Asset-1 and Asset-2 of the instant Petition. The same are not repeated here for the sake of brevity.

74. The Petitioner has also submitted the status of the transmission project as on 25.3.2020 and 1.4.2021, along with the percentage of work completed pre-COVID-19 pandemic. In the transmission line portion, the supply of tower structures was completed. Approximately 60% of the foundation and 20% of the tower erection work were completed by 1.4.2021. In the Sub-station portion, only yard levelling was completed by 1.4.2021.

Delay due to Bihar Assembly Elections 2020:

75. Seven (7) days (from 03.11.2020 to 10.11.2020): Bihar Assembly election 2020 in Muzaffarpur district constituencies which was held on 3.11.2020. During the election period, construction work was disturbed and delayed due to non-availability of manpower and difficulties in free movement of vehicles in 7 days of the election date, i.e., from 3.11.2020 to 10.11.2020.

Delay due to Severe RoW issues during Construction of Line:

76. The severe RoW issues occurred during the construction of LILO of the Kishanganj-Darbhanga transmission line at Saharsa (New) Sub-station, which were



cleared with the help of District Administration and Police support. The total time overrun of 234 days has been claimed on this count, and the details of the same are as under:

Sr. No.	Issue for stoppage	Affected period		Days
		From	To	
1	RoW in Commencement of foundation work	8.9.2020	24.9.2020	17
2	RoW 12/0 FDN LO	13.10.2020	26.10.2020	14
3	RoW FDN 19/0 LI	9.3.2021	13.5.2021	66
4	RoW Stringing work 7/0-11/0	10.10.2021	31.10.2021	22
5	RoW FDN 2/3 LI	3.7.2021	15.9.2021	75
6	RoW Stringing work 10/0 - 11/0 LI	16.2.2022	14.3.2022	27
7	RoW Stringing work 12/0 - 13/0 LO	2.1.2022	14.1.2022	13
TOTAL DELAY				234

Delay due to waterlogging and flooding:

77. Most of the locations in Bihar were waterlogged during the monsoon and required heavy dewatering due to high rainfall in Bihar from May 2021 to August 2021. Non-concurrent period of delay owing to waterlogging and flooding was 35 days.

Delay due to non- availability of 11/33 kV shutdown during the stringing work (from 15.1.2022 to 20.1.2022 and 22.2.2022 to 28.2.2022):

78. The stringing work was affected due to the non-approval of various 11/33 kV feeders by NBPDCCL for stringing work. Also, shutdown was provided only for 5-6 hours on a daily basis after approval for the stringing work. Hence, the delay occurred in stringing work in different sections of the LILO line. The details of the delay that occurred due to the non-availability of the 11/33 kV feeder shutdown are as under:

Delay due to non – availability of 11 / 33 kV feeder shutdown			
	From	To	No. of Days
33 kV S/D AP 3/0-4/0 LI (NBPDCCL)	15.1.2022	20.1.2022	6
33 kV S/D AP 12/0-13/0 LO & 13/0-14/0 LI (NBPDCCL)	22.2.2022	28.2.2022	7



Delay due to Scarcity of Earth for executing earth filling

79. The levelling activities at the site involve around 1.64 lakh cubic metres of earth filling. However, due to the scarcity of soil in the said area owing to the flood-prone area, the same was delayed. All related activities, viz., pile, SPR, equipment foundation, and cable trench were also subsequently delayed.

Delay due to YASS Cyclone:

80. The YASS cyclone resulted in heavy rainfall from 26.5.2021 to 31.5.2021 in Saharsa and Supaul District, due to which most of the locations became water-logged. As a result, the work was delayed from 26.5.2021 to 31.5.2021, i.e., a total of 6 days.

Delay due to Gram Panchayat Elections in Supaul and Saharsa District:

81. The Gram Panchayat Election 2021 in Saharsa and Supaul district under Sattar Kataiya and Supaul Block held on 20.10.2021 and 12.12.2021, respectively. During the election period, the construction work was affected due to the non-availability of manpower and difficulties in the free movement of vehicles before the election, resulting in a total delay of 12 days, i.e., from 17.10.2021 to 22.10.2021 and 10.12.2021 to 15.12.2021 in each district, i.e., Saharsa and Supoul, respectively.

82. The chronology justifying the delay in execution of Asset-3 as submitted by the Petitioner is as under:

Sr. No.	Issue for stoppage	Affected period		Days
		From	To	
1	COVID-19	5.8.2021	12.9.2021	39
2	COVID – 19	16.5.2021	30.6.2021	46
3	Bihar Assembly Elections	3.11.2020	10.11.2020	7
4	RoW in Commencement of foundation work	8.9.2020	24.9.2020	17
5	RoW 12/0 FDN LO	13.10.2020	26.10.2020	14
6	RoW FDN 19/0 LI	9.3.2021	13.5.2021	66
7	RoW Stringing work 7/0-11/0	10.10.2021	31.10.2021	22
8	RoW FDN 2/3 LI	3.7.2021	15.9.2021	75



Sr. No.	Issue for stoppage	Affected period		Days
		From	To	
9	RoW Stringing work 10/0 - 11/0 LI	16.2.2022	14.3.2022	27
10	RoW Stringing work 12/0 - 13/0 LO	2.1.2022	14.1.2022	13
11	Water Logging and Flooding	27.7.2021	31.8.2021	35
12	Delay due to non-availability of 11/33 kV feeder shutdown- 33 kV S/D AP 3/0-4/0 LI (NBPDCL)	15.1.2022	20.1.2022	6
13	Delay due to non-availability of 11/33 kV feeder shutdown- 33 kV S/D AP 12/0-13/0 LO & 13/0-14/0 LI (NBPDCL)	22.2.2022	28.2.2022	7
14	Scarcity of earth for executing earth filing	-	-	-
15	YASS Cyclone	26.5.2021	31.5.2021	6
16	Gram panchayat elections	17.10.2021	22.10.2021	6
17	Gram panchayat elections	10.12.2021	15.12.2021	6

83. BSPHCL has submitted the same reasons for the Bihar Assembly Elections, YASS Cyclone, and water logging and flooding as submitted for time overrun in the case of Asset-2. Therefore, the same has not been repeated here. Further, BSPHCL has submitted that the claim of delay due to the alleged RoW issues, the details of the steps taken by the Petitioner for resolution of the alleged issues are not mentioned, and it has not been stated as to why the same was not taken earlier to avert the RoW issues, which are common in such construction projects. BSPHCL has further submitted that there is not much of a delay due to the non-availability of the 11/33 kV shutdown during the stringing work. The Petitioner ought to give ample public notice for shutdown, and here, the requests were given only on 10.1.2022 and 14.2.2022. BSPHCL has also submitted that the claim of delay on account of the alleged scarcity of earth for executing earth filling is also liable to be rejected as much as the same ought to have been in



contemplation of the Petitioner and the lack of planning and preparedness in this regard is attributable to the Petitioner.

84. In response, the Petitioner has submitted the same reasons for the Bihar Assembly Elections, YASS Cyclone, and water logging and flooding as for Asset-2. The same is not repeated here. Further, the Petitioner has submitted that, at times, RoW issues are unprecedented. To cater to such issues, due communications with the local authorities were maintained to avoid the delay. The approval of the shutdown of 11/33 kV lines was not under the control of the Petitioner. The COD of Asset-3 is claimed as 28.4.2022 by the Petitioner, and requests for shutdown were sent well before time. The Petitioner has further submitted that the site levelling activities involve around 1.64 lakh cubic metres of earth filling. However, due to the scarcity of soil in the said area owing to the flood-prone area, the same was delayed. All the related activities, viz., pile, SPR, equipment foundation, and cable trench, were also subsequently delayed.

Time overrun analysis and decision in the case of Asset-3:

85. We have considered the submission of the Petitioner and BSPHCL. As per the IA dated 11.7.2020, the SCOD of Asset-3 was 10.6.2021. The Petitioner has submitted the actual COD as 28.4.2022. The time overrun in commissioning of the transmission Asset-3 is 322 days in the commissioning vis-à-vis the SCOD. The Petitioner has claimed the delay on account of the COVID-19 Pandemic, water logging issues, RoW issues, delay due to stringing work, assembly, and gram panchayat elections, and the YASS cyclone. We have considered the submissions of the Petitioner and have gone through the documentary evidence produced on record to justify the time overrun.



Delay due to the COVID-19 Pandemic:

86. With regards to the delay claimed by the Petitioner due to the COVID-19 Pandemic, it is observed that the MoP vide letter dated 12.6.2021 has extended the SCOD of the inter-State transmission projects by 3 months respectively due to the COVID-19 Pandemic. The relevant portion of the letter dated 12.6.2021 has been re-produced during analyses of Asset-1.

87. The Petitioner, vide affidavit dated 20.11.2023, has submitted that in the transmission line portion, the supply of tower structures was completed. Approximately 60% of the foundation and 20% of the tower erection work were completed by 1.4.2021. In the Sub-station portion, only yard levelling was completed by 1.4.2021. Balance foundation, erection, and commissioning activities were pending as on 1.4.2021 in accordance with the MoP letter 12.6.2021. Therefore, it has been observed that the work was under progress, and also, the SCOD of the transmission asset was on 10.6.2021 (as per IA), i.e., after 1.4.2021 and, hence, as per MoP letter dated 12.6.2021, the extension of 3 months in respect of the SCOD is applicable in the instant case. Therefore, the time period of 92 days is condoned.

Delay due to Bihar Assembly Election 2020 (in Muzaffarpur district constituencies):

88. The Petitioner has submitted that the construction work was hampered for 7 days, i.e., from 3.11.2020 to 10.11.2020, due to the Bihar Assembly Elections 2020 in Muzaffarpur district constituencies, which was held on 3.11.2020.

89. It is observed that the documentary evidence to indicate how the General Assembly Election affected the construction activities for 7 days has not been submitted



by the Petitioner. However, considering that the progress of work may have been affected due to the participation of the local manpower/workforce in casting their votes on the election day, i.e., on 3.11.2020, One (01) Day on account of delay due to the Bihar Assembly Election 2020 is hereby condoned.

Delay due to Severe RoW during Construction of Line:

90. The severe RoW issues arose during the construction of LILO of Kishanganj – Darbhanga transmission line at Saharsa (New) Sub-station, which were cleared with the help of local administration and Police support. The Petitioner has claimed the time over-run of 234 days on account of severe RoW issues due to the cutting of the big mango garden and issues created by the land owners during the construction and stringing activities of the transmission line. The details of the time period affected due to RoW issues as submitted by the Petitioner are as follows:

Sr. No.	Issue for stoppage	Affected period		Days
		From	To	
1	RoW in Commencement of foundation work	8.9.2020	24.9.2020	17
2	RoW 12/0 FDN LO	13.10.2020	26.10.2020	14
3	RoW FDN 19/0 LI	9.3.2021	13.5.2021	66
4	RoW FDN 2/3 LI	3.7.2021	15.9.2021	75
5	RoW Stringing work 7/0-11/0	10.10.2021	31.10.2021	22
6	RoW Stringing work 10/0 - 11/0 LI	16.2.2022	14.3.2022	27
7	RoW Stringing work 12/0 - 13/0 LO	2.1.2022	14.1.2022	13
Total				234 Days

91. We have considered the submissions of the Petitioner and gone through the supporting documents submitted by the Petitioner. It has been observed that the executing agency, i.e., L&T of the Petitioner, intimated the RoW issues which impeded the progress of the work vide letters dated 13.10.2020, 9.3.2021, 3.7.2021, 10.10.2021,



2.1.2022 and 16.2.2022. Consequently, the Petitioner confirmed the resolution of RoW issues and provided clearance to the executing agency to proceed with the work vide letters dated 27.10.2020, 14.5.2021, 16.9.2021, 1.11.2021, 16.1.2022 and 15.3.2022.

The details of correspondence in respect of various RoW issues are as follows:

Date	From	To	Remarks
13.10.2020	Larsen and Toubro Limited	The Petitioner	Regarding the forceful stoppage of work by the villagers
27.10.2020	The Petitioner	Larsen and Toubro Limited	The Petitioner intimated that the RoW issue was resolved at the site.
9.3.2021	Larsen and Toubro Limited	The Petitioner	Regarding forceful stoppage of work and nuisance created by the villagers
14.5.2021	The Petitioner	Larsen and Toubro Limited	The Petitioner intimated that the RoW issue was resolved at the site.
3.7.2021	Larsen and Toubro Limited	The Petitioner	Regarding forceful stoppage of work and nuisance created by the villagers
4.7.2021	The Petitioner	Sub Inspector, Adarsh Thana	Regarding critical RoW issue
16.9.2021	The Petitioner	Larsen and Toubro Limited	The Petitioner intimated that the RoW issue was resolved at the site.
10.10.2021	Larsen and Toubro Limited	The Petitioner	Regarding non-clearance to commence stringing work and non-completion of tree-cutting
1.11.2021	The Petitioner	Larsen and Toubro Limited	The Petitioner intimated that the RoW issue was resolved at the site.
2.1.2022	Larsen and Toubro Limited	The Petitioner	Informed the Petitioner regarding work getting stuck due to the non-cutting of a big mango garden and severe RoW created by a local contractor
16.1.2022	The Petitioner	Larsen and Toubro Limited	RoW and tree-cutting work was completed.
16.2.2022	Larsen and Toubro Limited	The Petitioner	Informed the Petitioner regarding work getting stuck due to the non-cutting of the big mango garden
15.3.2022	The Petitioner	Larsen and Toubro Limited	Tree cutting was completed



92. Based on the details of the correspondence, it is evident that the progress of work was hampered due to various RoW issues faced by the Petitioner during the construction and stringing activities. Therefore, we are of the view that the time overrun of 234 days claimed by the Petitioner on account of RoW problems at various locations was beyond the control of the Petitioner.

93. Further, it has been observed that the time overrun of 167 days has been subsumed under the time over-run on account of the COVID-19 pandemic (2nd wave) which we have already condoned and extended the SCOD of Asset-3, i.e., by 10.9.2021.

94. Therefore, in view of the above, the net impact of time over-run of 67 days due to various RoW issues faced by the Petitioner during construction and stringing work at various locations is hereby condoned.

Delay due to waterlogging and flooding:

95. The delay of 35 days was due to the waterlogging at most of the locations during the high rainfall in Bihar from May 2021 to August 2021. However, no document has been submitted by the Petitioner to depict the direct effect of high rainfall on the progress of construction activities. Also, the Petitioner is expected to ensure the proper arrangement for dewatering in water logging conditions at the sites during the monsoon season. Therefore, the time overrun of 35 days claimed by the Petitioner is not condoned.

Delay due to non- availability of 11/33 kV shutdown during the stringing work (from 15.1.2022 to 20.1.2022 & 22.2.2022 to 28.2.2022):

96. The stringing work was affected due to the non-approval of shutdown at various 11/33 kV feeders by NBPDCCL for stringing work. It has been observed that the Petitioner has requested for the shutdown from 17.2.2022 to 20.2.2022 and 15.1.2022 to



19.1.2022 vide letter dated 14.2.2022 and 10.1.2022, respectively. However, the documentary evidence that the NABDCL was not granted the shutdown for the desired period has not been submitted by the Petitioner. Therefore, the time overrun of 13 days claimed by the Petitioner due to the non-availability of the shutdown is not condoned.

Delay due to scarcity of soil for executing earth filling:

97. The site levelling activities at site involve around 1.64 lakh cubic metres of earth filling, and due to scarcity of soil, the same was delayed. Therefore, all the related activities, viz., pile, SPR, equipment foundation, and cable trench were also subsequently delayed. However, the Petitioner has not submitted the documents in support of its submission and not claimed any time overrun. Thus, the said reason for the delay is not condoned.

Delay due to YASS Cyclone:

98. The time over-run of 6 days due to the YASS cyclone resulted in heavy rainfall from 26.5.2021 to 31.5.2021. However, no documentary evidence has been submitted by the Petitioner to depict that the said event may be considered under Force Majeure event as per the 2019 Tariff Regulations. Therefore, the time overrun of 6 days claimed by the Petitioner is not condoned.

Delay due to Gram Panchayat Elections in Supoul and Saharsa District (12 days from 17.10.2021 to 22.10.2021 and from 10.12.2021 to 15.12.2021):

99. The Petitioner has submitted that due to the non-availability of manpower and difficulties in the free movement of vehicles before the election during the Gram Panchayat Election 2021 in Saharsa and Supoul Districts under Sattar Kataiya and Supoul Block held on 20.10.2021 and 12.12.2021 respectively, the progress of work was disrupted and total delay 12 days, i.e. 6 days from 17.10.2021 to 22.10.2021 and



06 days from 10.12.2021 to 15.12.2021 in Saharsa and Supoul district respectively happened.

100. It is observed that no documentary evidence has been submitted by the Petitioner to show the direct impact of Gram Panchayat Elections on the construction activities. However, considering that the Progress of work may have been affected due to the participation of Local manpower/workforce in the casting of votes on 20.10.2021 & 12.12.2021, the time delay of 2 days, i.e. 20.10.2021 & 12.12.2021 out of 12 days on account of Gram Panchayat Elections in Supoul and Saharsa districts is hereby condoned.

101. Keeping in view the above-stated reasons and considering the overlapping of time over-run due to different constraints and having analysed the submissions of the Petitioner and BSPHCL, the summary of the time over-run condoned and not condoned is as under:

Asset-3	SCOD as per IA	Actual COD	Time over-run claimed	Time over-run condoned	Time overrun not condoned
	10.6.2021	28.4.2022	322 days	162 days	160 days

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

102. The Petitioner has claimed IDC of the transmission assets and has submitted the statement showing IDC claim, discharge of IDC liability as on the COD and thereafter, as under:

(₹ in lakh)				
Assets	IDC as per Auditor's Certificate	IDC Discharged up to COD	IDC discharged during 2021-22	IDC discharged during 2022-23
Asset-1	29.47	29.42	0.04	0.00
Asset-2	64.98	64.65	0.00	0.33
Asset-3	108.75	67.49	0.00	41.26



103. We have considered the submissions of the Petitioner, as discussed above in this order; the time overrun in the commissioning of the transmission assets has been partially condoned. Accordingly, the IDC on a cash basis up to the COD has been worked out based on the loan details given in the statement showing the 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's Certificate (A)	IDC Disallowed (B)	IDC Allowed (C)=(A)-(B)	Undischarged IDC (D)	IDC allowed on COD (E)=(C)-(D)
Asset-1	29.47	8.30	21.17	1.18	19.99
Asset-2	64.98	7.69	57.29	3.86	53.43
Asset-3	108.75	21.20	87.55	20.06	67.49

104. The Petitioner has claimed IEDC for the transmission assets as per the Auditor's Certificate and was paid up to the COD. As the time overrun for the transmission asset has been partially condoned, IEDC has been allowed on a pro-rata basis. The IEDC claimed as per the Auditor's Certificate, IEDC considered and discharged up to the COD as under:

(₹ in lakh)

Assets	IEDC claimed as per Auditor's certificate (A)	IEDC disallowed due to time over-run not condoned (B)	IEDC Allowed (A-B)
Asset-1	407.90	86.11	321.79
Asset-2	766.85	252.00	514.85
Asset-3	2493.98	608.29	1885.69



Initial Spares

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

“(d) Transmission System

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

106. The Initial Spares claimed by the Petitioner are as under:

(₹ in lakh)				
Assets	Particulars	Capital cost for calculation of Initial Spares	Initial Spares claimed	Ceiling limit as mentioned as per Regulation (in %)
Asset-1	Transmission Lines	1288.00	12.36	1.00
	Sub-station (Brownfield)	621.85	21.66	6.00
	PLCC/Communication System	51.25	7.75	3.50
Asset-2	Sub-station	3508.11	164.40	6.00
Asset-3	Transmission Lines	10790.63	105.03	1.00
	Sub-station (Brownfield)	2695.81	40.86	6.00
	PLCC/Communication System	211.20	7.10	3.50

107. The Petitioner has submitted the Initial Spares discharge statement with the Petition.

108. BSPHCL has submitted that only claims in accordance with Regulation 23 of the 2019 Tariff Regulations may be considered. In response, the Petitioner has submitted



that the individual and overall cost of the Initial Spares are well within the ceiling limit, and the same may be allowed as claimed.

109. We have considered the submissions of the Petitioner and BSPHCL. Based on the information available on record, the Initial Spares for the transmission assets are allowed as per the respective percentage of the plant and machinery cost as on the cut-off date on individual basis. The Initial Spares allowed for the transmission assets are as under:

Assets	Particulars	Plant and Machinery cost (excluding IDC/IEDC, Land cost and Cost of Civil Works) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2019 Tariff Regulations (in %)	Initial Spares allowable (₹ in lakh)	Excess Initial Spares disallowed (₹ in lakh)	Initial Spares Allowed (₹ in lakh)
		A	B	C	$D=(A-B)*C/(100-C)$	$E=B-D$	
Asset-1	Transmission Lines	1288.00	12.36	1.00	12.89	0.00	12.36
	Sub-station (Brownfield) + PLCC	673.10	29.41	6.00	41.09	0.00	29.41
Asset-2	Sub-station	3508.11	164.40	6.00	213.43	0.00	164.40
Asset-3	Transmission Lines	10790.63	105.03	1.00	107.94	0.00	105.03
	Sub-station (Brownfield) + PLCC	2907.01	47.96	6.00	182.49	0.00	47.96

110. Therefore, the capital cost allowed as on COD is as under:

Assets	Capital Cost claimed as on COD (Auditor's Certificate) (A)	IDC Disallowed (B)	Undischarged IDC as on COD (C)	IEDC Disallowed (D)	Initial Spares Disallowed (E)	Undischarged Initial Spares (F)	Capital Cost as on COD (G) = (A-B-C-D-E-F)
	(₹ in lakh)						
Asset-1	1716.80	8.30	1.18	86.11	0.00	0.00	1621.21
Asset-2	3598.66	7.69	3.86	252.00	0.00	0.00	3335.11
Asset-3	14021.98	21.20	20.06	608.29	0.00	0.00	13372.43



Additional Capital Expenditure (“ACE”)

111. Regulations 24 and 25 of the 2019 Tariff Regulations provide as under:

“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.”*

112. The Petitioner has claimed that the ACE incurred/projected to be incurred, mainly on account of the balance/retention payments and works deferred for execution. Hence, the same is claimed in accordance with Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations. The Petitioner has claimed the capital cost as per the cash IDC discharge as on 31.3.2024, and the same is as under:

(₹ in lakh)

Assets	Capital Cost as on COD	Projected ACE 2019-24			Capital Cost as on 31.3.2024
		2021-22	2022-23	2023-24	
Asset-1	1716.80	151.89	319.35	181.50	2369.54
Asset-2	3598.66	0.00	626.38	114.90	4339.94
Asset-3	14021.98	0.00	1423.95	695.64	16141.57

113. The Petitioner, vide affidavit dated 3.3.2023, has submitted that there is no expenditure expected beyond 2024-25. However, the ACE is on the anticipated basis, and the actual ACE will be submitted at the time of true-up of the 2019-24 tariff period based on the actual expenditure incurred and spillover, if any.

114. The Petitioner vide affidavit dated 3.3.2023 has also submitted the liability flow statement, and the same is as follows:

Asset-1

Description	Party Name	Particulars	Outstanding as on COD	Discharge				Additional Liability
				2021-22	2022-23	2023-24	Total (2019-24)	
Upgradation of 400 kV	Vikran Engineering	Sub-station	94.82	11.89	22.50	31.50	65.89	0.00



Description	Party Name	Particulars	Outstanding as on COD	Discharge				Additional Liability	
				2021-22	2022-23	2023-24	Total (2019-24)	2019-24	
Line Bay Equipment's	and Exim Pvt. Ltd.								
Description	Party Name	Particulars	Outstanding as on COD	Discharge				Work deferred	
				2021-22	2022-23	2023-24	2019-24	20221-22	2022-23
Bypassing of 400 kV D/C Farakka-Kahalgaon (Ckt-3 & Ckt-4) and 400 kV D/C Faraka - Durgapur (Ckt-1 & Ckt-2)	Compensation	Transmission Line		0.00	0.00	0.00	0.00	10.00	0.00
	M/S L&T and etc.	Transmission Line	333.73	55.00	178.73	100.00	333.73	25.00	17.17
	M/s Vikarant Engg. Etc.	Sub-station/PLCC	50.00	0.00	0.00	50.00	50.00	50.00	100.95
Total				66.89	201.23	181.50	449.62	85.00	118.12

Asset-2

Party Name	Particulars	Outstanding as on COD	Discharge				Additional Liability	
			2021-22	2022-23	20223-24	Total (2019-24)	2019-24	
Vikran Engineering and Exim Pvt. Ltd.	Sub-station	741.28	0.00	626.38	114.90	741.28	0.00	
Total			0.00	626.38	114.90	741.28	0.00	

Asset-3

Party Name	Particulars	Outstanding as on COD	Discharge				Additional Liability	
			21-22	22-23	23-24	Total (19-24)	22-23	
Vikran Engineering and Exim Pvt. Ltd.	Sub-station	1020.56	0.00	116.00	695.64	811.64	204.00	
M/s L&T	Transmission Line	803.95	0.00	803.95	0.00	803.95	300.00	
Total			0.00	919.95	695.64	1615.59	504.00	

115. BSPHCL has submitted that the claims in accordance with Regulation 24 of the 2019 Tariff Regulations and the definition of the cut-off date given therein may be considered subject to prudence check as per Regulation 24(2) of the 2019 Tariff Regulations. In response, the Petitioner has reiterated its submission.



116. We have considered the submissions of the Petitioner and BSPHCL. The projected ACE to be incurred is mainly on account of the balance/retention payments and the works deferred for execution. Hence, the same is allowed in accordance with Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations. ACE allowed, including un-discharged IDC, is as under:

(₹ in lakh)

Asset	Particulars	2021-22	2022-23	2023-24
Asset-1	ACE	151.89	319.35	181.50
	Undischarged IDC	0.04	1.14	0.00
	Total	151.93	320.49	181.50
Asset-2	ACE		626.38	114.90
	Undischarged IDC		0.33	3.53
	Total		626.71	118.43
Asset-3	ACE		1423.95	695.64
	Undischarged IDC		20.06	0.00
	Total		1444.01	695.64
Total ACE		151.93	2390.00	995.19

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

(₹ in lakh)

Assets	Capital Cost as on COD	Admitted Projected ACE 2019-24			Capital Cost as on 31.3.2024
		2021-22	2022-23	2023-24	
Asset-1	1621.21	151.93	320.49	181.50	2275.13
Asset-2	3335.11		626.71	118.43	4080.25
Asset-3	13372.43		1,444.01	695.64	15512.08

Debt-Equity ratio

118. Regulation 18 of the 2019 Tariff Regulations provides as under:

“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

(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 regulation.

(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.”



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

Asset-1

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	1134.85	70.00	457.74	70.00	1592.59	70.00
Equity	486.36	30.00	196.18	30.00	682.54	30.00
Total	1621.21	100.00	653.92	100.00	2275.13	100.00

Asset-2

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	2334.58	70.00	521.60	70.00	2856.18	70.00
Equity	1000.53	30.00	223.54	30.00	1224.07	30.00
Total	3335.11	100.00	745.14	100.00	4080.25	100.00

Asset-3

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	9360.70	70.00	1497.75	70.00	10858.45	70.00
Equity	4011.73	30.00	641.89	30.00	4653.62	30.00
Total	13372.43	100.00	2139.65	100.00	15512.08	100.00

Depreciation

120. Regulation 33 of the 2019 Tariff Regulations provides as under:

“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.”

121. The depreciation has been worked out considering the admitted capital expenditure as on the COD and thereafter up to 31.3.2024. The weighted average rate of depreciation (WAROD) at Annexure-I for Asset-1, Annexure-II for Asset-2, and Annexure-III for Asset-3 has been worked out as per the rates of depreciation specified in the 2019 Tariff Regulations. The depreciation allowed for the transmission assets is as follows:

Asset-1

Particulars	(₹ in lakh)		
	2021-22 (pro-rata 89 days)	2022-23	2023-24
Depreciation			
Opening Gross Block	1621.21	1773.14	2093.62
ACE	151.93	320.49	181.50
Closing Gross Block	1773.14	2093.62	2275.12
Average Gross Block	1697.17	1933.38	2184.37
Weighted average rate of Depreciation (WAROD) (in %)	5.31	5.31	5.30
Balance useful life of the asset (Year)	31	31	30
Lapsed life at the beginning of the year (Year)	0	0	1
Aggregate Depreciable Value	1527.45	1740.04	1965.94
Combined Depreciation during the year	21.98	102.61	115.88
Aggregate Cumulative Depreciation	21.98	124.59	240.47
Remaining Aggregate Depreciable Value	1505.48	1615.45	1725.47



Asset-2

(₹ in lakh)

Particulars	2022-23 (pro-rata 358 days)	2023-24
Depreciation		
Opening Gross Block	3335.11	3961.82
ACE	626.71	118.43
Closing Gross Block	3961.82	4080.25
Average Gross Block	3648.46	4021.03
Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28
Balance useful life of the asset (Year)	25	25
Lapsed life at the beginning of the year (Year)	0	0
Aggregate Depreciable Value	3283.61	3618.93
Combined Depreciation during the year	188.94	212.31
Aggregate Cumulative Depreciation	188.94	401.25
Remaining Aggregate Depreciable Value	3094.67	3217.67

Asset-3

(₹ in lakh)

Particulars	2022-23 (pro-rata 338 days)	2023-24
Depreciation		
Opening Gross Block	13372.43	14816.44
ACE	1444.01	695.64
Closing Gross Block	14816.44	15512.08
Average Gross Block	14094.44	15164.26
Weighted average rate of Depreciation (WAROD) (in %)	5.32	5.32
Balance useful life of the asset (Year)	33	33
Lapsed life at the beginning of the year (Year)	0	0
Aggregate Depreciable Value	12688.50	13652.35
Combined Depreciation during the year	693.77	807.10
Aggregate Cumulative Depreciation	693.77	1500.87
Remaining Aggregate Depreciable Value	11994.72	12151.49

Interest on Loan (“IoL”)

122. Regulation 32 of the 2019 Tariff Regulations provides as under:

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

(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting



the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.

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

123. BSPHCL has submitted that the IoL may be calculated as contemplated by Regulation 32 of the 2019 Tariff Regulations only. The 2019 Tariff Regulations do not permit the change in the interest rate due to the floating rate of interest applicable, if any, and the same may be adjusted by the beneficiaries. In response, the Petitioner has reiterated its submission.

124. We have considered the submissions of the Petitioner and BSPHCL. The weighted average rate of IoL (WAROI) has been considered on the basis of the rate



prevailing as on 1.4.2019. The Petitioner has prayed to bill and adjust the impact of IoL on change in the interest rate due to the floating rate of interest applicable, if any, during the 2019-24 tariff period from the beneficiaries. Accordingly, the floating rate of interest, if any, shall 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 under:

Asset-1

Particulars	(₹ in lakh)		
	2021-22 (pro-rata 89 days)	2022-23	2023-24
Gross Normative Loan	1134.85	1241.20	1465.54
Cumulative Repayments up to Previous Year	0.00	21.98	124.59
Net Loan-Opening	1134.85	1219.22	1340.95
Additions	106.35	224.34	127.05
Repayment during the year	21.98	102.61	115.88
Net Loan-Closing	1219.22	1340.95	1352.12
Average Loan	1177.04	1280.09	1346.54
Weighted Average Rate of Interest on Loan (in %)	5.9500	5.9500	5.9500
Interest on Loan	17.08	76.17	80.12

Asset-2

Particulars	(₹ in lakh)	
	2022-23 (pro-rata 358 days)	2023-24
Gross Normative Loan	2334.58	2773.28
Cumulative Repayments up to Previous Year	0.00	188.94
Net Loan-Opening	2334.58	2584.33
Additions	438.70	82.90
Repayment during the year	188.94	212.31
Net Loan-Closing	2584.33	2454.93
Average Loan	2459.46	2519.63
Weighted Average Rate of Interest on Loan (in %)	5.9557	5.9557
Interest on Loan	143.67	150.06



Asset-3

Particulars	(₹ in lakh)	
	2022-23 (pro-rata 338 days)	2023-24
Gross Normative Loan	9360.70	10371.51
Cumulative Repayments up to Previous Year	0.00	693.77
Net Loan-Opening	9360.70	9677.73
Additions	1010.81	486.95
Repayment during the year	693.77	807.10
Net Loan-Closing	9677.73	9357.59
Average Loan	9519.22	9517.66
Weighted Average Rate of Interest on Loan (in %)	6.0249	6.0249
Interest on Loan	531.10	573.43

Return on Equity (“RoE”)

125. Regulations 30 and 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:
- rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
 - 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:

- Estimated Gross Income from generation or transmission business for FY 2019-20 is ₹ 1,000 crore;
- 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.”

126. BSPHCL has submitted that RoE and Tax on RoE, as contemplated by Regulations 30 and 31 of the 2019 Tariff regulations, may only be taken into consideration. In response, the Petitioner has reiterated its submission.

127. We have considered the submission of the Petitioner and BSPHCL. The Petitioner has submitted that the MAT rate is applicable to it. Accordingly, the MAT rate applicable in 2019-24 has been considered for the purpose of RoE, which will be trued-up in accordance with Regulation 31(3) of the 2019 Tariff Regulations. The RoE has been worked out for the transmission assets and allowed is as follows:

Asset-1

Particulars	(₹ in lakh)		
	2021-22 (pro-rata 89 days)	2022-23	2023-24
Opening Equity (A)	486.36	531.94	628.09
Additions (B)	45.58	96.15	54.45
Closing Equity (C) = (A+B)	531.94	628.09	682.54
Average Equity (D) = (A+C)/2	509.15	580.01	655.31
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782
Return on Equity	23.32	108.94	123.08



Asset-2

(₹ in lakh)

Particulars	2022-23 (pro-rata 358 days)	2023-24
Opening Equity (A)	1000.53	1188.54
Additions (B)	188.01	35.53
Closing Equity (C) = (A+B)	1188.54	1224.07
Average Equity (D) = (A+C)/2	1094.54	1206.31
Return on Equity (Base Rate) (in %)	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782
Return on Equity	201.63	226.57

Asset-3

(₹ in lakh)

Particulars	2022-23 (pro-rata 338 days)	2023-24
Opening Equity (A)	4011.73	4444.93
Additions (B)	433.20	208.69
Closing Equity (C) = (A+B)	4444.93	4653.62
Average Equity (D) = (A+C)/2	4228.33	4549.28
Return on Equity (Base Rate) (in %)	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782
Return on Equity	735.42	854.45

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

128. The O&M Expenses claimed by the Petitioner for the transmission assets for the 2019-24 period are as under:

Asset-1

(₹ in lakh)

Particulars	2021-22 (pro-rata 89 days)	2022-23	2023-24
Transmission Line			
i. Bypassing of 400 kV D/C Farakka-Kahalgaon (Ckt-3 & Ckt-4) and 400 kV S/C Farakka-Durgapur (Ckt-1 & Ckt-2)			
Double Circuit (Twin Conductor)			
Normative Rate of O&M Expenses as per Regulation	0.94	0.97	1.01
No. of units (Length in km)	3.19	3.19	3.19
Total O&M Expenses	0.73	3.12	3.23



Asset-2

(₹ in lakh)

Particulars	2022-23 (pro-rata 358 days)	2023-24
Transmission Line:		
i. 220 kV Cable from ICT to GIS bay		
Bays:		
i. Muzaffarpur: ICT 4_ 400 kV Side Main Bay 1_418		
ii. Muzaffarpur: ICT 4 Transformer Bay_214		
Transformer:		
Muzaffarpur: ICT 4 at Muzaffarpur		
400 kV Sub-station (Nos.)	1.00	1.00
Norms (₹ lakh/bay)	35.66	36.91
O&M expenses	34.98	36.91
400 kV Sub-station (Nos.)	1.00	1.00
Norms (₹ lakh/MVA)	0.398	0.411
O&M Expenses	195.18	205.50
220 kV GIS Sub-station (Nos.)	1.00	1.00
Norms (₹ lakh/bay)	17.47	18.08
O&M Expenses	17.14	18.09
Total O&M Expenses	247.41	260.62

Asset-3

(₹ in lakh)

Particulars	2022-23 (pro-rata 338 days)	2023-24
Transmission Line:		
i. 400 kV D/C Saharsa Darbhanga Loop Out Line Ckt 1&2		
ii. 400 kV D/C Saharsa Darbhanga Loop In Line Ckt 1&2		
Bays:		
i. KishanGanj-III Line Bay 419		
ii. Kishanganj-IV Line Bay 422		
iii. Darbhanga-I Line Bay 421		
iv. Darbhanga-I Line Bay 424		
Single Circuit (Bundled Conductor with 4 sub-conductors) (in km)	20.72	20.72
Norms (₹ lakh/km)	0.837	0.867
O&M expenses	16.06	17.96
Double Circuit (Bundle Conductor with 4 sub-conductors) (in km)	18.20	18.20
Norms (₹ lakh/km)	1.466	1.517
O&M Expenses	24.71	27.61
400 kV Sub-station (Nos.)	4.00	4.00
Norms (₹ lakh/bay)	35.66	36.91
O&M Expenses	132.08	147.64
Total O&M Expenses	172.85	193.21



129. The norms specified under Regulation 35(3)(a) of the 2019 Tariff Regulations provide as under:

“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 (pro-rata 47 days)	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
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



Particulars	2019-20	2020-21	2021-22 (pro-rata 47 days)	2022-23	2023-24
<i>±500 kV Talcher- Kolar HVDC bipole scheme (₹ Lakh) (2000 MW)</i>	2,468	2,555	2,645	2,738	2,834
<i>±500 kV Bhiwadi-Balia HVDC bipole scheme (₹ Lakh) (2500 MW)</i>	1,696	1,756	1,817	1,881	1,947
<i>±800 kV, Bishwanath-Agra HVDC bipole scheme (₹ Lakh)(3000 MW)</i>	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

- (i) the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*
- (ii) the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*
- (iii) the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (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.”

130. BSPHCL has submitted that the claim of operation and maintenance expenses may only be considered in accordance with Regulation 35(3) (a) of the 2019 Tariff Regulations. In response, the Petitioner has reiterated its submission.

131. We have considered the submissions of the Petitioner and BSPHCL. The O&M Expenses worked out for various elements of the transmission asset as per the norms specified in the 2019 Tariff Regulations, and the same are as follows:

Asset-1

(₹ in lakh)

Particulars	2021-22 (pro-rata 89 days)	2022-23	2023-24
Transmission Line			
ii. Bypassing of 400 kV D/C Farakka Kahalgaon (Ckt-3 & Ckt-4) and 400 kV S/C Farakka Durgapur (Ckt-1 & Ckt-2)			
Double Circuit (Twin Conductor)			
Normative Rate of O&M Expenses as per Regulation	0.94	0.97	1.01
No. of units (Length in km)	3.19	3.19	3.19
Total O&M Expenses	0.73	3.12	3.23

Asset-2

(₹ in lakh)

Particulars	2022-23 (pro-rata 358 days)	2023-24
Transmission Line:		
ii. 220 kV Cable from ICT to GIS bay		
Bays:		
iii. Muzaffarpur: ICT 4_ 400 kV Side Main Bay 1_418		
iv. Muzaffarpur: ICT 4 Transformer Bay_214		
Transformer:		
Muzaffarpur: ICT 4 at Muzaffarpur		
Single Circuit (Single Conductor)	0.42	0.42
Norms (₹ lakh/km)	0.279	0.289
O&M Expenses	0.12	0.12
400 kV Sub-station (Nos.)	1.00	1.00
Norms (₹ lakh/bay)	35.66	36.91



Particulars	2022-23 (pro-rata 358 days)	2023-24
O&M Expenses	34.98	36.91
500 MVA, 400 kV ICT	1.00	1.00
Norms (₹ lakh/MVA)	0.398	0.411
O&M Expenses	195.18	205.50
220 kV GIS Sub-station (Nos.)	1.00	1.00
Norms (₹ lakh/bay)	17.47*	18.08*
O&M Expenses	17.14	18.09
Total O&M Expenses	247.41	260.62

*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

Asset-3

Particulars	(₹ in lakh)	
	2022-23 (pro-rata 338 days)	2023-24
Transmission Line:		
iii. 400 kV D/C Saharsa Darbhanga Loop Out Line Ckt 1 & 2		
iv. 400 kV D/C Saharsa Darbhanga Loop In Line Ckt 1 & 2		
Bays:		
v. KishanGanj-III Line Bay 419		
vi. Kishanganj-IV Line Bay 422		
vii. Darbhanga-I Line Bay 421		
Darbhang-I Line Bay 424		
Single Circuit (Bundled Conductor with 4 sub-conductors) (in km)	20.72	20.72
Norms (₹ lakh/km)	0.837	0.867
O&M expenses	16.06	17.96
Double Circuit (Bundle Conductor with 4 sub-conductors) (in km)	18.20	18.20
Norms (₹ lakh/km)	1.466	1.517
O&M Expenses	24.71	27.61
400 kV Sub-station (Nos.)	4.00	4.00
Norms (₹ lakh/bay)	35.66	36.91
O&M Expenses	132.08	147.64
Total O&M Expenses	172.86	193.21

132. It is observed that the CEA Energisation Certificate as well as ERLDC Trial Run Certificate is for D/C LOOP-IN and DC LOOP-OUT for LILO of Kishanganj – Darbhanga 400 kV D/C line at Saharsa, whereas the Petitioner has claimed the different



configurations in respect of Line-Out and Line-In portion for O&M Expenses. The Petitioner is directed to submit a detailed justification along with supporting documents for review at the time of truing up.

Interest on Working Capital (“IWC”)

133. 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.*

(2) *The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined:*

Provided that in case of new generating station, the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which tariff is to be determined.

(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;”

134. 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 1.4.2021. The Petitioner has considered the rate of IWC as 10.50%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 10.50% (SBI 1year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points), 10.50% (SBI 1year MCLR applicable as on 1.4.2022 of 7.00% plus 350 basis points) and 12.00% (SBI 1year MCLR applicable as on 1.4.2023 of 8.50% plus 350 basis points) for 2021-22, 2022-23 and 2023-24 respectively. The components of the working capital and interest allowed thereon is as follows:

Asset-1

Particulars	(₹ in lakh)		
	2021-22 (pro-rata 89 days)	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	0.25	0.26	0.27
Working Capital for Maintenance Spares (15% of O&M Expenses)	0.45	0.47	0.48
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	32.34	36.34	40.23
Total Working Capital	33.04	37.06	40.98
Rate of Interest (in %)	10.50	10.50	12.00
Interest on Working Capital	0.85	3.89	4.92



Asset-2

(₹ in lakh)

Particulars	2022-23 (pro-rata 358 days)	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	21.02	21.72
WC for Maintenance Spares (15% of O&M Expenses)	37.84	39.09
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	100.31	106.93
Total Working Capital	159.17	167.74
Rate of Interest (in %)	10.50	12.00
Interest on Working Capital	16.39	20.13

Asset-3

(₹ in lakh)

Particulars	2022-23 (pro-rata 338 days)	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	15.56	16.10
Working Capital for Maintenance Spares (15% of O&M Expenses)	28.00	28.98
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	288.29	303.69
Total Working Capital	331.85	348.78
Rate of Interest (in %)	10.50	12.00
Interest on Working Capital	32.27	41.85

Annual Fixed Charges for the 2019-24 Tariff Period

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

Asset-1

(₹ in lakh)

Particulars	2021-22 (pro-rata 89 days)	2022-23	2023-24
Depreciation	21.98	102.61	115.88
Interest on Loan	17.08	76.17	80.12
Return on Equity	23.32	108.94	123.08
Interest on Working Capital	0.85	3.89	4.92
O&M Expenses	0.73	3.12	3.23
Total	63.96	294.73	327.23



Asset-2

Particulars	(₹ in lakh)	
	2022-23 (pro-rata 358 days)	2023-24
Depreciation	188.94	212.31
Interest on Loan	143.67	150.06
Return on Equity	201.63	226.57
Interest on Working Capital	16.39	20.13
O&M Expenses	247.41	260.62
Total	798.05	869.69

Asset-3

Particulars	(₹ in lakh)	
	2022-23 (pro-rata 338 days)	2023-24
Depreciation	693.77	807.10
Interest on Loan	531.10	573.43
Return on Equity	735.42	854.45
Interest on Working Capital	32.27	41.85
O&M Expenses	172.86	193.21
Total	2165.41	2470.04

Filing Fee and the Publication Expenses

136. The Petitioner has sought reimbursement of the fee paid by it for filing the Petition and publication expenses.

137. BSPHCL has submitted that the grant of filing fees and expenses incurred is at the discretion of the Commission and need not necessarily be allowed in all cases. Further, nothing beyond what is contemplated by the 2019 Tariff Regulations may be granted.

138. In response, the Petitioner has submitted that they have requested reimbursement of expenditure towards the Petition filing fee and publication expense from the beneficiaries, in terms of Regulation 70(1) of the Tariff Regulations, 2019. The Petitioner has further submitted that the Commission has allowed the recovery of the Petition filing fee and publication of notices from the beneficiaries on a pro-rata basis in



the order dated 28.3.2016 in Petition No. 137/TT/2015 for the determination of tariff for 2014-19 period.

139. We have considered the submissions of the Petitioner and BSPHCL. The Petitioner shall be entitled to reimbursement of the filing fees and publication expenses in connection with the present Petition directly from the beneficiaries on a pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

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

Goods and Services Tax

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

142. BSPHCL has submitted that Regulation 56 of the 2019 Tariff Regulations contemplates recovery of statutory charges by the generating company and not by the transmission licensee. Therefore, the said claim is premature and liable to be rejected. In response, the Petitioner has reiterated its submission.



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

Security Expenses

144. The Petitioner has submitted that security expenses in respect of the transmission assets are not claimed in the instant Petition, and it would file a separate Petition for claiming the overall security expenses and the consequential IWC as per Regulation 35(3)(c) of the 2019 Tariff Regulations.

145. BSPHCL has submitted that the claim made by the Petitioner regarding the security expenses may only be considered as per Regulation 35(3)(c) of the 2019 Tariff Regulations. In response, the Petitioner has reiterated its submission.

146. We have considered the above submissions of the Petitioner and BSPHCL. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on a projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in the FY 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

147. The Petitioner has sought reimbursement of capital spares at the end of the tariff period. The Petitioner's claim, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.



Sharing of Transmission Charges

148. The Petitioner has submitted that the transmission charges in respect of the transmission assets for the 2019-24 tariff period will be recovered on a monthly basis in accordance with Regulation 57 of the 2019 Tariff Regulations and will be shared by the beneficiaries and long term transmission customers as per the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 dated 15.6.2010 and amendment to these Regulations issued vide order dated 30.11.2012 or as amended from to time.

149. BSPHCL has submitted that the sharing of the transmission charges will be done as per the applicable Tariff and Sharing Regulations.

150. We have considered the submissions of the Petitioner and BSPHCL. With effect from 1.7.2011, the sharing of transmission charges for the inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations. However, with effect from 1.11.2020 (after the repealing of the 2010 Sharing Regulations), the sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the billing, collection, and disbursement of the transmission charges for the transmission assets shall be recovered in terms of the provisions of the applicable Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

Interim Tariff

151. The Petitioner in the present Petition has prayed for an interim tariff as per Regulation 10(3) of the 2019 Tariff Regulations. We have considered the submission of the Petitioner. Since the tariff has been determined in this Petition for the 2019-24 tariff period, the prayer of the Petitioner for an interim tariff has become infructuous.



152. To summarize, the Annual Fixed Charges (AFC) allowed in respect of the transmission asset for the 2019-24 tariff period are as follows:

Asset-1

Particulars	(₹ in lakh)		
	2021-22 (pro-rata 89 days)	2022-23	2023-24
AFC	63.96	294.73	327.23

Asset-2

Particulars	(₹ in lakh)	
	2022-23 (pro-rata 358 days)	2023-24
AFC	798.05	869.69

Asset-3

Particulars	(₹ in lakh)	
	2022-23 (pro-rata 338 days)	2023-24
AFC	2165.41	2470.04

153. The Annexure(s) to this order form part of the order.

154. This order disposes of Petition No. 15/TT/2023 in terms of the above findings and discussions.

**sd/-
(Ramesh Babu V.)
Member**

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



ANNEXURE-I

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)				Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations (in %)	Annual Depreciation as per Regulations (₹ in lakh)		
		2021-22	2022-23	2023-24	Total			2021-22	2022-23	2023-24
Transmission Line	1134.65	90.03	196.70	100.00	386.72	1521.37	5.28	62.29	69.86	77.69
Sub-station	436.63	61.90	122.29	80.90	265.09	701.72	5.28	24.69	29.55	34.92
PLCC	49.93	0.00	1.51	0.60	2.11	52.03	6.33	3.16	3.21	3.27
Total	1621.21	151.93	320.49	181.50	653.92	2275.12		90.13	102.61	115.88
							Average Gross Block (₹ in lakh)	1697.17	1933.38	2184.37
							Weighted Average Rate of Depreciation (in %)	5.31	5.31	5.30



ANNEXURE-II

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations (in %)	Annual Depreciation as per Regulations (₹ in lakh)		
		2022-23	2023-24	Total			2022-23	2023-24	
Sub-station	3335.11	626.71	118.43	745.14	4080.25	5.28%	192.64	212.31	
Total	3335.11	626.71	118.43	745.14	4080.25		192.64	212.31	
							Average Gross Block (₹ in lakh)	3648.46	4021.03
							Weighted Average Rate of Depreciation (in %)	5.28	5.28



ANNEXURE-III

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations (in %)	Annual Depreciation as per Regulations (₹ in lakh)		
		2022-23	2023-24	Total			2022-23	2023-24	
Transmission Line	11339.59	1120.96	-	1120.96	12460.55	5.28%	628.32	657.92	
Sub-station	1845.54	322.77	593.95	916.72	2762.25	5.28%	105.97	130.17	
PLCC	152.30	0.23	81.40	81.63	233.93	6.33%	9.65	12.23	
IT Equipment (Incl. Software)	35.00	0.05	20.29	20.34	55.34	15.00%	5.25	6.78	
Total	13372.43	1444.01	695.64	2139.65	15512.08		749.19	807.10	
							Average Gross Block (₹ in lakh)	14094.44	15164.26
							Weighted Average Rate of Depreciation (in %)	5.32	5.32

