CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 132/TT/2023

Coram:

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

Date of Order: 01.05.2025

In the matter of:

Approval under Regulation 86 of CERC (Conduct of Business) Regulations,1999 and CERC (Terms and Conditions of Tariff) Regulations, 2019 for the determination of transmission tariff from COD to 31.3.2024 for **Asset-I:** Combined Asset of **(1)** LILO of one circuit of Bamnauli-Jattikalan 400 kV D/C line along with associated bays at Dwarka-I Sub-station, **(2)** 400/200 kV, 500 MVA ICT-I, II & III along with associated bays at Dwarka-I Sub-station, **(3)** 400 kV, 125 MVAR bus reactor along with associated bay at Dwarka-I Sub-station; **Asset-II:** 400/200 kV, 500 MVA ICT-IV along with associated bays at Dwarka-I Sub-station; **Asset-III:** LILO of circuit-2 of 400 kV D/C Bawana-Mandola line at Maharanibagh Sub-station along with associated bays; **Asset-IV:** LILO of circuit-1 of 400 kV D/C Bawana-Mandola line at Maharanibagh Sub-station along with associated bays; and **Asset-V:** By passing of LILO of one circuit of 400 kV Dadri–Ballabhgarh D/C line at Maharanibagh (existing) (to be used during emergency) under "Creation of 400/220 kV Sub-stations in NCT of Delhi during 12th plan period (Part-A)" in the Northern Region.

And in the matter of:

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

Versus

1. **Ajmer Vidyut Vitran Nigam Limited,**
   Corporate Office, Vidyut Bhawan,
   Panchsheel Nagar, Makarwali Road,
   Ajmer – 305004.

2. **Jaipur Vidyut Vitran Nigam Limited,**
   Vidyut Bhawan, Janpath, JyotiNagar
   Jaipur- 302 005.
3. **Jodhpur Vidyut Vitran Nigam Limited,**
   New Power House, Industrial Area,
   Jodhpur- 342 003.
4. **Himachal Pradesh State Electricity Board Limited,**
   Vidyuti Bhawan,Kumar House Complex Building II,
   Shimla 171004.
5. **Punjab State Power Corporation Limited,**
   The Mall, PSEB Head Office,
   Patiala- 147001.
6. **Haryana Power Purchase Centre,**
   Shakti Bhawan. Sector-6
   Panchkula- 134109.
7. **Jammu Kashmir Power Corporation Limited (JKPCL)**
   220/66/33 kV Gladni Sub-station
   SLDC Building, Narwal.
8. **Uttar Pradesh Power Corporation Limited,**
   Shakti Bhawan,14, Ashok Marg,
   Lucknow- 226001.
9. **BSES Yamuna Power Limited,**
   B-Block, Shakti Kiran, Karkardooma 2nd Floor,
   New Delhi- 110092.
10. **BSES Rajdhani Power Limited,**
    BSES Bhawan. Nehru Place,
    New Delhi- 110019.
11. **Tata Power Delhi Distribution Limited,**
    NDPL House, Hudson Lines Kingsway Camp,
    Delhi- 110009
12. **Chandigarh Administration,**
    Sector-9, Chandigarh.

13. **Uttarakhand Power Corporation Limited,**
Urja Bhawan, Kanwali Road,
Dehradun.

14. **North Central Railway,**
DRM Office, Nawab Yusuf Road,
Prayagraj, Uttar Pradesh- 211011.

15. **New Delhi Municipal Council,**
Palika Kendra, Sansad Marg,
New Delhi- 110002.

16. **Delhi Transco Limited,**
Shakti Sadan, Kotla Road,
New Delhi- 110002. **... Respondent(s)**

Parties Present: Shri Vivek Kumar Singh, PGCIL
Shri V.C. Sekhar, PGCIL

ORDER

The instant Petition has been filed by the Petitioner, Power Grid Corporation of India Limited, a deemed transmission licensee, for determination of 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 under "Creation of 400/220 kV Sub-stations in NCT of Delhi during the 12th plan period (Part-A)" in the Northern Region.":

Sl. No.	Asset No	Asset Name	COD
1	**Asset-I**	Combined Asset of **(1)** LILO of one circuit of Bamnauli- Jattikalan 400 kV D/C line along with associated bays at Dwarka-I Sub-station, **(2)** 400/200 kV, 500 MVA ICT-I, II & III along with associated bays at Dwarka-I Sub-station, **(3)** 400 kV, 125 MVAR bus reactor along with associated bay at Dwarka-I Sub-station	10.2.2022

2	**Asset-II**	400/200kV, 500 MVA ICT-IV along with associated bays at Dwarka-I Sub-station	1.4.2022
3	**Asset-III**	LILO of circuit-2 of 400 kV D/C Bawana-Mandola line at Maharanibagh Sub-station, along with associated bays	31.3.2022
4	**Asset-IV**	LILO of circuit-1 of 400 kV D/C Bawana-Mandola line at Maharanibagh Sub-station, along with associated bays	10.4.2022
5	**Asset-V**	By passing of LILO of one circuit of 400 kV Dadri–Ballabhgarh D/C line at Maharanibagh (existing) (to be used during emergency)	25.2.2023

2. The Petitioner has made the following prayers in the instant Petition:

"

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

2) *Approve the Transmission Tariff for the tariff block 2019-24 block for the asset covered under this petition, as per para –8.4 above.*

3) *Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 as per para 8 above for respective block.*

4) *Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.*

5) *Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*

6) *Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.*

7) *Allow the petitioner to file a separate petition before the Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 8.9 above.*

8) *Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*

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

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

and pass such other relief as the 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) of the transmission project was accorded by the Board of Directors of the Petitioner in its 312th meeting held on 24.03.2015 and circulated vide Memorandum No. C/CP/NCT Delhi SS(Part-A)-ID 616 dated 26.3.2015 at an estimated cost of ₹139452 lakh, including an IDC of ₹7312 lakh based on the December 2014 price level. The project was scheduled to be commissioned within 26 months from the date of IA, i.e., by 23.05.2017.

b) As per Investment Approval, the scope of work covered under the transmission project is as below:

Transmission Lines

i. LILO of both circuits of Bawana –Mandola 400kV D/c line at Rajghat on M/c tower with Twin/HTLS conductor

ii. LILO of one circuit of Bamnauli - Jattikalan 400kV line at Dwarka-I with Twin/HTLS conductor

Sub-stations

i. Establishment of 4x500MVA, 400/220 kV GIS at Rajghat

400 kV

a. Line bays: 4 nos(with provision for future expansion)
b. 500 MVA, 400/220 kV ICTs: 4 Nos.
c. 125 MVAr Bus Reactor: 1 Nos.
d. Transformer bay: 4 Nos.
e. Reactor Bay: 1 Nos.

220 KV

a. Line Bays: 12 Nos
b. Transformer Bays: 08 No's (04 No's for 400/220 kV ICTs & 4 Nos for 220/33 kV ICTs)
c. 125 MVAR Bus Reactor: 2 Nos
d. Bus Sectionalizer Bays: 2 Nos

ii. Establishment of 4x500 MVA, 400/220 kV GIS Sub-station at Dwarka-I

400 kV

a. Line bays: 2 Nos. (with provision for future expansion)
b. 500 MVA, 400/220 kV ICTs: 4 Nos.
c. 125 MVAr Bus Reactor: 1 Nos.
d. Transformer bay: 4 Nos.
e. Reactor Bay: 1 Nos.

220 kV

Line Bays: 12 Nos

a. Transformer Bays: 4 Nos
b. Bus Coupler Bays: 2 Nos
c. Bus Sectionalizer: 2 Nos

c) The Petitioner has submitted that the instant transmission project was discussed and agreed upon in the 34th Standing Committee Meeting held on dated 08.08.2014, and subsequent modifications were discussed in the 35th, 36th , and 37th Standing Committee Meetings of the Northern Region held on 03.11.2014, 13.07.2015, and 20.01.2016, respectively. Further, the instant transmission project was discussed and agreed in 32nd (Special) meeting of NRPC held on 10.09.2014 and the 36th NRPC meeting held on 24.12.2015.

The Petitioner has also submitted that the matter of revision in scope was further discussed in the 39th SCM of Northern Region held on 29.05.2017-30.5.2017 & the 40th NRPC meeting held on 28.10.2017.

d) The Petitioner has submitted that as per the Investment Approval, the line bays of LILO of both circuits of 400 kV Bawana - Mandola Line was to be terminated at Rajghat Sub-station. However, DTL vide their letter dated 26.10.2016 had informed that land for Rajghat 400/220 kV S/s at the earlier proposed location near IP Extension was not feasible due to upcoming solar power complex and RoW constraint in laying of transmission lines associated with it (MoM of 39th SCM of Northern Region dated 29.05.2017-30.05.2017 has been placed in record by the Petitioner)

e) After deliberations, the following changes and additional scope were agreed to in the 39th SCM of Northern Region held on 29.05.2017-30.05.2017 and 40th NRPC meeting held on 28.10.2017:

   i. i. LILO of both circuits of the Mandola-Bawana 400 kV D/C line at Maharanibagh (existing) on multi-circuit towers. This LILO at Maharanibagh is under implementation by POWERGRID.
   ii. 4 nos. of 400 kV GIS bays at 400/220kV Maharanibagh (existing) Sub-station for LILO both circuits of Mandola-Bawana 400 kV D/C line at Maharanibagh (existing)
   iii. Bypassing of LILO of one circuit of 400kV Dadri– Samaypur (PG) D/C line at Maharanibagh (existing) (to be used during emergency).

f) The Petitioner has submitted that the Revised Scope of work covered "Creation of 400/220 kV Sub-station in NCT of Delhi during 12th Plan period (Part-A)" in the Northern Region is as follows:

<u>Sub-station</u>

i. 4x500MVA, 400/220 kV GIS at Dwarka-I 400/200 kV Subtstation

400 kV

a. Line bays: 2 nos. (with provision for future expansion)
b. 500 MVA, 400/220 kV ICTs: 4 Nos.
c. 125MVAr Bus Reactor: 1 Nos.
d. Transformer bay: 4 Nos.
e. Reactor Bay: 1 Nos.

220 kV

500 MVA, 400/220 kV ICTs: 4 nos

ii. 4 Nos of 400 kV GIS bays at 400/220 kV Maharanibagh (existing) Sub-station for LILO of both circuits of Mandola -Bawana 400 kV D/c line at Maharanibagh (existing).

Transmission Line

i. LILO of both circuits of Bawana –Mandola 400kV D/c line at Maharanibagh on M/c tower with Quad/HTLS conductor

ii. LILO of one circuit of Bamnauli - Jattikalan 400kV line at Dwarka-I with Quad/HTLS conductor.

iii. Bypassing of LILO of one circuit of 400kV Dadri– Samaypur (PG) D/C line at Maharanibagh (existing) (to be used during emergency).

g) The Petitioner further submitted that as per the revised scope, Asset-V i.e., "Bypassing of LILO of one circuit of 400kV Dadri– Samaypur (PG) D/C line at Maharanibagh (existing) (to be used during emergency)" has been added in the instant project. Accordingly, Asset-V was finally agreed to on 11.01.2018. Further, LOA was placed on 08.01.2018, and as per the L2 schedule, the schedule of commissioning of additional work (Asset-5) was kept as 07.01.2019.

h) The Petitioner has submitted the scheduled commercial operation date (SCOD), date of commercial operation (COD), and time overrun of the transmission assets of the instant Petition as follows:

Assets	SCOD	COD	Time over-run
Asset-I	23.5.2017	10.2.2022	1723 days
Asset-II	23.5.2017	01.04.2022	1774 days
Asset-III	07.1.2019	31.03.2022	1179 days
Asset-IV	07.1.2019	10.04.2022	1189 days
Asset-V	07.1.2019	25.02.2023	1567 days

Name of Asset	SCOD	Actual COD	Petition No.
Asset-I: Combined Asset of **(1)** LILO of one circuit of Bamnauli- Jattikalan 400 kV D/C line along with associated bays at Dwarka-I Sub-station, **(2)** 400/200 kV, 500 MVA ICT-I, II & III along with associated bays at Dwarka-I Sub-station, **(3)** 400 kV, 125 MVAR bus reactor along with associated bay at Dwarka-I Sub-station	23.5.2017	10.2.2022	The assets are covered in the instant Petition
Asset-II: 400/200kV, 500 MVA ICT-IV along with associated bays at Dwarka-I Sub-station	23.5.2017	1.4.2022	
Asset-III: LILO of circuit-2 of 400 kV D/C Bawana-Mandola line at Maharanibagh Sub-station, along with associated bays	7.1.2019	31.3.2022	
Asset-IV: LILO of circuit-1 of 400 kV D/C Bawana-Mandola line at Maharanibagh Sub-station, along with associated bays	7.1.2019	10.4.2022	
Asset-V: By passing of LILO of one circuit of 400 kV Dadri–Ballabhgarh D/C line at Maharanibagh (existing) (to be used during emergency)	7.1.2019	25.2.2023	

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

5. The Petitioner has served the Petition on the Respondents, and notice regarding the filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received

from the general public in response to the aforesaid notice published in the newspaper by the Petitioner. None of the respondent(s) has filed any reply in the Petition.

6. This order is issued considering the submissions in the Petition, the Petitioner's affidavits dated 30.12.2022, 27.7.2023, 27.9.2023, and 20.11.2023. The hearing in this matter was held on 16.07.2024, and the order in the matter was reserved.

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

Determination of Annual Fixed Charges for the 2019-24 Tariff Period

8. The transmission charges for Asset-I, Asset-II, Asset-III, Asset-IV, and Asset-V claimed by the Petitioner for the 2019-24 tariff period are as follows:

Asset-I

(₹ in lakh)

Particulars	2021-22 (pro-rata 50 days)	2022-23	2023-24
Depreciation	220.47	1704.90	1814.31
Interest on Loan	184.81	1396.85	1413.73
Return on Equity	254.11	1997.99	2167.48
O&M Expenses	106.78	807.71	834.60
Interest on Working Capital	12.70	97.53	102.20
Total	**778.87**	**6004.98**	**6332.32**

Asset-II

(₹ in lakh)

Particulars	2022-23	2023-24
Depreciation	246.43	283.57
Interest on Loan	213.80	233.64
Return on Equity	300.90	351.48
O&M Expenses	241.43	249.43
Interest on Working Capital	19.14	20.81
Total	**1021.70**	**1138.91**

Asset-III

(₹ in lakh)

Particulars	2021-22 (pro-rata 1 day)	2022-23	2023-24
Depreciation	3.01	1144.15	1203.53
Interest on Loan	2.24	817.18	791.39
Return on Equity	3.20	1218.76	1282.35
O&M Expenses	0.28	101.28	104.84
Interest on Working Capital	0.12	45.55	46.84
Total	**8.85**	**3326.92**	**3428.95**

Asset-IV

(₹ in lakh)

Particulars	2022-23 (pro-rata 356 days)	2023-24
Depreciation	1194.05	1291.48
Interest on Loan	994.36	995.59
Return on Equity	1271.91	1376.03
O&M Expenses	48.70	51.68
Interest on Working Capital	47.23	49.87
Total	**3556.25**	**3764.65**

Asset-V

(₹ in lakh)

Particulars	2022-23 (pro-rata 35 days)	2023-24
Depreciation	0.52	6.74
Interest on Loan	0.42	5.24
Return on Equity	0.55	7.19
O&M Expenses	0.00	0.00
Interest on Working Capital	0.02	0.25
Total	**1.51**	**19.42**

9. The Petitioner has claimed the Interest on Working Capital (IWC) for Asset-I, Asset-II, Asset-III, Asset-IV, and Asset-V for the 2019-24 tariff period as follows:

Asset-I

(₹ in lakh)

Particulars	2021-22 (pro-rata 50 days)	2022-23	2023-24
O&M Expenses	64.97	67.31	69.55
Maintenance Spares	116.94	121.16	125.19
Receivables	700.99	740.34	778.56
Total Working Capital	882.90	928.81	973.30
Rate of Interest (in %)	10.50	10.50	10.50
Interest on Working Capital	**12.70**	**97.53**	**102.20**

Asset-II

(₹ in lakh)

Particulars	2022-23	2023-24
O&M Expenses	20.12	20.79
Maintenance Spares	36.21	37.41
Receivables	125.96	140.03
Total Working Capital	182.29	198.23
Rate of Interest (in %)	10.50	10.50
Interest on Working Capital	**19.14**	**20.81**

Asset-III

(₹ in lakh)

Particulars	2021-22 (pro-rata 1 days)	2022-23	2023-24
O&M Expenses	8.15	8.44	8.74
Maintenance Spares	14.67	15.19	15.73
Receivables	397.75	410.17	421.59
Total Working Capital	420.57	433.80	446.06
Rate of Interest (in %)	10.50	10.50	10.50
Interest on Working Capital	**0.12**	**45.55**	**46.84**

Asset-IV

(₹ in lakh)

Particulars	2022-23 (pro- rata 356 days)	2023-24
O&M Expenses	4.16	4.31
Maintenance Spares	7.49	7.75
Receivables	449.52	462.87
Total Working Capital	461.17	474.93
Rate of Interest (in %)	10.50	10.50
Interest on Working Capital	**47.23**	**49.87**

Asset-V

(₹ in lakh)

Particulars	2022-23 (pro- rata 35 days)	2023-24
O&M Expenses	0.00	0.00
Maintenance Spares	0.00	0.00
Receivables	1.94	2.39
Total Working Capital	1.94	2.39
Rate of Interest (in %)	10.50	10.50
Interest on Working Capital	**0.02**	**0.25**

Date of Commercial Operation (COD)

10. The Petitioner has claimed the actual COD of Asset-I as 10.02.2022, Asset-II as 01.04.2022, Asset-III as 31.03.2022, Asset-IV as 10.04.2022, and Asset-V as 25.02.2023.

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

> *"**5. Date of Commercial Operation:** (1) The date of commercial operation of a generating station or unit thereof or a transmission system or element thereof and associated communication system shall be determined in accordance with the provisions of the Grid Code.*
>
> *(2) In case the transmission system or element thereof executed by a transmission licensee is ready for commercial operation but the interconnected generating station or the transmission system of other transmission licensee as per the agreed project implementation schedule is not ready for commercial operation, the transmission licensee may file petition before the Commission for approval of the date of commercial operation of such transmission system or element thereof:*
>
> *Provided that the transmission licensee seeking the approval of the date of commercial operation under this clause shall give prior notice of at least one month, to the generating company or the other transmission licensee and the long term customers of its transmission system, as the case may be, regarding the date of commercial operation:*
>
> *Provided further that the transmission licensee seeking the approval of the date of commercial operation of the transmission system under this clause shall be required to submit the following documents along with the petition:*
>
> > *(a) Energisation certificate issued by the Regional Electrical Inspector under Central Electricity Authority;*
> > *(b) Trial operation certificate issued by the concerned RLDC for charging element with or without electrical load;*
> > *(c) Implementation Agreement, if any, executed by the parties;*

(d) Minutes of the coordination meetings or related correspondences regarding the monitoring of the progress of the generating station and transmission systems;
(e) Notice issued by the transmission licensee as per the first proviso under this clause and the response;
(f) Certificate of the CEO or MD of the company regarding the completion of the transmission system including associated communication system in all respects."

12. In support of the actual COD of Assets, the Petitioner has submitted the CEA Energisation Certificate, RLDC Charging Certificate, and Self-declaration COD Certificate. The details of the same are as follows:

Asset Details	CEA Energisation Certificate	RLDC Charging Certificate
Asset-I	CEA Energisation certificate dated 25.10.2021, 6.2.2022	RLDC vide certificate dated 2.03.2022 has certified that the successful trial operation was completed on 8.2.2022 and 9.2.2022
Asset-II	CEA Energisation certificate dated 28.3.2022	RLDC vide certificate dated 19.04.2022 has certified that the successful trial operation was completed on 31.03.2022.
Asset-III	CEA Energisation certificate dated 28.3.2022	RLDC vide certificate dated 02.05.2022 has certified that the successful trial operation was completed on 29.03.2022.
Asset-IV	CEA Energisation certificate dated 28.3.2022	RLDC vide certificate dated 02.05.2022 has certified that the successful trial operation was completed on 09.04.2022.
Asset-V	CEA Energisation certificate dated 28.3.2022	RLDC vide certificate dated 27.04.2023 has certified that the successful trial operation was completed on 24.02.2023.

13. We have considered the submissions of the Petitioner.

COD of Asset-I and Asset-II:

(a) Taking into consideration the CEA Energisation Certificate, RLDC Charging Certificate, and Self-declaration Certificate, the COD of the Asset-I and Asset-II has been approved as 10.2.2022 and 1.4.2022, respectively.

COD of Asset-III and Asset-IV:

(b) The Petitioner has sought COD of Asset-III, i.e., LILO of circuit-2 of 400 kV D/C Bawana-Mandola line at Maharanibagh Sub-station along with associated bays as 31.03.2022 and sought COD of Asset-IV, i.e. LILO of Circuit-1 of 400 kV D/C Bawana-Mandola line at Maharanibagh Sub-station along with associated bays as 10.04.2022.

(c) We have gone through the submissions of the Petitioner. The relevant CEA Energisation Certificate and RLDC Charging Certificate are extracted as under:

भारत सरकार/Govt. of India

विद्युत मंत्रालय/Ministry of Power

केन्द्रीय विद्युत प्राधिकरण/Central Electricity Authority

मुख्य विद्युत निरीक्षणालय प्रभाग/Chief Electrical Inspectorate Division

****

No. CEI/2/EI/RIO(N)/INSP./2022/162 **Dated: 25.03.2022**

To,
Shri A. K. Dixit
M/s Power Grid Corporation of India Limited,
400/220kV GIS Maharanibagh Sub-station,
Near Sarai kale khan, New Delhi-110013

Approval for Energisation

Subject: Approval for Energisation of 400 KV M/C LILO of Bawana-Mandola Transmission Line at Maharanibagh (Length 29.981 km) at 400/220KV GIS Maharanibagh Substation Bahlolpur Khadar in front of Sarai Kale Khan ISBT, New Delhi-110013 under Regulation 43 of Central Electricity Authority (Measures relating to Safety and Electrical Supply) Regulations, 2010 (as amended).

Ref.: -
1. Online Application no.- B/2021/01033 dated 14-03-2022
2. Our letter No CEI/2/EI/RIO(N)/INSP./2022/156 Dated: 23-03-2022 (Inspection Report)
3. Your compliance uploaded on the https://ceaclearance.gov.in/ei/ dated 25.03.2022 (Compliance Report-1)
4. Your compliance uploaded on the https://ceaclearance.gov.in/ei/ dated 25-03-2022 (Compliance Report-2)

Whereas the Inspection of 400 KV M/C LILO of Bawana-Mandola Transmission Line at Maharanibagh (Length 29.981 km) at 400/220KV GIS Maharanibagh Substation Bahlolpur Khadar in front of Sarai Kale Khan ISBT, New Delhi-110013was carried out on 23-03-2022 by the undersigned.

The non-compliance of certain provisions/ stipulations of the Regulations were conveyed to you vide our letter under reference at Sl. No. (2) above (Inspection Report) and the compliance of the same has since been received vide your letter under reference at Sl. No. (3) & (4) above. ***The Approval for Energisation of*** 400 KV M/C LILO of Bawana-Mandola Transmission Line at Maharanibagh (Length 29.981 km) at 400/220KV GIS Maharanibagh Substation Bahlolpur Khadar in front of Sarai Kale Khan ISBT, New Delhi-110013 ***is hereby accorded subject to consistent compliance of relevant provisions of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 by M/s PGCIL.***

The next inspection of this equipment under regulation 30 shall be due after two years from the date of this inspection. This periodicity is subject to change by government notification.

The Date & Time of energisation shall be intimated to this office.

पंकज कुमार वर्मा
PANKAJ KUMAR VERMA
उप निदेशक/Deputy Director
केन्द्रीय विद्युत प्राधिकरण/C.E.A.
विद्युत मंत्रालय/Ministry of Power
भारत सरकार/Govt. of India
नई दिल्ली/New Delhi-66

(पंकज कुमार वर्मा)
उप निदेशक एवं
विद्युत निरीक्षक भारत सरकार

पावर सिस्टम ऑपरेशन कॉर्पोरेशन लिमिटेड 376 III &IV

POWER SYSTEM OPERATION CORPORATION LIMITED

NORTHERN REGIONAL LOAD DESPATCH CENTRE

Certificate Number: POSOCO/NRLDC/SO-1/390 Date: 02-05-2022

Certificate of completion of Trial Operation of 400kV Maharanibagh (PG) -Mandola (PG) Ckt- 1 & 2 and 400kV Maharanibagh (PG)- Bawana (DV) Ckt - 1 & 2 along with associated bays at 400kV Maharanibagh (PG) {LILO of 400kV Mandola (PG) -Bawana (DV) Ckt- 1 & 2 at 400kV Maharanibagh(PG)}.

Reference:

1. **POWERGRID** Communication dated **22 Mar 2022 12:08, 22 Mar 2022 14:01, 25 Mar 2022 12:10 and 28 Mar 2022 12:33,** regarding the submission of pre charging documents for -

i. 400kV Maharanibagh (PG) -Mandola (PG) Ckt- 1 along with 400kV Main Bay 411 at 400kV Maharanibagh (PG).
ii. 400kV Maharanibagh (PG) -Mandola (PG) Ckt- 1 along with 400kV Main Bay 408 at 400kV Maharanibagh (PG).
iii. 400kV Maharanibagh (PG)- Bawana (DV) Ckt- 1 along with 400kV Main Bay 409 at 400kV Maharanibagh (PG).
iv. 400kV Maharanibagh (PG)- Bawana (DV) Ckt- 2 along with 400kV Main Bay 410 at 400kV Maharanibagh (PG).

2. Real time code issued by **NRLDC** on request of **POWERGRID** Real Time Code No- **NR2203-5656, 5670, 5686, 5687, 5765, 5781, 5791, 5792 and NR2204-1315.**

3. **POWERGRID** , Communication dated **13 Apr 2022 20:40,** regarding the submission of post charging documents.

Based on above references, it is hereby certified that the following Transmission elements have successfully completed the trial operation:

Name of the Transmission Asset:	1. 400kV Maharanibagh (PG) -Mandola (PG) Ckt- 1 along with 400kV Main Bay 411 at 400kV Maharanibagh (PG). 2. 400kV Maharanibagh (PG) -Mandola (PG) Ckt- 1 along with 400kV Main Bay 408 at 400kV Maharanibagh (PG). 3. 400kV Maharanibagh (PG)- Bawana (DV) Ckt- 1 along with 400kV Main Bay 409 at 400kV Maharanibagh (PG). 4. 400kV Maharanibagh (PG)- Bawana (DV) Ckt- 2 along with 400kV Main Bay 410 at 400kV Maharanibagh (PG).
Owner of the Transmission Asset:	POWERGRID CORPORATION OF INDIA LIMITED (LILO portion length-28.791 Kms)
Date and Time of Energization for commencement of successful trial run operation	1. 28-03-2022 18:20 2. 28-03-2022 17:45 3. 08-04-2022 21:55 4. 29-03-2022 11:55
Date/Time of completion of successful trial run operation	1. 29-03-2022 18:20 2. 29-03-2022 17:45 3. 09-04-2022 21:55 4. 30-03-2022 11:55

This certificate is being issued in accordance with Regulation 6.3(A)(5) of CERC(Indian Electricity Grid Code) Regulation,2010 to certify successful completion of trial operation of transmission element. Usage of this certificate for any other purpose is prohibited.

R K Porwal

CGM (I/C), NRLDC

(d) The Petitioner has bifurcated the LILO of 400 kV D/C Bawana-Mandola line at Maharanibagh into LILO of circuit-2 of 400 kV D/C Bawana-Mandola line and LILO

of circuit-1 of 400 kV D/C Bawana-Mandola line. We are of the view that the complete LILO portion is completed and ready for changing only on 9.4.2022; however, without the completion of the entire LILO portion, the Petitioner has claimed COD of CKt-1 and Ckt-2 separately. Regulation 3 of the 2019 tariff regulations, 'element' is defined as follows:

> *"(20) 'Element' means an asset which has been distinctively defined under the scope of the transmission project in the Investment Approval such as transmission lines including line bays and line reactors, Sub-stations, bays, compensation device, Interconnecting Transformers;"*

(e) In view of the above, an element can be treated as a separate asset only if it is distinctly defined in the Investment Approval. In the instant case, LILO of both circuits of the Bawana –Mandola 400kV D/c line at Maharanibagh on the M/c tower with Quad/HTLS conductor is shown as a single element in the Investment Approval. However, the Petitioner has bifurcated the LILO portion into Ckt-I and CKt-II as separate elements, which is not permissible as per the definition of element. Therefore, we are not inclined to approve the COD of the Asset-III and Asset-IV separately. We treat the Ckt-I and Ckt-II, i.e., Asset-III and Asset-IV, as one combined asset and approve their COD as 10.04.2022, when the double circuit line along with bays have been completed, and accordingly approve the combined tariff for Ckt-I and Ckt-II of the LILO of 400 kV D/C Bawana-Mandola line at Maharanibagh along with associated bays.

COD of Asset-V:

(f) Taking into consideration the CEA Energisation Certificate, RLDC Charging Certificate, and Self-declaration Certificate, the COD of the Asset-V is approved as 25.02.2023.

Capital Cost

14. 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:

(a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and

(b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.

(5) The following shall be excluded from the capital cost of the existing and new projects:

(a) The assets forming part of the project, but not in use, as declared in the tariff petition;

(b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

(c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;

(d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and

(e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."

15. The Petitioner has claimed the capital cost incurred as on COD and ACE projected to be incurred in respect of the transmission assets during the tariff period and

has submitted the Auditor's Certificates dated 5.7.2022 for Asset-I and Asset-II, and dated 17.10.2022 for Asset-III, Asset-IV and Asset- V in support of the same:

(₹ in lakh)

Assets	Apportioned Approved Cost (As per FR)	Expenditure up to COD	Projected ACE				Estimated Completion Cost
			2021-22	2022-23	2023-24	2024-25	
Asset-I	37462.11	32818.48	351.66	4635.07	1324.31	662.16	39791.68
Asset-II	6418.00	4712.31	0.00	1270.98	508.38	762.57	7254.24
Asset-III	23413.95	20791.80	0.00	1720.89	491.68	245.85	23250.19
Asset-IV	23413.95	22559.80	0.00	1628.67	465.33	232.67	24886.47
Asset-V	250.00	128.53	0.00	20.11	13.41	6.70	168.75

16. The Petitioner has claimed the capital cost incurred as on COD and ACE projected to be incurred vide affidavit dated 27.9.2023 and 20.11.2023 as follows:

(₹ in lakh)

Assets	Apportioned Approved Cost (As per FR)	Expenditure up to COD	Projected ACE					Estimated Completion Cost
			2021-22	2022-23	2023-24	2024-25	2025-26	
Asset-I	37462.11	32818.48	351.66	4635.07	1324.31	662.16		39791.68
Asset-II	6418.00	4712.31		1270.98	508.38	762.57		7254.24
Asset-III	23413.95	20791.80		1720.89	491.68	245.85		23250.19
Asset-IV	23413.95	22559.80		1628.67	465.34	232.67		24886.48
Asset-V	250.00	104.15			46.93	13.41	6.70	171.9
Total	**90958.01**	**80986.51**	**351.66**	**9255.61**	**2836.64**	**1916.66**	**6.70**	**95353.78**

17. Further, with regard to the Leasehold land there is a discrepancy in Form 5 for Asset-1 and Asset-2 with respect to the Auditor's Certificate. The Petitioner is directed to justify the reason for such discrepancy along with the reconciliation of the Auditor Certificate to Form-5 at the time of truing up.

Cost Overrun

18. The Petitioner has submitted that the total apportioned approved cost as per FR is ₹90958 lakh and the estimated completion cost is ₹93696 lakh up to the 2023-24 period. Thus, there is a cost overrun with regard to the instant assets.

19. The Petitioner vide affidavit dated 26.3.2015 has submitted that the IA of the project, accorded by Board of Directors of POWERGRID vide Memorandum Ref.: C/CP/ NCT Delhi SS(Part-A)-ID 616 dated 26.3.2015, at an estimated cost of ₹90958 lakh, whereas the estimated completion cost of the work, claimed in the instant petition is ₹95351 lakh. Thus, there is a variation of ₹3097 lakh with respect to the approved cost. The reasons for item-wise cost variation between the approved cost (FR) and the estimated completion cost are given in Form-5. Further, the main reasons for said cost variation are as follows:

A) Being a Government enterprise, the Petitioner has been following a well-laid-down-procurement policy which ensures both transparency and competitiveness in the bidding process. Through this process, the lowest possible market prices for required product/services/as per detailed designing, is obtained, and contracts are awarded based on the lowest evaluated eligible bidder. The best competitive bid prices against tenders may vary as compared to the cost estimate, depending on prevailing market forces, design, and site requirements. Whereas, the estimates are prepared by the Petitioner as per well-defined procedures. The FR cost estimate is a broad, indicative cost worked out generally based on average unit rates of recently awarded contracts/general practice.

B) Further, regarding variation in cost of individual items, it is submitted that the packages under the subject scope of works comprise a large no. of items and the same are awarded through open competitive bidding. In the said bidding process, bids are received from multiple parties quoting different rates for various BOQ items under the said package. Further, the lowest bidder can be arrived at/ evaluated on an overall basis only. Hence, the item-wise unit prices in contracts

and their variation over unit rate considered in FR estimates are beyond the control of the Petitioner. Accordingly, the Petitioner has prayed that the full tariff may be allowed from the anticipated DOCO based on the estimated completion cost of the subject assets.

20. We have considered the submissions made by the Petitioner. As compared to the FR cost, the estimated completion cost of Asset-I, Asset-II, and Asset-IV has increased by ₹2329.57 lakh, ₹836.24 lakh, and ₹1472.53 lakh, respectively. As compared to the FR cost, the estimated completion cost of Asset-III and Asset-V is within the FR cost.

21. As compared to the FR approved cost of ₹90958 lakh, the estimated completion cost of the project is ₹ 95353.78 lakh, which has increased by ₹ 4395.77 lakh.

22. The Petitioner has submitted Form-5 wherein the Petitioner has mentioned about variation of capital cost of various items, and the same is as follows:

Asset-1:

	As per Original Estimate (₹ lakh)	**Actual Capital Expenditure (₹ lakh)**	**Reasons for variation**
Preliminary Investigation, Right of way, forest clearance, PTCC, general civil works etc	101.24	1411.10	As per actual.
Control room & office building including HVAC	1131.60	1556.14	The cost includes site levelling, boundary wall, water supply, power supply, rain-water harvesting, and other infrastructure works, which generally depend on the site conditions. The work requires some additional civil work like excavation, covering of bores, and filling of land to maintain the level.
Township & Colony	817.78	3558.58	Due to the difference in the rate of award and the envisaged price.

Structure for switchyard	881.77	1565.97	Due to the increased award cost, the overall cost increased.

Asset-II:

	As per Original Estimate (₹ lakh)	**Actual Capital Expenditure (₹ lakh)**	**Reasons for variation**
Land	1834.60	1857.55	As per the actual amount paid to land authorities.
Control room & office building including HVAC	274.60	373.90	As per the actual site conditions and the higher award price.
Township& Colony	199.22	859.00	As per the actual amount paid to land authorities.

Asset-IV:

	As per Original Estimate (₹ lakh)	**Actual Capital Expenditure (₹ lakh)**	**Reasons for variation**
Preliminary Investigation, Right of way, forest clearance, PTCC, general civil works etc	80.83	892.18	As per actual.
Structure for switchyard	137.94	352.19	Due to the high bid price.

23. We have considered the submissions of the Petitioner. The Commission vide order dated 22.04.2022 in Petition No. 88/TT/2020 had held as under:

> *"17----------The Petitioner is henceforward directed to ensure that in all future petitions wherever the cost of asset increases beyond the FR cost, in that event, Revised Cost Estimate shall be required to be submitted prior to COD of the asset and not after the COD of the asset. Further, after COD of the asset, the Petitioner shall invariably furnish actual cost incurred duly approved by the competent authority. In such cases, the Petitioner is directed to place on record valid justification and documentary evidence with reference to cost variation along with the petition."*

24. In the instant case, also, the Petitioner has not submitted RCE. The Petitioner has submitted that the RCE-I is under preparation and the same will be submitted upon approval. We are of the view that the Petitioner shall follow the direction of the

Commission issued vide order dated 22.04.2022 in Petition No. 88/TT/2020 in all future Petitions.

25. The Petitioner is further directed that detailed justification of the cost overrun project as a whole at the time of truing-up, and also submit consolidated Form-5 for all the assets covered in the instant transmission project. The Petitioner is also directed to submit detailed justification with valid documentary proof for variation of cost incurred towards Preliminary Investigation, right of way (RoW), forest clearance, PTCC, general civil works, etc., Control Room and office building including HVAC, Township and Colony and Structure for switchyard at the time of truing-up.

26. Accordingly, the capital cost of Asset-I and Asset-IV is restricted to apportioned FR cost, and the same will be reviewed at the time of truing-up based on the justification submitted by the Petitioner.

Time Overrun

27. As per the IA dated 24.3.2015, the transmission project was scheduled to be commissioned within 26 months from the date of IA, i.e., by 23.5.2017. However, the details of actual commissioning of the transmission assets are as follows:

Assets	I.A. date	SCOD	COD	Time over-run
Asset-I	24.3.2015	23.5.2017	10.2.2022	1723 days
Asset-II	24.3.2015	23.5.2017	1.4.2022	1774 days
Asset-III	24.3.2015	23.5.2017	31.3.2022	1179 days
Asset-IV	24.3.2015	23.5.2017	10.4.2022	1189 days
Asset-V	24.3.2015	23.5.2017	25.2.2023	1567 days

28. The detailed reasons submitted by the Petitioner for time overrun in the case of the transmission assets are as follows:

Asset-I & II:

Delay in Allotment of land for Dwarka Sub-station:

29. The handing over of land from the Power Department of the Government of NCT Delhi (GNCTD) to the Petitioner took about 518 days (Approx.17 months), from the date of Investment Approval, which is the major reason for delay in the commissioning of Asset- I and Asset- II.

Delay in Land Allocation from concerned authorities for Compensatory Afforestation/Delhi Prevention of Trees Act (DPTA) land required for LILO of 400 kV Bamnauli-Jhatikara TL at Dwaraka :

30. The 400 kV LILO of the Bamnauli-Jhatikara transmission line at Dwaraka Sub-station was finalized in March 2016 using a limited corridor in NCR. The proposed route consists of the diversion of a small stretch of the 220 kV Bamnauli-Naraina transmission line, utilizing a vacant corridor. The Delhi Development Authority (DDA) advised to change the route due to line infringement with the proposed Golf Course at Sector -24 & Sector -19 at Dwarka. POWERGRID explored the possibilities of alternate routes and deliberated that there is no possibility of any other route.

31. During the execution, the DDA informed that two towers (AP-29 & 30) were falling under a commercial plot, causing work to stop. Accordingly, a new route including road crossings, streetlight shortening, and forest stretch along with requirement of 12 ha. land for compensatory afforestation under Forest Conservation Act, 1980 (FCA) and 3 ha. under DTPA 1994 (for land to be provided in lieu of trees to be cut under proposed corridor) was proposed. The matter was resolved between the Forest Department, DDA and the concerned Ministry for special arrangement and finally the allotment of 10.98

ha. land for compensatory afforestation was made on 03.01.2020. Accordingly, the FCA proposal replied (online) on 20.1.2020 and further queries on 20.4.2020. However, due to the COVID-19 interruption, the matter could not be pursued.

Delay in Forest Department approval for Tree cutting:

32. The trees falling under the proposed route needed to be enumerated such that the corridor maintains enough clearance as per the Electricity Act to avoid line tripping. To maintain the necessary clearance, tree enumeration / cutting permission was required for a 2.2 kms stretch from the competent authority, which caused the time overrun of about 35 months. After getting the permission, the petitioner has commissioned Asset-I and Asset-II after completing the remaining work (17 nos. Foundation, 17 nos. tower erection and stringing of 4.7 kms), which was affected due to approval from the Forest department.

Delay due to the COVID-19 pandemic

33. COVID-19 was identified by WHO as a Global pandemic and a force majeure event across all segments/verticals of the global business/ industry. This situation, by definition(s), was of unforeseen/unplanned nature. As such, the global business, production, and execution on the ground took a multiple-fold hit. The projects undertaken by POWERGRID were no exception, facing a multitude of challenges as they navigate through largely uncharted territory with projects and supply lines experiencing highly unique and mounting risks, leading to delays in execution from the effects of COVID-19. All transport services—road, air, and rail—were suspended, with exceptions for transportation of essential goods, fire, police, and emergency services. The government (centre & state) had locked down all the cities and restricted 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 the complete halt of ongoing projects. The lockdown imposition voluntary step back of construction workers, which was also unforeseen and unavoidable. The sites were either closed or access was largely restricted as a result of measures to contain the COVID-19 outbreak. The contractors thus were not able to carry out the works as a result of action by governments to prevent the spread of the outbreak. Specific COVID-19-related challenges: supplier-delivery issues, worker absenteeism due to illness, delayed issuance of permits, travel restrictions, and loss time or inefficiencies due to the need to practice social distancing on the job site are just a few of the issues that had scheduling consequences. Also, with the lack of engineering and technical support and supply Chain disruptions were the major factor impacting 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. Apart from the Guidelines issued by the GOI, the compliance of various activities such as construction timings, movement of labourers & machinery, etc, regarding COVID protocol was also issued by the Delhi Disaster Management Authority (DDMA). Some of the protocols & guidelines issued by DDMA dated 28.3.2020, 7.4.2020, 1.5.2020, 12.6.2020, 1.7.2020, 8.8.2020, 31.8.2020, 27.3.2021, 10.4.2021, 23.5.20. Further, the Ministry of Power (MOP) Govt. of India vide letter dated 27th July 2020 and vide letter dated 12.06.2021 had provided an extension of 05 month or 150 days and extension of 03 month or 90 days respectively provided relief in respect to execution delay owing to unforeseen circumstances forced by the COVID-19 pandemic.

34. The Petitioner, in response to the Commission's query, submitted the status of the assets as on 25.3.2020 and 1.4.2021 vide affidavit dated 20.11.2023 as follows:

Asset No.	Status as on 25.3.2020	Status as on 1.4.2021
Asset-I	**LILO Line**: Forest clearance under FCA & DPTA pending. Online FCA submitted in October 2018 after information was received from the forest about the area falling in FCA & DPTA. Revised DPTA and FCA proposal as per the instructions of the Forest department, submitted in February 2019 and March 2019 respectively. **Due to COVID 19 Lockdown the proposal was not taken up by the authorities**. On 30.8.2020, the FCA proposal was recommended and forwarded by the forest department, Ministry of Environment, Forest & Climate Change. **ICTs**: Pre-commissioning of ICT I & II was done in May 2019. Pre-commissioning of ICT III was done in July 2019 **Bays**: Associated bays pre-commissioning was completed in January 2019	**LILO Line**: Forest clearance under FCA & DPTA pending. Stage-1 clearance under FCA was received in January 2021. Permission for falling/transportation of trees under FCA received in May 2021, Permission for falling/transportation of trees under DPTA received in September 2021. The work of the LILO line was completed in January 2022. **ICTs**: Pre-commissioning of ICT I & II was done in May 2019. Pre-commissioning of ICT III was done in July 2019 **Bus Reactor:** Bus reactor pre-commissioning was done in March 2019. **Bays**: Associated bays pre-commissioning was completed in January 2019
Asset-II	ICT-IV: Pre-commissioning completed in March 2022, and associated bays pre-commissioning were completed in Jan 2019	ICT-IV: Pre-commissioning completed in March 2022, and associated bays pre-commissioning were completed in Jan 2019
Asset-III & IV	Foundation work of 79 nos. towers was completed out of 89 towers; 10 locations were on hold due to forest clearance. Also, erection & stringing work was in progress	Foundation /Erection/Stringing works of 79 nos. locations were completed. Stage-1 forest clearance was received in the month of October-2020, but due to litigation on land which was provided by DDA, work could not be started immediately.
Asset-V	Work could only be completed after the commissioning of Asset-III & Asset-IV	

Asset-III and IV:

Time Overrun due to Change in Scope:

35. Time overrun up to 07.01.2019 is mainly due to a change in the scope. Matter of revision in scope has been discussed in the 39th SCM of Northern Region held on 29-30th May, 2017 and the 40th NRPC meeting held on 28th Oct' 2017. MOM of 39th SCM of Northern Region & 40th NRPC meeting were issued on 28.7.2017 and 11.1.2018, respectively. As per the Investment Approval/Original scope, the line bays of LILO of both circuits of the 400 kV BAWANA-MANDOLA Line were to be terminated at Rajghat Sub-station. However, DTL vide their letter dated 26-10-2016, had informed that land for Rajghat 400/220 kV S/s at the earlier proposed location near IP Extension was not feasible due to the upcoming solar power complex and RoW constraint in laying of transmission lines associated with it. Further, LOA was placed for additional scope on 08.01.2018, and as per the L2 schedule, the schedule of commissioning of additional work (Asset-3 & 4) was kept as 07.01.2019.

Delay Land Allocation for Compensatory Afforestation:

36. The Petitioner applied to get the Land for compensatory plantation/afforestation in DDA. The case was pursued at different levels in the DDA. DDA intimated that they will not provide the requisite land. The Petitioner's request for land in another state was sent for consideration of the Forest Department GNCTD which insisted that compensatory afforestation shall be taken up in Delhi only and DDA should provide the land. Finally, land allocated by DDA for taking up compensatory afforestation under FCA on 3.1.2020. After getting the land from DDA, the first and second stage forest clearance were given by the Forest Department on 19.10.2020 and 19.8.2021, respectively. Final working permission was granted on 8.9.2021.

Delay due to the COVID-19 pandemic

37. COVID-19 was identified by WHO as a Global pandemic and a force majeure event across all segments/verticals of the global business/ industry. This situation, by definition(s), was of unforeseen/unplanned nature. As such, the global business, production, and execution on the ground took a multiple-fold hit. The projects undertaken by POWERGRID were no exception, facing a multitude of challenges as they navigate through largely uncharted territory with projects and supply lines experiencing highly unique and mounting risks, leading to delays in execution from the effects of COVID-19. All transport services—road, air, and rail—were suspended, with exceptions for transportation of essential goods, fire, police, and emergency services. The Government (Central & State) had locked down 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 the complete halt of ongoing projects. The lockdown imposition voluntary step back of construction workers, which was also unforeseen and unavoidable. The sites were either closed or access was largely restricted as a result of measures to contain the COVID-19 outbreak. The contractors thus were not able to carry out the works as a result of action by governments to prevent the spread of the outbreak. Specific COVID-19-related challenges: supplier-delivery issues, worker absenteeism due to illness, delayed issuance of permits, travel restrictions, and loss time or inefficiencies due to the need to practice social distancing on the job site are just a few of the issues that had scheduling consequences. Also, the lack of engineering and technical support and supply Chain disruptions were the major factors impacting project schedules and implementations. Thus, the commissioning of various projects,

including the subject project, faced delays due to the squeezing of supply lines and construction activities. Apart from the Guidelines issued by the GOI, the compliance of various activities such as construction timings, movement of labourers & machinery, etc., regarding the COVID-19 protocol was also issued by the DDMA. Some of the protocols and guidelines issued by DDMA dated 28.3.2020, 7.4.2020, 1.5.2020, 12.6.2020, 1.7.2020, 8.8.2020, 31.8.2020, 27.3.2021, 10.4.2021, 23.5.20. Further, the Ministry of Power (MOP) Government of India, vide letter dated 27th July 2020 and vide letter dated 12.06.2021, had provided an extension of 05 months or 150 days and an extension of 03 months or 90 days, respectively, provided relief in respect to execution delay owing to unforeseen circumstances forced by the COVID-19 pandemic. The relevant documentary evidence. Thus, the time period affected by COVID-19 restrictions is approximate. 05 months in 2020 and 03 months in 2021.

Asset-V:

Time Overrun due to Change in Scope:

38. The Petitioner has submitted that the Time overrun up to 07.01.2019 is mainly due to a change in the scope. Matter of revision in scope has been discussed in the 39th SCM of Northern Region held on 29-30th May'2017, 40th NRPC meeting held on 28th October 2017. MOM of the 39th SCM of the Northern Region & the 40th NRPC meeting issued on 28.7.2017 and 11.1.2018, respectively. As per the revised scope, Asset-V, i.e., "Bypassing of LILO of One Circuit of 400 kV Dadri -Samaypur (PG) D/C line at Maharanibagh (Existing) (to be used during emergency) has been added to the instant project. Accordingly, the Asset -V was finally agreed on 11.01.2018.

39. Further, LOA was placed for additional scope on 08.01.2018, and as per the L2 schedule, the commissioning of work (Asset-5) was kept as 07.01.2019.

Delay due to the delayed completion of the subject Asset-III and Asset-IV

40. Time overrun from 08.01.2019 is mainly due to the delay in the commissioning of Asset-III and Asset-IV, i.e., "LILO of 400 kV D/C Bawana-Mandola line at Maharanibagh Sub-station along with associated bays". As per the revised scope discussed in 39th SCM of Northern Region & 40th NRPC, Asset-V, i.e., "Bypassing of LILO of one circuit of 400kV Dadri-Samaypur (PG) D/C line at Maharani Bagh (existing)(to be used during emergency)" was agreed to address the fault level at the Maharani Bagh Sub-station.

41. After the commissioning of LILO of 400 kV D/C Bawana-Mandola line at Maharani Bagh Sub-station, while checking & performing operation on the disconnector switch at by-pass section, the motor mechanism was found non-functioning.

Delay due to Shutdown Constraints

42. To implement the Bypass scheme at Maharani Bagh Sub-station, a continuous shutdown for at least one week was required simultaneously for both lines, i.e., Dadri-Maharani Bagh and Ballabhgarh-Maharani Bagh. This shutdown was a prerequisite for executing the work of jumpering involving the interconnection of all 06 nos. SF6 to air bushings and to these existing lines to arrive at the bypass stage. As the Dadri-Maharani Bagh and Ballabhgarh-Maharani Bagh are the existing lines for feeding the majority of required power to DTL to cater to load of NCR region, receipt of continuous shutdown approval and further consent of DTL and NTPC (Dadri end) was a major obstacle especially considering the peak summer load i.e. from April, 2022 to June, 2022 and further heavy loading during hydro season (monsoon period) i.e. from July' 2022 to September, 2022.

43. The details of time overrun in r/o different assets under instant Petition submitted by the Petitioner vide Affidavit dated 27.7.2023 are as under:

Asset	SCOD as per IA	Actual COD	Time over-run
Asset-I	23.5.2017	10.2.2022	1723 days
Asset-II	23.5.2017	1.4.2022	1774 days
Asset-III	23.05.2017	31.03.2022	1773 days
Asset-IV	23.05.2017	10.04.2022	1783 days
Asset-V	23.05.2017	25.02.2023	2104 days

Analysis and Decision

44. We have considered the submissions made by the Petitioner with respect to the time overrun. We have also gone through the documentary evidence placed on record by the Petitioner justifying the time overrun.

45. As per the IA dated 24.03.2015, the transmission project was scheduled to be completed within 26 months, i.e., by 23.5.2017. The transmission assets, Asset-I, Asset-II, Asset-III, and Asset-IV, were declared under commercial operation on 10.02.2022,1.04.2022 1.04.2022, 31.03.2022, 31.03.2022,10.04.2022,25.02.2023 with a delay of 1723 days, 1774 days,1773 days,1783 days, and 2104 days, respectively.

46. As discussed above, the COD of Asset-III and Asset-IV has been approved as 10.4.2022, and the time overrun in the case of Asset-III and Asset-IV has been considered as 1783 days.

The Asset-wise time overrun is analysed, and the same is as follows:

Asset -I & II

47. The Petitioner has submitted that Asset-I and Asset-II are delayed due to the delay in obtaining land for the Dwaraka Sub-station, forest clearance, and tree cutting approval. The item-wise time overrun is analysed, and the same is as follows:

(a) <u>Delay in allotment of Land for Dwarka Sub-station:</u>

48. The Petitioner has submitted that the time period from 24.3.2015 to 23.8.2016 is affected due to the delay in the allotment of land for the Dwarka Sub-station.

49. We have considered the submissions of the Petitioner and have gone through the documentary evidence submitted by the Petitioner. The Petitioner, vide a letter dated 20.3.2015 and another letter dated 31.3.2015, addressed to the Chief Secretary, GNCTD, requested for the allotment of land to PGCIL. The Petitioner finally obtained the land on 23.8.2016.

50. As per the different documents submitted by the Petitioner for justification of delay in handing over of Land for the Sub-station, it is observed that the competent Authority of the Power Department of GNCTD asked for consent for payment of Dwarka Land Fees by Annual Licence Fee (year-wise) vide letter dated 20.2.2015. However, as the demand was significantly higher in the form of Annual Licence Fee as compared to onetime payment; the Petitioner requested to consider the request for onetime payment rather than in the form of annual lease charges vide letters dated 26.2.2015, 3.3.2015, 20.3.2015, 31.3.2015, 16.4.2015, 27.5.2015, 17.6.2015, 18.6.2015, 30.7.2015 to avoid high escalation in project. The said issue was also addressed and discussed in the various Review Meetings dated 12.3.2015, 8.10.2015, 30.11.2015, 1.2.2016, and 18.4.2016 held in the MoP. During the meeting in January 2016, DDA apprised that the land identified for Dwarka Sub-station was earlier for the Hospital, and subsequent approval of the change of Land use is in process. Further, during the meeting held on 18.4.2016, the concerned authority informed that the land would be handed over on 19.4.2016. However, again due to certain administrative procedures, a further 3-4 months were delayed in the handover of land to the Petitioner.

51. As per Form-12 submitted by the Petitioner as per original planning, the time period from 24.3.2015 to 15.6.2015, i.e., 83 days, was considered by the Petitioner for land acquisition in the original schedule. Accordingly, out of the total time overrun of 518 days claimed by the Petitioner, the time overrun of 435 days is condoned (excluding 83 days originally planned) on account of the delay in the allotment of land at the Dwaraka Sub-station.

(b) **Delay in Land allocation from concerned authorities for compensatory afforestation/Delhi Prevention Trees Act (DPTA) Land required for LILO of 400 kV Bamnauli-Jhatikara TL at Dwarka:**

52. The Petitioner has submitted that the time period from 31.3.2016 to 3.1.2020 is affected on account of the delay in Forest Clearance (owing to Land allocation for Compensatory Afforestation Land issue).

53. The Petitioner, vide letter dated 31.03.2016, has submitted an initial proposal for NoC with route alignment to DDA. Further, the Petitioner clarified the queries and submitted the requisite documents to DDA vide letters dated 17.5.2016, 3.8.2016, 27.8.2016, 30.11.2016, 23.5.2017, and further requested to issue the NOC for construction permission vide a letter dated 8.6.2017. Further, DDA intimated to the Petitioner that the proposal is not feasible as the line shown in the plans is passing through the proposed golf course site and advised to give some other proposal vide letter dated 28.06.2017. Subsequently, the Petitioner submitted that due to practical constraints, no alternate route is possible for laying of this line and requested to consider the proposal and issue the NOC vide letter dated 12.7.2017. Accordingly, various correspondences took place between DDA and the Petitioner in respect of the alignment of the line due to the Golf Course and identification of Land for compensatory afforestation under FCA. Finally, after various correspondences and meetings between

the DDA and the Petitioner, DDA finally allocated 10.98 Ha. Land for compensatory afforestation for Dwarka line vide letter dated 3.1.2020.

54. It is observed that as per Form-12 submitted by the Petitioner, the Petitioner has not kept any timeline for this activity. The Investment Approval of the project was approved by the BoD of the Petitioner on 24.3.2015, whereas the Petitioner wrote the first letter on 31.3.2016, which is about 373 days after the IA. It is observed that advanced action for survey in forest area saves considerable time in identification of forest area and helps in preparation of a suitable forest proposal to enable its submission within the prescribed time after investment approval. The matter regarding land allocation from the concerned authorities for compensatory afforestation/DPTA could have been dealt with along with the matter of Land transfer for the Dwarka Sub-station by the Petitioner. Therefore, we are not inclined to condone the 373-day delay in the allocation of land. Out of the total time overrun of 1373 days (31.3.2016 to 3.1.2020), 1000 days of delay were beyond the control of the Petitioner, and the same has been condoned.

(c) **Delay in approval from the Forest Department for tree cutting fall in the proposed corridor:**

55. The Petitioner has submitted that the time period from 16.1.2018 to 31.8.2020 is delayed on account of the delay in approval of forest clearance and tree cutting.

56. The Petitioner has submitted the request for forest clearance for tree cutting permission for 277 trees to the concerned authority vide letter dated 16.1.2018. The said request was denied as the application was not made in the prescribed manner vide letter dated 25.1.2018. The Petitioner again requested for NOC and submitted the requisite details to the Forest Department vide a letter dated 08.02.2018. The Petitioner

also requested to depute the representative for a joint survey vide a letter dated 29.05.2018. Subsequently, after joint survey and various correspondences, the Forest Department intimated that “2.2 Km stretch of the alignment for the 220 kV line is falling in the deemed forest on the land under the ownership of Irrigation and Flood Control Department (I & FCD)” and requested to explore the alternative alignment to avoid the destruction of the patch of deemed forest vide letter dated 31.08.2018. The Petitioner replied that there was no scope for change of the alignment of this line and again requested to process the case so that the FCA proposal could be initiated vide letter dated 04.09.2018. Subsequently, the Petitioner submitted the online application for FCA on 01.10.2018. Further, various correspondences have been done between the concerned authorities and the Petitioner. Finally, after the continuous follow-up, the matter by the Petitioner, the DCF (Forest) issued working permission for felling/transplantation of trees under DPTA vide letter dated 08.09.2021.

57. As per Form-12 submitted by the Petitioner, the Petitioner has planned to complete the forest approval within 360 days, i.e., from 30.6.2015 to 24.6.2016, whereas the Petitioner has taken 1331 days, i.e., from 16.1.2018 to 8.9.2021, for getting the FC and Tree cutting approval. Considering the planned time of 360 days, 971 days is condoned out of the total 1331 days taken for getting the FC and tree-felling permission. We have already condoned the time overrun of about 1000 days on account of the delay in the allotment of land at the Dwaraka Sub-station. The net impact of the time overrun on account of compensatory afforestation/Delhi Prevention Trees Act (DPTA) Land was from 3.1.2020 to 8.9.2021 (614 days), which was beyond the control of the Petitioner, and the same has been condoned.

(d) **Delay due to COVID-19**:

58. The Petitioner has submitted that the COVID-19 pandemic and the consequent lockdown/ restrictions imposed in various parts of the country affected the execution of the transmission projects in the country, including the instant transmission assets. The Petitioner has submitted that the MoP vide its order dated 27.7.2020, acknowledged the disruption in supply chain and manpower due to the COVID-19 pandemic and granted an extension of 5 months in the execution of inter-State transmission projects that were under construction as on 25.3.2020 and vide its order dated 12.6.2021 has been granted 3 months 5 months in the execution of inter-State transmission projects that were under construction as on 1.4.2021.

59. We have considered the submissions of the Petitioner. The relevant extracts of the letters dated 27.7.2020 and 12.6.2021 of MoP are as follows.

> "**Dated 27.07.2020**
> *"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 pointed out that construction activity at various transmission projects sites have been severely affected by the nationalised lockdown measures announced since 25th March 2020 to contain outbreak of COVID -19 have requested for extension of Scheduled Commercial Operation Date (SCOD) for to mitigate the issues of disruption in supply chains and manpower, caused due to COVID-19 pandemic.*
>
> *2. it has been therefore decided that;*
>
> *i. All inter-state transmission projects, which were under construction as on date of lockdown i.e. 25th March 2020, shall get an extension of five months in respect of their SCOD;*
> *ii. This order shall not apply to those projects, whose SCOD dates was prior to 25th March 2020.*
>
> **Dated 12.06.2021**
> *"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 activity at various transmission projects sites have been severely affected by the current second wave of COVID-19 pandemic and various measures taken by 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) for the undergoing Transmission projects 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 lock-down in the entire country, this time different States/UTs have ordered lock-down in their State/UTs as per their own assessments. Therefore, after due consideration, it has been decided that;
i. All inter-state transmission projects, which are 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 a transmission line, whose SCOD is extended by three (3) months due to COVID19 as mentioned above at point(i), shall also be extended by three (3) months.

3. This issue with the approval of Competent Authority."

60. The Investment Approval date of the project is 24.3.2015, and the SCOD of the transmission project is 23.5.2017, which is much after the cut-off date mentioned in the MoP letter dated 27.7.2020 and 12.6.2021. Therefore, the MoP's circular granting extension of COD due to COVID-19 is not applicable in the present case. It is also observed that the petitioner has sought condonation of time overrun of 5 months from 23.5.2020 to 20.08.2020 under Covid-19 Wave I and 3 months from 27.03.2021 to 25.06.2021 under Covid-19 Wave II. We have already condoned the net impact of the time overrun on account of compensatory afforestation/Delhi Prevention Trees Act (DPTA) Land from 3.1.2020 to 8.9.2021 (614 days). Therefore, the time overrun on account of Covid-19 Wave I and Wave II is subsumed under the time overrun condoned due to compensatory afforestation/Delhi Prevention Trees Act (DPTA). Accordingly, we are not inclined to condone the time overrun due to COVID-19 Wave I and Wave II.

61. In the case of Asset-II, the Petitioner has taken an additional time of 51 days for the commissioning of 500 MVA ICT-IV along with associated bays at the Dwarka Sub-station. The Petitioner has submitted that unforeseen and unprecedented rainfall in the

month of February 2022 has affected the testing and commissioning works of Asset-II. We have considered the submissions of the Petitioner. In support of unforeseen and unprecedented rainfall in the month of February 2022, the Petitioner has not submitted any documentary evidence. Due to the non-submission of the documentary evidence, we are not inclined to condone the time overrun of 51 days in the case of Asset-II.

62. In view of the above, the time overrun condoned /not condoned on various activities is as follows:

Delay in allotment of Land for Dwarka	Out of the total time overrun of 518 days, the time overrun of 435 days is condoned.
Delay in Land allocation from the concerned authorities for CA/DPTA land required for LILO of 400 kV Bamnauli-Jhatikara tr. line at Dwarka	Out of the total time overrun of 1373 days,1000 days is condoned.
Delay in approval from Forest dept for tree cutting falling in the proposed corridor	The time overrun from 3.01.2020 to 8.09.2021(614 days) is condoned.
Delay due to COVID-19 Wave-I and Wave-II	Not condoned.

63. As discussed above, out of the total time overrun of 1723 days and 1774 days claimed against Asset 1 and 2 by the Petitioner, the total time period of 1723 days in the case of Asset I and Asset II is condoned.

Asset-III & IV

(a) Delay due to change in scope:

64. As per the original scope of work defined in IA dated 24.03.2015, LILO of both circuits of the Bawana–Mandola 400 kV D/c line on M/c tower with Twin/HTLS conductor was at Rajghat. However, DTL vide their letter dated 26.10.2016 had informed that land for Rajghat 400/220 kV S/s at the earlier proposed location near IP Extension was not feasible due to the upcoming solar power complex and RoW constraints in laying

transmission lines associated with it (MoM of the 39th SCM of the Northern Region dated 29.05.2017-30.05.2017 has been placed in record by the Petitioner). Accordingly, after deliberations, it was agreed in the 39th SCM of the Northern Region held on 29.5.2017-30.5.2017 and the 40th NRPC meeting held on 28.10.2017 that LILO of both circuits of the Mandola-Bawana 400 kV D/C line is at Maharanibagh (existing).

65. The relevant extracts of the minutes of the 39th SCM of NR are as follows:

11.0 400/220 kV Sub-stations at Rajghat (Maharanibagh-II) and Karampura in NCT of Delhi:

"*---11.10 After deliberations, following was agreed:*

ISTS Scheme (under PGCIL scope of already awarded scheme):

i) LILO of both circuits of Mandola-Bawana 400 kV D/C line at Maharanibagh (existing) with Twin HTLS conductor on multicircuit towers (already under construction by PGCIL). (Note: This would take care the requirement of additional interconnection at Maharanibagh. In view of above LILO, NRSS-XXXIX scheme was agreed to be dropped.)

ISTS Scheme (to be taken up):

i) 4 no. of 400 kV bays at 400/220kV Maharanibagh (existing) Sub-station

ii) By passing of LILO one circuit of 400 kV Dadri–Ballabhgarh D/C line at Maharanibagh (existing) (to be used during emergency)

Intra State Scheme (to be implemented by DTL):

i) Establishment of 4x500MVA, 400/220kV GIS Substation at Gopalpur along with 125 MVAR bus reactor - by DTL.

ii) LILO of Maharanibagh–Bawana 400 kV D/C line at Gopalpur 400/220 kV substation on multicircuit towers – by DTL"

66. The relevant extracts of the minutes of the 40th NRPC is as follows:

"B. Creation of 400/220kV S/s in NCT of Delhi during 12th Plan period (Part-A):

i). To meet the load demand of East Delhi, Kashmere Gate, Park Street and Electric Lane areas, 400/220 kV Rajghat substation was planned by LILO of both circuits of Mandaula-Bawana 400kV D/c at Rajghat. Also, to provide second feed to Maharanibagh, Rajghat–Maharanibagh 400kV D/c line was planned. However, due to non-availability of land at Rajghat, its location was shifted adjacent to existing 400/220kV Maharani bagh and accordingly Rajghat– Maharanibagh 400kV D/c line was dropped.

ii). Subsequently, DTL proposed a 4x500 MVA, 400/220kV S/s at Gopalpur in North Delhi instead of Rajghat (Maharanibagh-II) due to severe RoW constraints in taking out 220 kV and 33 kV feeders. Accordingly, the 4x500 MVA, 400/220kV Rajghat substation was also dropped and 4x500 MVA, 400/220kV Gopalpur substation was agreed to be implemented by DTL as an intra-state project.

iii). To provide second feed to Maharanibagh, it was proposed to implement LILO of both circuits of Mandaula- Bawana 400kV D/c line at Maharanibagh (existing) on M/c towers. This LILO at Maharanibagh (PG) is under implementation by POWERGRID. Further, to provide connectivity to Gopalpur, LILO of both circuits of Bawana- Maharanibagh 400kV

D/c at Gopalpur was to be carried out by DTL.

iv). Further, to address the high fault level at Maharanibagh, it was proposed that LILO of one ckt. of Samaypur(PG)-Dadri 400kV line at Maharanibagh would be bypassed at Maharanibagh. The LILO would be operated in emergency condition only. Accordingly, following works were proposed to be included under the "Creation of 400/220kV substations in NCT of Delhi during 12th Plan period (Part-A)" scheme:

i). 4 nos. of 400 kV GIS bays at 400/220 kV Maharanibagh (existing) substation for LILO of both circuits of Mandola- Bawana 400kV D/c line at Maharanibagh (existing)

ii). Bypassing of LILO of one circuit of 400kV Dadri– Samaypur(PG) D/c line at Maharanibagh (existing) (to be used during emergency)
NRPC Deliberations

B.16.3 NRPC agreed to the above works."

67. In view of the above minutes of the 39th SCM of NR and the 40th NRPC, we are of the considered view that the change in the scope of work has impacted the commissioning of the Asset-III and IV. As per the revised scope of work, the Petitioner has placed LOA and the same is as follows:

PART-III

FORM- 5A

Break-up of Construction/Supply/Service Packages

Name of the Transmission Asset: Bypassing of LILO of one circuit of 400kV Dadri– Samaypur(PG) D/c line at Maharanibagh (existing) (to be used during emergency)

DOCO:25.02.2023

S. No.	Name/No. of Construction /supply/service package	Whether awarded through ICB/DCB/ Departmentally/ Deposit Work, etc.	No. of bids received	Date of Award	Date of Start of work	Date of Completion of Work	Value of Award[2] in (Rs. Lakh)	Firm or With Escalation in prices	Actual expenditure till the completion or up to COD whichever is earlier (Rs. Lakh)	Taxes & Duties and IEDC (Rs. Lakh)	IDC, FC, FERV & Hedging cost (Rs. Lakh)	Sub- Total (Rs. Lakh)	LOA No. &, Agency
1	Substation package SS12 (GIS) for : Extension of 400 kV Maharanibagh GIS s/s and bypassing arrangement of existing LILO Line. (Off-Shore	OCB/OFB	5	08.01.2018	08.01.2018	07.01.2019	1320.29 (Off Shore)-S 213.98 (On Shore)-S 514.33 (On Shore)-G 949.42 (On Shore Ser)-G G Total = 2998.02	Fixed Fixed ESC. ESC.	60.3	39.93	3.92	104.15	7580,81,82 & 83 M/S Sandeeng & Godrej

68. Taking into consideration the revised LoA on account of the change in the scope of the work, we are of the considered view that the time period from 23.5.2017 to

7.1.2019 (594 days) is beyond the control of the Petitioner, and the same has been condoned.

(b) Delay due to Forest clearance/delay in acquisition of Land for compensatory plantation/afforestation from DDA (Delhi Development Authority)

69. The Petitioner has submitted that the time overrun from 28.10.2017 to 10.4.2022 is impacted on account of the delay in getting forest clearance/delay in acquisition of land for compensatory plantation/afforestation from DDA.

70. We have considered the submissions of the Petitioner. In support of the documentary evidence, the Petitioner has submitted various correspondences and communications that took place between the concerned authorities and the Petitioner. It is observed that we have already condoned the time overrun from 23.5.2017 to 7.1.2019 (594 days) on account of a change in the scope of the work. Accordingly, the time overrun from 23.5.2017 to 7.1.2019 is subsumed on account of the change in the scope of the work. The Petitioner has submitted a letter dated 31.01.2019 wherein the DDA stated that it was not able to provide land for compensatory plantation under the DPTA category. The Petitioner vide letter dated 8.3.2019, 27.03.2019, 23.04.2019, 10.05.2019, 16.05.2019, 3.06.2019, and 11.06.2019, 12.06.2019, 27.06.2019, 28.08.2019, wherein the Petitioner has requested DDA and CCF to allow compensatory plantation under DPTA. DDA has finally allocated 14.0 Ha. Land for taking up compensatory afforestation under FCA vide letter dated 3.1.2020. Taking into consideration the above communications with DDA and CCF, we are of the view that the time period from 8.01.2019 to 3.01.2020 (360 days) was beyond the control of the Petitioner, and the same has been condoned.

71. The Petitioner has further submitted that vide the letter dated 11.1.2020, PGCIL has replied to the queries raised by FCA. The DCF vide letter dated 27.02.2020 returned

the proposal. The revised FCA proposal was again submitted by the Petitioner on 26.03.2020, and vide letter dated 18.09.2020, which, however, the DFO returned with remarks. The first stage clearance for the forest under FCA was issued by MoEF & Climate Change on 19.10.2020. After handing over the land for compensatory afforestation to the concerned authorities, the working permission in the forest area under FCA was issued to the Petitioner on 2.3.2021. Further, the Petitioner obtained second-stage clearance for the forest under FCA on 19.8.2021, and working permission in the area under DPTA was obtained on 8.9.2021. The Petitioner finally charged the Asset-III and Asset-IV on 29.3.2022 and 8.4.2022 and declared the DOCO on 31.3.2022 and 10.4.2022, respectively.

72. From the above, it is observed that the Petitioner took about 818 days and 828 days for the completion of work of Asset-III and Asset-IV, respectively. Further, in view of the documents submitted by the Petitioner, it is noticed that the time delay from 3.1.2020 to the issuance of final working permission in the forest area under DPTA on 8.9.2021 was beyond the control of the Petitioner. However, the Petitioner has not submitted any reasons for further time delay w.e.f. 8.9.2021 in the commissioning of the assets. Therefore, in view of the above, we only condone the time delay of 615 days from 3.1.2020 to 8.9.2021 on account of the delay in Forest Clearance in respect of Asset-III & Asset-IV.

(c) <u>Delay due to COVID-19</u>:

73. The Petitioner has submitted that the COVID-19 pandemic and the consequent lockdown/ restrictions imposed in various parts of the country affected the execution of the transmission projects in the country, including the instant transmission assets. The Petitioner has submitted that the Ministry of Power (MoP), vide its order dated

27.7.2020, acknowledged the disruption in supply chain and manpower due to the COVID-19 pandemic and granted an extension of 5 months in the execution of inter-State transmission projects that were under construction as on 25.3.2020 and vide its order dated 12.06.2021 had granted 3 months and 5 months, respectively in the execution of inter-State transmission projects that were under construction as on 1.4.2021.

74. We have considered the submissions of the Petitioner. The relevant extracts of the letters dated 27.7.2020 and 12.06.2021 of MoP are as follows.

Dated 27.07.2020

"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 pointed out that construction activity at various transmission projects sites have been severely affected by the nationalised lockdown measures announced since 25th March 2020 to contain outbreak of COVID -19 have requested for extension of Scheduled Commercial Operation Date (SCOD) for to mitigate the issues of disruption in supply chains and manpower, caused due to COVID-19 pandemic.

2. it has been therefore decided that;

i. All inter-state transmission projects, which were under construction as on date of lockdown i.e. 25th March 2020, shall get an extension of five months in respect of their SCOD;
ii. This order shall not apply to those projects, whose SCOD dates was prior to 25th March 2020.

Dated 12.06.2021

"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 activity at various transmission projects sites have been severely affected by the current second wave of COVID-19 pandemic and various measures taken by 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) for the undergoing

Transmission projects 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 lock-down in the entire country, this time different States/UTs have ordered lock-down in their State/UTs as per their own assessments. Therefore, after due consideration, it has been decided that;
i. All inter-state transmission projects, which are 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 a transmission line, whose SCOD is extended by three (3) months due to COVID19 as mentioned above at point(i), shall also be extended by three (3) months.

3. This issue with the approval of Competent Authority."

75. In the instant case, the Investment Approval date of the project is 24.3.2015, and the SCOD of the transmission project is 23.5.2017, which is much before the cut-off date mentioned in the MoP letter dated 27.7.2020 and 12.6.2021. Therefore, the MoPs circular granting extension of COD due to Covid-19 is not applicable in the instant case. It is also observed that the petitioner has sought condonation of time overrun of 5 months from 23.5.2020 to 20.08.2020 under Covid-19 wave-I and 3 months from 27.03.2021 to 25.06.2021 under Covid-19 Wave-II. We have already condoned the net impact of the time overrun on account of compensatory afforestation/Delhi Prevention Trees Act (DPTA) Land from 3.1.2020 to 8.9.2021 (614 days). Therefore, the time overrun on account of COVID-19 Wave-I and Wave-II is subsumed under the time overrun condoned due to delay in compensatory afforestation/Delhi Prevention Trees Act (DPTA). Accordingly, we are not inclined to condone the time overrun due to COVID-19 Waves I and II.

76. In view of the above, the time overrun condoned/not condoned on various activities is as follows:

Change in the scope of work	The time period from 23.5.2017 to 7.1.2019 (594 days) is beyond the control of the Petitioner, and the same has been condoned.
Delay due to Forest clearance/delay in acquisition of Land for compensatory plantation/afforestation from DDA (Delhi Development Authority)	The time period from 8.01.2019 to 3.01.2020 (360 days)
	The time delay of 615 days from 3.1.2020 to 8.9.2021 on account of the delay in Forest Clearance in respect of is condoned.
Delay due to COVID-19 Waves I and II	Not condoned.

77. As discussed above, out of the total delay of 1783 days and 1793 days for Asset-III & Asset-IV, respectively, the time overrun of 1569 days (594 days +360 days + 615 days) was beyond the control of the Petitioner, and the same has been condoned for both the assets.

Asset-V

(a) <u>Delay due to Change in Scope:</u>

78. The Petitioner has submitted that the time overrun up to 7.01.2019 is due to the change in the scope of the work.

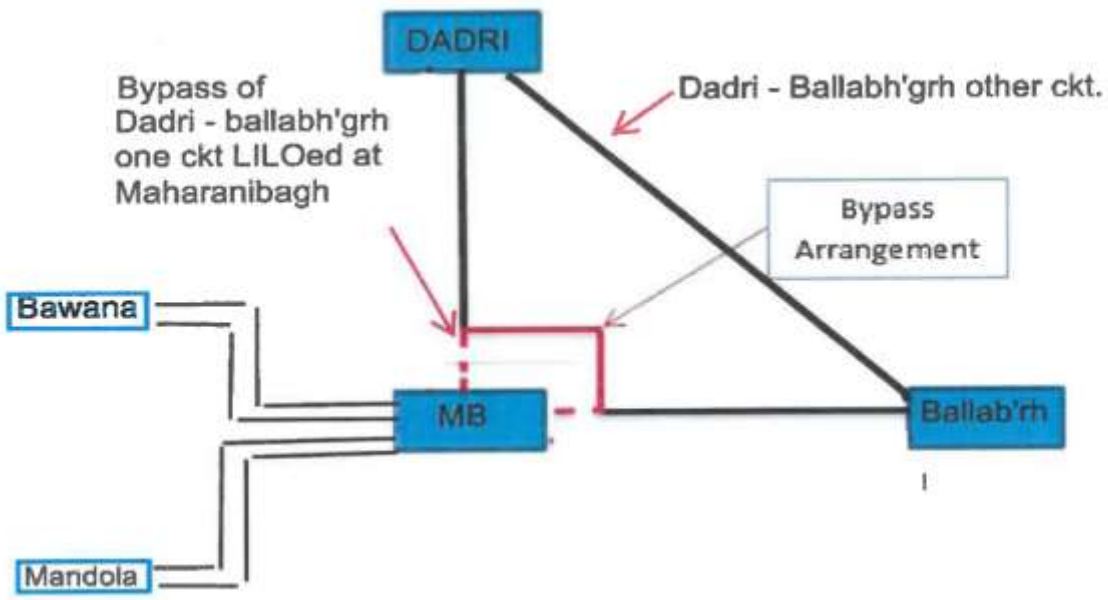
79. We have considered the submissions of the Petitioner. We have already dealt with the change in scope in the case of Asset-III and Asset-IV, and the time period from 23.5.2017 to 7.1.2019 (594 days) was beyond the control of the Petitioner, and the same has been condoned on account of the change in the scope of the work.

(b) <u>Delay due to delay in the commissioning of Asset III & IV:</u>

80. The Petitioner has submitted that the time overrun from 8.1.2019 to 10.4.2022 was due to a delay in the commissioning of Asset-III and Asset-IV, i.e., the LILO of 400 kV D/C Bawaa-Mandola line at Maharani Bag Sub-station. The Petitioner has submitted that the Petitioner had proposed to complete the bypass of LILO of the Dadri-Samaypur

transmission line only after the commissioning of LILO of the 400 kV D/C Bawana-Mandola line at Maharani Bagh Sub-station.

81. We have considered the submissions of the Petitioner. The SLD of the bypass arrangement is as follows:



82. From the above SLD, it is noted that the Petitioner could not complete the bypass arrangement without the completion of the LILO of the Bawana-Mandola line at Maharani Bagh. The Petitioner has submitted that Asset-III and Asset-IV are delayed due to a delay in forest clearance and acquisition of land for Compensatory plantation/afforestation. We have already dealt with the time overrun on account of forest clearance and acquisition of land for Compensatory plantation/afforestation in the case of Asset-III and Asset-IV. Accordingly, the time period between the commissioning of Asset-III and IV needs to be condoned as the works under Asset V could only be undertaken after its completion. Therefore, we are inclined to condone the time overrun of 1783 days in the case of Asset-V also.

Delay due to Shutdown Constraints:

83. Further, with regard to the Petitioner's submissions for shutdown constraints, it is observed that the Petitioner applied the first shutdown in April 2022 and availed of the same. However, after April 2022, the Petitioner applied for shutdowns in June 2022, August 2022, and October 2022, i.e., after a gap of one month and was not able to avail of the same even after obtaining approval in the various OCCs. Such approval was accorded with the rider that consent of DTL & NTPC be also obtained. The Petitioner has not submitted the documents in respect of the consent from DTL & NTPC, and hence, the time period lapsed for various approved shutdowns from 2.6.2022 to 2.10.2022, and therefore the aforesaid time overrun is not condoned. Besides, the Petitioner has not justified the delay of approximately 02 months for charging the elements on 25.02.2023, after receiving the shutdown consent from DTL and NTPC in December 2022. Accordingly, the delay on account of the shutdown is not condonable. The Petitioner is given liberty to produce documents pertaining to communication with DTL and NTPC at the time of truing-up, which will be reviewed at the time of truing-up.

84. Therefore, out of the total time overrun of 2104 days claimed by the Petitioner against Asset-V, the time overrun of 1783 days 1783 was beyond the control of the Petitioner, and the same has been condoned.

85. The summary analysis of time overrun in respect of the assets covered in the instant Petition is as under:

Assets	SCOD as per IA	DOCO	Time Over-run Claimed w.r.t SCOD (in Days)	Time over-run Condoned (in Days)	Time over-run Not Condoned
Asset-I	23.05.2017	10.2.2022	1723	1723	0

Asset-II	23.05.2017	1.4.2022	1774	1723	51
Asset-III and Asset-IV	23.5.2017	10.4.2022	1783	1569	214
				1569	214
Asset-V	23.05.2017	25.02.2023	2104	1783	321

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

86. The Petitioner has claimed the IDC in respect of Asset-I, Asset-II, Asset-III, Asset-IV, and Asset-V and has submitted the statement showing the computation of IDC, discharge of IDC liability as on the date of commercial operation and thereafter as under:

(₹ in lakh)

Assets	IDC as per the Auditor Certificate	IDC Discharged up to COD	IDC discharged during 2021-22	IDC discharged during 2022-23	IDC discharged during 2023-24
Asset-I	4816.66	4728.84	31.17	68.86	0.00
Asset-II	709.32	694.28	0.00	15.04	0.00
Asset-III	1764.28	1719.85	0.00	44.43	0.00
Asset-IV	3374.89	2914.56	0.00	460.33	0.00
Asset-V	3.92	0.10	0.00	3.82	0.00

87. 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 the Auditor's Certificate	IDC Disallowed	IDC Allowed	IDC Discharged up to COD	IDC discharged during 2021-22	IDC discharged during 2022-23	IDC discharged during 2023-24
Asset-I	4816.66	474.34	4342.32	4251.02	34.65	56.65	0.00
Asset-II	709.32	84.78	624.54	611.07	0.00	13.48	0.00
Asset-III	1764.28	414.15	1350.13	1347.20	0.00	2.93	0.00
Asset-IV	3374.89	650.92	2723.97	2615.03	0.00	108.93	0.00
Asset-V	3.92	3.74	0.18	0.00	0.00	0.18	0.00

88. Further, the Petitioner has submitted that the entire amount of IEDC for the transmission asset has been discharged up to COD. As the time overrun for the instant transmission assets has been partially condoned, there are disallowances of IEDC. Accordingly, the details of IEDC claimed as per the Auditor's Certificate, IEDC disallowed, and IEDC allowed are as under:

(₹ in lakh)

Assets	IEDC claimed as per the Auditor's certificate (A)	IEDC disallowed due to time overrun not condoned (B)	IEDC Allowed (C)=(A-B)
Asset-I	1770.73	0.00	1770.73
Asset-II	309.01	6.14	302.87
Asset-III	1431.86	119.04	1312.82
Asset-IV	1482.00	123.21	1358.79
Asset-V	9.05	1.00	8.05

Initial Spares

89. 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%"*

90. The Initial Spares as claimed by the Petitioner vide affidavit dated 27.9.2023 are as under:

(₹ in lakh)

Assets	Particulars	Plant and machinery cost	Initial Spares claimed	Initial Spares Claimed (%)	Ceiling limit mentioned as per Regulation (%)
Asset-I	Sub-station	13020.77	467.83	3.54	5.00
	Transmission Line	7165.75	56.38	0.79	1.00
Asset-II	Sub-station	3132.72	137.44	4.36	5.00
Asset-III	Sub-station	1975.59	139.34	7.21	5.00
	Transmission Line	17674.92	161.22	0.91	1.00
Asset-IV	Sub-station	1973.73	139.34	7.22	5.00
	Transmission Line	17652.53	161.22	0.91	1.00
Asset-V	Sub-station	158.22	0.00	0.00	6.00

91. The Petitioner has submitted the Initial Spares Discharge Statement vide affidavit dated 27.9.2023 as follows:

(₹ in lakh)

Assets	Particulars	Total Spares Claimed	Expenditure on IS upto COD	Expenditure on IS in 2021-22 (ACE)	Expenditure on IS in 2022-23 (ACE)	Expenditure on IS in 2023-24 (ACE)	Expenditure on IS in 2024-25 (ACE)
Asset-I	Sub-station	467.83	306.61	53.74	53.74	53.74	0.00
	Transmission Line	56.38	8.54	15.95	15.95	15.94	0.00
Asset-II	Sub-station	137.44	24.83	0.00	37.54	37.54	37.53
Asset-III	Sub-station	139.34	26.97	0.00	37.45	37.46	37.46
	Transmission Line	161.22	5.24	0.00	52.00	51.99	51.99
Asset-IV	Sub-station	139.34	26.96	0.00	37.46	37.46	37.46
	Transmission Line	161.22	5.25	0.00	51.99	51.99	51.99

92. We have considered the submissions of the Petitioner. Based on the information available on record, the Initial Spares for the transmission assets are allowed as per the respective permissible percentage of the Plant and Machinery Cost as on the cut-off date on an individual basis. The Initial Spares allowed for the transmission assets are as follows:

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 (%)	Initial Spares allowable (₹ in lakh)	Initial Spares disallowed (₹ in lakh)	Initial Spares Allowed (₹ in lakh)
		A	B	C	D=(A-B)*C/(100-C)	E=B-D	
Asset -I	Sub-station	13020.77	467.83	5.00	660.68	0.00	467.83
	Transmission Line	7165.75	56.38	1.00	71.81	0.00	56.38
Asset-II	Sub-station	3132.72	137.44	5.00	157.65	0.00	137.44
Asset-III	Sub-station	2187.21	139.34	5.00	107.78	31.56	107.78
	Transmission Line	17674.92	161.22	1.00	176.91	0.00	161.22
Asset-IV	Sub-station	2185.18	139.34	5.00	107.68	31.66	107.68
	Transmission Line	17652.53	161.22	1.00	176.68	0.00	161.22
Asset-V	Sub-station	158.22	0.00	6.00	10.10	0.00	0.00

93. The Initial Spares claimed for Asset-I, Asset-II, and Asset-V are within specified norms. Therefore, the Initial Spares have been allowed for Asset-I, Asset-II, and Asset-V. However, the Initial Spares claimed for Asset-III and Asset-IV exceed the specified norms; the excess Initial Spares have been disallowed for Asset-III and Asset-IV. These disallowed Initial spares will be, accordingly, deducted from the Initial Spares discharge claimed in the 2024-29 tariff period. Accordingly, the capital cost allowed as on COD is as follows:

(₹ in lakh)

Assets	Capital Cost claimed as on COD (Auditor Certificate) (A)	IDC Disallowed (B)	Undischarged IDC as on COD (C)	IEDC Disallowed (D)	Excess IS Disallowed as on COD (E)	Capital Cost as on COD (F) = (A-B-C-D-E)
Asset-I	32818.48	474.34	91.30	0.00	0.00	32252.84
Asset-II	4712.31	84.78	13.48	6.14	0.00	4607.91
Asset-III	20791.77	414.15	2.93	119.04	0.00	20255.64
Asset-IV	22559.8	650.92	108.93	123.21	0.00	21676.73
Asset-V	104.15	3.74	0.18	1.00	0.00	99.23

94. The COD of the Asset-III and Asset-IV has been approved as 10.4.2022**.** The Petitioner is directed to submit the revised Auditor's Certificate and tariff forms by combining Asset-III and Asset-IV at the time of truing-up.

Additional Capital Expenditure (ACE)

95. Regulation 24 of the 2019 Tariff Regulations provide as under:

*"**24. Additional Capitalisation within the original scope and up to the cut-off date***

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

(a) Undischarged liabilities recognized to be payable at a future date;
(b) Works deferred for execution;
(c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;
(d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;
(e) Change in law or compliance of any existing law; and
(f) Force Majeure events:

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

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

96. The Petitioner has claimed that the ACE incurred/projected to be incurred is mainly on account of balance/retention payments, and hence the same is claimed under Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations. The Petitioner has claimed capital cost as on 31.3.2024 as under:

(₹ in lakh)

Assets	FR approved cost	Capital cost up to COD	Projected ACE			Capital Cost as on 31.3.2024
			2021-22	2022-23	2023-24	
Asset-I	37462.11	32818.48	351.66	4635.07	1324.31	39129.55
Asset-II	6418.00	4712.31	0.00	1270.98	508.38	6491.67
Asset-III	23413.95	20791.77	0.00	1720.89	491.68	23004.37
Asset-IV	23413.95	22559.8	0.00	1628.67	465.33	24653.80
Asset-V	250.00	104.15	0.00	0.00	46.93	151.08

97. The Petitioner has submitted the package-wise and vendor-wise details of the ACE claimed including details of balance and retention payments vide affidavit dated 27.9.2023.

98. The ACE claimed by the Petitioner over and above the apportioned approved cost for Asset-I, and Asset-IV has been disallowed due to Cost over-run to restrict the Capital Cost of the Assets to the Apportioned approved FR cost in the absence of RCE.

99. We have considered the submissions made by the Petitioner. The ACE claimed by the Petitioner has been allowed under Regulation 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations on account of balance and retention payments for works already executed.

100. The excess Initial Spares of ₹31.56 lakh in the case of Asset-III will be disallowed from expenditure towards Initial Spares in 2024-25, subject to truing-up.

101. The excess Initial Spares of ₹31.66 lakh in the case of Asset-IV will be disallowed from expenditure towards Initial Spares in 2024-25, subject to truing-up.

102. Accordingly, the ACE allowed for the 2019-24 period is as follows:

Asset-I

(₹ in lakh)

Particulars	2021-22	2022-23	2023-24
ACE as per Auditor's Certificate	351.66	4635.07	1324.31
Add: IDC Discharged	34.65	56.65	0.00
less: Disallowed Capital Cost	0.00	0.00	(1193.07)
ACE allowed	**386.31**	**4691.72**	**131.24**

Asset-II

(₹ in lakh)

Particulars	2022-23	2023-24
ACE as per Auditor's Certificate	1270.98	508.38
Add: IDC Discharged	13.48	0.00
less: Disallowed Capital Cost	0.00	0.00
ACE allowed	**1284.46**	**508.38**

Asset-III

(₹ in lakh)

Particulars	2022-23	2023-24
ACE as per Auditor's Certificate	1720.89	491.68
Add: IDC Discharged	2.93	0.00
Less: IS Discharged	-	0.00
ACE allowed	**1723.82**	**491.68**

Asset-IV

(₹ in lakh)

Particulars	2022-23	2023-24
ACE as per Auditor's Certificate	1628.67	465.33
Add: IDC Discharged	108.93	0.00
Less: Disallowed Capital Cost	(0.38)	(465.33)
Less: IS Discharged	0.00	0.00
ACE allowed	**1737.22**	**0.00**

Asset-V

(₹ in lakh)

Particulars	2022-23	2023-24
ACE as per Auditor's Certificate	0.00	46.93
Add: IDC Discharged	0.18	0.00
ACE allowed	**0.18**	**46.93**

Capital Cost allowed as on 31.03.2024:

103. The capital cost allowed as on COD of the assets and ACE allowed for the assets covered in the instant Petition is as follows:

(₹ in lakh)

Assets	FR Approved Cost	Capital Cost allowed up to COD	Projected ACE allowed			Capital Cost as on 31.3.2024
			2021-22	2022-23	2023-24	
Asset-I	37462.11	32252.84	386.31	4691.72	131.24	37462.11
Asset-II	6418.00	4607.91	0.00	1284.46	508.38	6400.75
Asset-III	23413.95	20255.64	0.00	1723.82	491.68	22471.14
Asset-IV	23413.95	21676.73	0.00	1737.22	0.00	23413.95
Asset-V	250.00	99.23	0.00	0.18	46.93	146.34

Debt-Equity ratio

104. 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 be.*
>
> *(2) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt:*

equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

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

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

(3) 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.

(4) 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."

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

Asset-I

Funding	Capital Cost as on COD (₹ in lakh)	%	ACE during 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	22576.99	70.00	3646.49	70.00	26223.48	70.00
Equity	9675.85	30.00	1562.78	30.00	11238.63	30.00
Total	**32252.84**	**100.00**	**5209.27**	**100.00**	**37462.11**	**100.00**

Asset-II

Funding	Capital Cost as on COD (₹ in lakh)	%	ACE during 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	3225.54	70.00	1254.99	70.00	4480.53	70.00

Funding	Capital Cost as on COD (₹ in lakh)	%	ACE during 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Equity	1382.37	30.00	537.85	30.00	1920.22	30.00
Total	**4607.91**	**100.00**	**1792.84**	**100.00**	**6400.75**	**100.00**

Asset-III

Funding	Capital Cost as on COD (₹ in lakh)	%	ACE during 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	14178.95	70.00	1550.85	70.00	15729.80	70.00
Equity	6076.69	30.00	664.65	30.00	6741.34	30.00
Total	**20255.64**	**100.00**	**2215.50**	**100.00**	**22471.14**	**100.00**

Asset-IV

Funding	Capital Cost as on COD (₹ in lakh)	%	ACE during 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	15173.71	70.00	1216.05	70.00	16389.76	70.00
Equity	6503.02	30.00	521.17	30.00	7024.19	30.00
Total	**21676.73**	**100.00**	**1737.22**	**100.00**	**23413.95**	**100.00**

Asset-V

Funding	Capital Cost as on COD (₹ in lakh)	%	ACE during 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	69.46	70.00	32.98	70.00	102.44	70.00
Equity	29.77	30.00	14.13	30.00	43.90	30.00
Total	**99.23**	**100.00**	**47.11**	**100.00**	**146.34**	**100.00**

Depreciation

106. 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."

107. The depreciation has been worked out considering the admitted capital cost as on COD and the ACE allowed during the tariff period 2019-24. The weighted average rate of depreciation (WAROD) has been worked as per the rates of depreciation prescribed in the 2019 Tariff Regulations, and the WAROD table is placed in the Annexure-I. The depreciation allowed for the transmission assets are as follows:

Asset-I

(₹ in lakh)

Sl. No.	Particulars	2021-22 (pro-rata 50 days)	2022-23	2023-24
A	Opening Capital Cost	32252.84	32639.15	37330.87
B	Addition during the year 2019-24 due to ACE	386.31	4691.72	131.24
C	Closing Capital Cost (A+B)	32639.15	37330.87	37462.11
D	Average Capital Cost (A+C)/2	32446.00	34985.01	37396.49
E	Average Capital Cost (90% depreciable assets)	32251.52	34786.05	37193.05
F	Average Capital Cost (100% depreciable assets)	194.48	198.96	203.44
G	Depreciable value (excluding IT equipment and software) (E*90%)	29026.37	31307.45	33473.75
H	Depreciable value of IT equipment and software (F*100%)	194.48	198.96	203.44
I	Total Depreciable Value (G+H)	29220.85	31506.41	33677.19
J	Weighted average rate of Depreciation (WAROD) (in %)	4.88	4.80	4.73
K	Lapsed useful life at the beginning of the year (Year)	0	0	1
L	Balance useful life at the beginning of the year (Year)	27	27	26
M	**Depreciation during the year (D*J)**	**217.08**	**1680.28**	**1768.08**
N	Cumulative Depreciation at the end of the year	217.08	1897.36	3665.45
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	29003.77	29609.05	30011.74

Asset-II

(₹ in lakh)

Sl. No.	Particulars	2022-23	2023-24
A	Opening Capital Cost	4607.91	5892.37
B	Addition during the year 2019-24 due to ACE	1284.46	508.38
C	Closing Capital Cost (A+B)	5892.37	6400.75
D	Average Capital Cost (A+C)/2	5250.14	6146.56
E	Average Capital Cost (90% depreciable assets)	5213.23	6105.57
F	Average Capital Cost (100% depreciable assets)	36.91	40.99
G	Depreciable value (excluding IT equipment and software) (E*90%)	4691.91	5495.01
H	Depreciable value of IT equipment and software (F*100%)	36.91	40.99

Sl. No.	Particulars	2022-23	2023-24
I	Total Depreciable Value (G+H)	4728.82	5536.00
J	Weighted average rate of Depreciation (WAROD) (in %)	4.60	4.54
K	Lapsed useful life at the beginning of the year (Year)	0	1
L	Balance useful life at the beginning of the year (Year)	25	24
M	**Depreciation during the year (D*J)**	**241.73**	**278.84**
N	Cumulative Depreciation at the end of the year	241.73	520.56
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	4487.09	5015.44

Asset-III

(₹ in lakh)

Sl. No.	Particulars	2022-23 (pro-rata 356 days)	2023-24
A	Opening Capital Cost	20255.64	21979.47
B	Addition during the year 2019-24 due to ACE	1723.82	491.68
C	Closing Capital Cost (A+B)	21979.47	22471.15
D	Average Capital Cost (A+C)/2	21117.55	22225.31
E	Average Capital Cost (90% depreciable assets)	21096.03	22196.38
F	Average Capital Cost (100% depreciable assets)	21.52	28.93
G	Depreciable value (excluding IT equipment and software) (E*90%)	18986.43	19976.74
H	Depreciable value of IT equipment and software (F*100%)	21.52	28.93
I	Total Depreciable Value (G+H)	19007.95	20005.67
J	Weighted average rate of Depreciation (WAROD) (in %)	5.2896	5.2882
K	Lapsed useful life at the beginning of the year (Year)	0	0
L	Balance useful life at the beginning of the year (Year)	34	34
M	**Depreciation during the year (D*J)**	**1089.49**	**1175.31**
N	Cumulative Depreciation at the end of the year	1089.49	2264.80
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	17918.46	17740.87

Asset-IV

(₹ in lakh)

Sl. No.	Particulars	2022-23 (pro-rata 356 days)	2023-24
A	Opening Capital Cost	21676.73	23413.95
B	Addition during the year 2019-24 due to ACE	1737.22	0.00
C	Closing Capital Cost (A+B)	23413.95	23413.95
D	Average Capital Cost (A+C)/2	22545.34	23413.95
E	Average Capital Cost (90% depreciable assets)	22522.77	23385.57
F	Average Capital Cost (100% depreciable assets)	22.57	28.38
G	Depreciable value (excluding IT equipment and software) (E*90%)	20270.49	21047.01
H	Depreciable value of IT equipment and software (F*100%)	22.57	28.38
I	Total Depreciable Value (G+H)	20293.06	21075.39
J	Weighted average rate of Depreciation (WAROD) (in %)	5.2896	5.2886
K	Lapsed useful life at the beginning of the year (Year)	0	0
L	Balance useful life at the beginning of the year (Year)	34	34
M	**Depreciation during the year (D*J)**	**1163.16**	**1238.27**
N	Cumulative Depreciation at the end of the year	1163.16	2401.43
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	19129.90	18673.96

Asset-V

(₹ in lakh)

Sl. No.	Particulars	2022-23 (pro-rata 35 days)	2023-24
A	Opening Capital Cost	99.23	99.41
B	Addition during the year 2019-24 due to ACE	0.18	46.93
C	Closing Capital Cost (A+B)	99.41	146.34
D	Average Capital Cost (A+C)/2	99.32	122.87
E	Average Capital Cost (90% depreciable assets)	99.32	122.87
F	Average Capital Cost (100% depreciable assets)	0.00	0.00
G	Depreciable value (excluding IT equipment and software) (E*90%)	89.39	110.59
H	Depreciable value of IT equipment and software (F*100%)	0.00	0.00
I	Total Depreciable Value (G+H)	89.39	110.59

Sl. No.	Particulars	2022-23 (pro-rata 35 days)	2023-24
J	Weighted average rate of Depreciation (WAROD) (in %)	5.06	5.28
K	Lapsed useful life at the beginning of the year (Year)	0	0
L	Balance useful life at the beginning of the year (Year)	25	25
M	**Depreciation during the year (D*J)**	**0.50**	**6.49**
N	Cumulative Depreciation at the end of the year	0.50	6.99
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	88.88	103.59

Interest on Loan (IoL)

108. 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."

109. The Petitioner has claimed the weighted average rate of IoL, based on its actual loan portfolio and rate of interest. Accordingly, IoL has been calculated based on actual interest rate submitted by the Petitioner, in accordance with Regulation 32 of the 2019 Tariff Regulations. The IoL allowed for the transmission assets are as follows:

Asset-I

(₹ in lakh)

	Particulars	2021-22 (pro-rata 50 days)	2022-23	2023-24
A	Gross Normative Loan	22576.99	22847.41	26131.61
B	Cumulative Repayments upto Previous Year	0.00	217.08	1897.36
C	Net Loan-Opening (A-B)	22576.99	22630.33	24234.25
D	Additions due to ACE	270.42	3284.20	91.87
E	Repayment during the year	217.08	1680.28	1768.08
F	Net Loan-Closing (C+D-E)	22630.33	24234.25	22558.03
G	Average Loan (C+F)/2	22603.66	23432.29	23396.14
H	Weighted Average Rate of Interest on Loan (%)	5.8824	5.8818	5.8674
I	**Interest on Loan**	**182.14**	**1378.25**	**1372.75**

Asset-II

(₹ in lakh)

	Particulars	2022-23	2023-24
A	Gross Normative Loan	3225.54	4124.66
B	Cumulative Repayments upto Previous Year	0.00	241.73
C	Net Loan-Opening (A-B)	3225.54	3882.93
D	Additions due to ACE	899.12	355.87
E	Repayment during the year	241.73	278.84
F	Net Loan-Closing (C+D-E)	3882.93	3959.96
G	Average Loan (C+F)/2	3554.24	3921.45

	Particulars	2022-23	2023-24
H	Weighted Average Rate of Interest on Loan (%)	5.9142	5.8732
I	**Interest on Loan**	**210.21**	**230.31**

Asset-III

(₹ in lakh)

	Particulars	2022-23 (pro-rata 356 days)	2023-24
A	Gross Normative Loan	14178.95	15385.63
B	Cumulative Repayments upto Previous Year	0.00	1089.49
C	Net Loan-Opening (A-B)	14178.95	14296.13
D	Additions due to ACE	1206.68	344.18
E	Repayment during the year	1089.49	1175.31
F	Net Loan-Closing (C+D-E)	14296.13	13465.00
G	Average Loan (C+F)/2	14237.54	13880.57
H	Weighted Average Rate of Interest on Loan (%)	5.6102	5.5802
I	**Interest on Loan**	**779.05**	**774.56**

Asset-IV

(₹ in lakh)

	Particulars	2022-23 (pro-rata 356 days)	2023-24
A	Gross Normative Loan	15173.71	16389.76
B	Cumulative Repayments upto Previous Year	0.00	1163.16
C	Net Loan-Opening (A-B)	15173.71	15226.60
D	Additions due to ACE	1216.05	0.00
E	Repayment during the year	1163.16	1238.27
F	Net Loan-Closing (C+D-E)	15226.60	13988.33
G	Average Loan (C+F)/2	15200.16	14607.47
H	Weighted Average Rate of Interest on Loan (%)	6.5337	6.5263
I	**Interest on Loan**	**968.64**	**953.32**

Asset-V

(₹ in lakh)

	Particulars	2022-23 (pro-rata 35 days)	2023-24
A	Gross Normative Loan	69.46	69.59
B	Cumulative Repayments upto Previous Year	0.00	0.50
C	Net Loan-Opening (A-B)	69.46	69.08
D	Additions due to ACE	0.13	32.85
E	Repayment during the year	0.50	6.49
F	Net Loan-Closing (C+D-E)	69.08	95.45
G	Average Loan (C+F)/2	69.27	82.27
H	Weighted Average Rate of Interest on Loan (%)	6.1069	6.1331
I	**Interest on Loan**	**0.41**	**5.05**

Return on Equity (RoE)

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

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

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

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system

Provided further that:

i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

iii. in case of a thermal generating station, with effect from 1.4.2020:

a) rate of return on equity shall be reduced by 0.25% in case of failure

to achieve the ramp rate of 1% per minute;

b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

"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.*

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

Rate of pre-tax return on equity = Base rate / (1-t)

Where "t" is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.

Illustration-

(6) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:

Rate of return on equity = 15.50/(1-0.2155) = 19.758%

(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;
(b) Estimated Advance Tax for the year on above is Rs 240 crore;
(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;
(d) Rate of return on equity = 15.50/ (1-0.24) = 20.395%.

(7) 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."

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

Asset-I

(₹ in lakh)

	Particulars	2021-22 (Pro-rata 50 days)	2022-23	2023-24
A	Opening Equity (A)	9675.85	9791.74	11199.26
B	Additions (B)	115.89	1407.52	39.37
C	Closing Equity I = (A+B)	9791.74	11199.26	11238.63
D	Average Equity (D) = (A+C)/2	9733.80	10495.50	11218.94
E	Return on Equity (Base Rate) (%)	15.500	15.500	15.500
F	MAT Rate for respective year (%)	17.472	17.472	17.472
G	Rate of Return on Equity (%)	18.782	18.782	18.782
H	**Return on Equity**	**250.44**	**1971.27**	**2107.14**

Asset-II

(₹ in lakh)

	Particulars	2022-23	2023-24
A	Opening Equity (A)	1382.37	1767.71
B	Additions (B)	385.34	152.51
C	Closing EquiI(C) = (A+B)	1767.71	1920.22
D	Average Equity (D) = (A+C)/2	1575.04	1843.96
E	Return on Equity (Base Rate) (%)	15.500	15.500
F	MAT Rate for respective year (%)	17.472	17.472
G	Rate of Return on Equity (%)	18.782	18.782
H	**Return on Equity**	**295.82**	**346.33**

Asset-III

(₹ in lakh)

	Particulars	2022-23 (pro-rata 356 days)	2023-24
A	Opening Equity (A)	6076.69	6593.84
B	Additions (B)	517.15	147.50
C	Closing Elty (C) = (A+B)	6593.84	6741.34
D	Average Equity (D) = (A+C)/2	6335.26	6667.59
E	Return on Equity (Base Rate) (%)	15.500	15.500
F	MAT Rate for respective year (%)	17.472	17.472
G	Rate of Return on Equity (%)	18.782	18.782
H	**Return on Equity**	**1160.55**	**1252.31**

Asset-IV

(₹ in lakh)

	Particulars	2022-23 (Pro-rata 356 days)	2023-24
A	Opening Equity (A)	6503.02	7024.19
B	Additions (B)	521.17	0.00
C	Closing Equity (C) = (A+B)	7024.19	7024.19
D	Average Equity (D) = (A+C)/2	6763.60	7024.19
E	Return on Equity (Base Rate) (%)	15.500	15.500
F	MAT Rate for respective year (%)	17.472	17.472
G	Rate of Return on Equity (%)	18.782	18.782
H	**Return on Equity**	**1239.02**	**1319.28**

Asset-V

(₹ in lakh)

	Particulars	2022-23 (Pro-rata 35 days)	2023-24
A	Opening Equity (A)	29.77	29.82
B	Additions (B)	0.05	14.08
C	Closing Equity (C) = (A+B)	29.82	43.90
D	Average Equity (D) = (A+C)/2	29.80	36.86
E	Return on Equity (Base Rate) (%)	15.500	15.500
F	MAT Rate for respective year (%)	17.472	17.472
G	Rate of Return on Equity (%)	18.782	18.782
H	**Return on Equity**	**0.54**	**6.92**

Operation & Maintenance Expenses (O&M Expenses)

112. The Petitioner has not claimed any O&M expenses for Asset-V. The O&M expenses claimed by the Petitioner for the transmission Asset-I, Asset-II, Asset-III, and Asset-IV for the 2019-24 period are as follows:

(₹ in lakh)

Particulars	Asset-I		
	2021-22 (pro-rata 50 days)	**2022-23**	**2023-24**
6 No. of 400 kV GIS Bays (1 No. 400 kV line bay at Jhatikalan,1 No. 400 kV line bay at Bamnauli, 3 No.of 400 kV ICT bays at Dwaraka S/S, 1 No. 125 MVAR Bus Reactor bay at Dwaraka S/S)	19.81	149.77	155.03
Norms (₹ lakh/Bay)	24.115	24.962	25.837
3 No. of 220 kV GIS Bays (3 No.of 220 kV ICT bays at Dwaraka Sub-station)	6.94	52.42	54.26
Norms (₹ lakh/Bay)	16.884	17.472	18.088
400 kV Transformers (MVA) (3x500 MVA ICTs at Dwaraka Sub-station)	78.90	597.00	616.50
Norms (₹ lakh/MVA)	0.384	0.398	0.411
D/C Twin/Triple conductors (8.719km) 400 kV D/C Bamnauli-Jhatikalan D/C line	1.13	8.52	8.81
Norms (₹ lakh/km)	0.944	0.977	1.011
Total O&M Expense (₹ in lakh)	**106.79**	**807.71**	**834.60**

Particulars	Asset-II	
	2022-23	**2023-24**
1 No. of 400 kV ICT (GIS) Bay	24.96	25.84
Norms (₹ lakh/Bay)	24.962	25.837
1 No. of 220 kV ICT (GIS) Bay	17.47	18.09
Norms (₹ lakh/Bay)	52.42	54.26
400 kV Transformers (1X500 MVA)	199.00	205.50
Norms (₹ lakh/MVA)	0.398	0.411
Total O&M Expense (₹ in lakh)	**241.43**	**249.43**

Particulars	Asset-III		
	2021-22 (pro-rata 1 day)	2022-23 (pro-rata 356 days)	2023-24
2 No. of 400 kV GIS line Bays (1 No.of 400 kV line bay @ bawana s/s for ckt-I, 1 No. of 400 kV line bay at Mandola S/s for Ckt-I)	48.23	49.92	51.67
Norms (₹ lakh/Bay)	24.115	24.962	25.837
Multi Ckt Twin/Triple (29.981 km) LILO of 400 kV D/C bawana-Mandola line at Maharanibagh Sub-station.	49.59	51.36	53.16
Norms (₹ lakh/km)	1.654	1.713	1.773
Total O&M Expense (₹ in lakh)	**0.27**	**101.28**	**104.83**

Particulars	Asset-IV	
	2022-23 (pro-rata 356 days)	2023-24
2 No. of 400 kV GIS line Bays (1 No. of 400 kV line bay @ bawana s/s for ckt-II, 1 No. of 400 kV line bay at Mandola S/s for Ckt-II)	49.92	51.67
Norms (₹ lakh/Bay)	24.962	25.837
Total O&M Expense (₹ in lakh)	**48.69**	**51.67**

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

*"**35. Operation and Maintenance Expenses:***

…

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

Particulars	***2019-20***	***2020-21***	***2021-22***	***2022-23***	***2023-24***
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	*45.01*	*46.60*	*48.23*	*49.93*	*51.68*
400 kV	*32.15*	*33.28*	*34.45*	*35.66*	*36.91*
220 kV	*22.51*	*23.30*	*24.12*	*24.96*	*25.84*
132 kV and below	*16.08*	*16.64*	*17.23*	*17.83*	*18.46*
Norms for Transformers (₹ Lakh per MVA)					
765 kV	*0.491*	*0.508*	*0.526*	*0.545*	*0.564*
400 kV	*0.358*	*0.371*	*0.384*	*0.398*	*0.411*
220 kV	*0.245*	*0.254*	*0.263*	*0.272*	*0.282*
132 kV and below	*0.245*	*0.254*	*0.263*	*0.272*	*0.282*

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;

ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;

iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);

iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;

v. the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and

vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

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

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

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

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

114. We have considered the submissions of the Petitioner. As discussed above, the COD of the Asset-III and Asset-IV has been considered as 10.4.2022. Accordingly, the O&M expenses for Asset-III and Asset-IV are allowed under one asset. The O&M expenses has been worked as per norms specified under tariff Regulations,2019 and the same is as follows:

Particulars	Asset-I		
	2021-22 (pro-rata 50 days)	2022-23	2023-24
6 No. of 400 kV GIS Bays (1 No. 400 kV line bay at Jhatikalan,1 No. 400 kV line bay at Bamnauli, 3 No.of 400 kV ICT bays at Dwaraka S/S, 1 No. 125 MVAR Bus Reactor bay at Dwaraka S/S)	19.81	149.77	155.03
3 No. of 220 kV GIS Bays (3 No. of 220 kV ICT bays at Dwaraka Sub-station)	6.94	52.42	54.26
400 kV Transformers (MVA) (3x500 MVA ICTs at Dwaraka Sub-station)	78.90	597.00	616.50
D/C Twin/Triple conductors (8.719km) 400 kV D/C Bamnauli-Jhatikalan line	1.13	8.52	8.81
Total O&M Expenses allowed (₹ in lakh)	**106.79**	**807.71**	**834.60**

Particulars	Asset-II	
	2022-23	2023-24
1 No. of 400 kV ICT (GIS) Bay	24.96	25.84
1 No. of 220 kV ICT (GIS) Bay	17.47	18.09
400 kV Transformers (1X500 MVA)	199.00	205.50
Total O&M Expenses allowed (₹ in lakh)	**241.43**	**249.43**

Particulars	Asset-III & IV	
	2022-23 (pro-rata 356 days)	2023-24
4 No. of 400 kV GIS line Bays (1 No. of 400 kV line bay @ bawana s/s for ckt-I& II, 1 No. of 400 kV line bay at Mandola S/s for Ckt-I& II)	99.84	103.34
Norms (₹ lakh/Bay)	24.962	25.837
Total O&M Expenses allowed (₹ in lakh)	**97.38**	**103.34**
Multi Ckt Twin/Triple (29.981 km) LILO of 400 kV D/C bawana-Mandola line at Maharanibagh Sub-station.		
Norms (₹ lakh/km)	1.713	1.773
Total O&M expenses allowed	**50.09**	**53.15**
Total allowed O&M expenses	**147.48**	**156.49**

115. The O&M Expenses of Asset-III and Asset-IV with respect to 4 No. of 400 kV GIS line Bays (1 No. of 400 kV line bay @ Bawana s/s for ckt-I& II, 1 No. of 400 kV line bay at Mandola S/s for Ckt-I& II) is allowed considering 50% of O&M expenses in asset-III and 50% of O&M expenses under Asset-IV. It is noted that the LILO of 400 kV D/C Bawana-Mandola line at Maharanibagh Sub-station is part of Asset-III, and the O&M Expenses of this are included under Asset-III. The Petitioner is directed to combine Asset-III and Asset-IV at the time of the truing-up of 2019-24 and claim O&M of Asset-III and Asset-IV together.

Interest on Working Capital (IWC)

116. 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 one month.*
>
> *…..*
>
> *(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:*
>
> *Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.*
>
> *(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency.–*
>
> ***"3. Definitions. -*** *In these regulations, unless the context otherwise requires:-*

*(7)'**Bank Rate**' means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;"*

117. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 11.25%.

118. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (ROI) considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, ROI for 2020-21 has been considered as 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) whereas ROI for 2021-22 has been considered as 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) and ROI 10.50% for the FY 2022-23 (SBI 1-year MCLR applicable as on 1.4.2022 of 7.00% plus 350 basis points), and for the FY 2023-24 ROI is considered as 12.00% (SBI 1-year MCLR applicable as on 1.4.2023 of 8.50% plus 350 basis points). The components of the working capital and interest thereon allowed are as follows:

Asset-I

(₹ in lakh)

	Particulars	**2021-22 (pro-rata 50 days)**	**2022-23**	**2023-24**
A	WC for O&M Expenses (O&M Expenses for 1 month)	64.96	67.31	69.55
B	WC for Maintenance Spares (15% of O&M Expenses)	116.94	121.16	125.19
C	WC for Receivables (Equivalent to 45 days of annual transmission charges)	692.12	731.60	761.97
D	**Total Working Capital**	**874.02**	**920.07**	**956.71**
E	Rate of Interest (%)	10.50	10.50	12.00
F	**Interest on Working Capital**	**12.57**	**96.61**	**114.81**

Asset-II

(₹ in lakh)

	Particulars	2022-23	2023-24
A	WC for O&M Expenses (O&M Expenses for 1 month)	20.12	20.79
B	WC for Maintenance Spares (15% of O&M Expenses)	36.22	37.41
C	WC for Receivables (Equivalent to 45 days of annual transmission charges)	124.29	138.76
D	**Total Working Capital**	**180.63**	**196.95**
E	Rate of Interest (%)	10.50	12.00
F	**Interest on Working Capital**	**18.97**	**23.63**

Asset-III

(₹ in lakh)

	Particulars	2022-23 (pro-rata 356 days)	2023-24
A	WC for O&M Expenses (O&M Expenses for 1 month)	8.44	8.74
B	WC for Maintenance Spares (15% of O&M Expenses)	15.19	15.72
C	WC for Receivables (Equivalent to 45 days of annual transmission charges)	400.87	413.05
D	**Total Working Capital**	**424.51**	**437.51**
E	Rate of Interest (%)	10.50	12.00
F	**Interest on Working Capital**	**43.47**	**52.50**

Asset-IV

(₹ in lakh)

	Particulars	2022-23 (pro-rata 356 days)	2023-24
A	WC for O&M Expenses (O&M Expenses for 1 month)	4.16	4.31
B	WC for Maintenance Spares (15% of O&M Expenses)	7.49	7.75
C	WC for Receivables (Equivalent to 45 days of annual transmission charges)	438.06	444.76
D	**Total Working Capital**	**449.71**	**456.82**
E	Rate of Interest (%)	10.50	12.00
F	**Interest on Working Capital**	**46.06**	**54.82**

Asset-V

(₹ in lakh)

	Particulars	2022-23(pro-rata 35 days)	2023-24
A	WC for O&M Expenses (O&M Expenses for 1 month)	0.00	0.00
B	WC for Maintenance Spares (15% of O&M Expenses)	0.00	0.00
C	WC for Receivables (Equivalent to 45 days of annual transmission charges)	1.88	2.30
D	**Total Working Capital**	**1.88**	**2.30**
E	Rate of Interest (%)	10.50	12.00
F	**Interest on Working Capital**	**0.02**	**0.28**

Annual Fixed Charges for the 2019-24 Tariff Period

119. The transmission charges allowed in respect of the assets for the 2019-24 tariff period are as follows:

Asset-I

(₹ in lakh)

	Particulars	2021-22 (pro-rata 50 days)	2022-23	2023-24
A	Depreciation	217.08	1680.28	1768.08
B	Interest on Loan	182.14	1378.25	1372.75
C	Return on Equity	250.44	1971.27	2107.14
D	O & M Expenses	106.79	807.71	834.60
E	Interest on Working Capital	12.57	96.61	114.81
F	**Total**	**769.02**	**5934.11**	**6197.38**

Asset-II

(₹ in lakh)

	Particulars	2022-23	2023-24
A	Depreciation	241.73	278.84
B	Interest on Loan	210.21	230.31
C	Return on Equity	295.82	346.33
D	O & M Expenses	241.43	249.43
E	Interest on Working Capital	18.97	23.63
F	**Total**	**1008.16**	**1128.54**

Asset-III

(₹ in lakh)

	Particulars	2022-23 (pro-rata 356 days)	2023-24
A	Depreciation	1089.49	1175.31
B	Interest on Loan	779.05	774.56

	Particulars	2022-23 (pro-rata 356 days)	2023-24
C	Return on Equity	1160.55	1252.31
D	O & M Expenses	98.78	104.83
E	Interest on Working Capital	43.47	52.50
F	**Total**	**3171.34**	**3359.51**

Asset-IV

(₹ in lakh)

	Particulars	2022-23 (pro-rata 356 days)	2023-24
A	Depreciation	1163.16	1238.27
B	Interest on Loan	968.64	953.32
C	Return on Equity	1239.02	1319.28
D	O & M Expenses	48.69	51.67
E	Interest on Working Capital	46.06	54.82
F	**Total**	**3465.57**	**3617.36**

Asset-V

(₹ in lakh)

	Particulars	2022-23 (pro-rata 35 days)	2023-24
A	Depreciation	0.50	6.49
B	Interest on Loan	0.41	5.05
C	Return on Equity	0.54	6.92
D	O & M Expenses	0.00	0.00
E	Interest on Working Capital	0.02	0.28
F	**Total**	**1.46**	**18.73**

120. We treat the Ckt-I and Ckt-II, i.e., Asset-III and Asset-IV as a Combined Asset and approve their COD as 10.4.2022, when the double circuit line along with bays has been completed and accordingly approve the combined tariff for Ckt-I and Ckt-II of the LILO of 400 kV D/C Bawana-Mandola line at Maharanibagh along with associated bays. Although we have combined Asset-III and Asset-IV, we are allowing tariffs for Asset-III and Asset-IV separately, as it is a first-time tariff determination stage. The tariffs for Asset-III and Asset-IV will be combined at the time of truing up. The Petitioner is directed

to combine Asset-III and Asset-IV at the time of the truing-up for the period 2019-24 and submit the necessary forms accordingly.

Filing Fee and Publication Expenses

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

122. We have considered the submissions of the Petitioner. 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

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

Goods and Services Tax

124. 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; the same may be allowed to be recovered from the beneficiaries.

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

Security Expenses

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

127. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses on a projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The Commission, vide order dated 3.8.2021 in Petition No. 260/MP/2020, approved security expenses from 1.4.2019 to 31.3.2024. Therefore, the security expenses will be shared in terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. Accordingly, 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

128. 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

129. The Petitioner has prayed that the transmission charges for the 2019-24 period shall be recovered on a monthly basis in accordance with Regulation 57 of the 2019

Tariff Regulations. With effect from 1.11.2020, sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the liabilities of the DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of the 2020 Sharing Regulation and shall be recovered from the concerned DICs through the Bill under Regulation 15(2)(b) of the 2020 Sharing Regulations. For subsequent periods, the billing, collection, and disbursement of the transmission charges approved in this order shall be governed by the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

130. To summarise:

a. AFC allowed for the 2019-24 tariff period is as follows:

(₹ in lakh)

Asset	2021-22 (pro-rata 50 days)	2022-23	2023-24
Asset-I	769.02	5934.11	6197.38

(₹ in lakh)

Asset	2022-23	2023-24
Asset-II	1008.16	1128.54

(₹ in lakh)

Asset	2022-23 (pro-rata 356 days)	2023-24
Asset-III	3171.35	3359.51

(₹ in lakh)

Asset	2022-23 (pro-rata 356 days)	2023-24
Asset-IV	3465.55	3617.37

(₹ in lakh)

Asset	2022-23 (pro-rata 35 days)	2023-24
Asset-V	1.46	18.73

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

132. This order disposes of Petition No. 132/TT/2023 in terms of the above discussion and findings.

sd/-
(Ramesh Babu V.)
Member

sd/-
(Jishnu Barua)
Chairperson

ANNEXURE-I

Asset-I

2019-24	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	Annual Depreciation as per Regulations (₹ in lakh)		
Capital Expenditure		**2021-22**	**2022-23**	**2023-24**	**Total**			**2021-22**	**2022-23**	**2023-24**
Land - Leasehold	5365.63	-	1639.73	46.43	1686.16	7051.79	3.34%	179.21	206.60	234.75
Building Civil Works & Colony	2316.40	2.99	2370.06	66.97	2440.01	4756.41	3.34%	77.42	117.05	157.75
Transmission Line	7915.66	361.86	486.56	13.30	861.72	8777.39	5.28%	427.50	449.90	463.09
Sub Station	16300.43	21.01	180.17	4.13	205.31	16505.74	5.28%	861.22	866.53	871.39
PLCC	160.37	0.21	6.48	0.17	6.86	167.22	6.33%	10.16	10.37	10.58
IT Equipment (Incl. Software)	194.35	0.25	8.72	0.23	9.20	203.56	15.00%	29.17	29.84	30.52
Total	**32252.84**	**386.31**	**4691.72**	**131.24**	**5209.27**	**37462.11**		**1584.68**	**1680.28**	**1768.08**
						Average Gross Block (₹ in lakh)		**32446.00**	**34985.01**	**37396.49**
						Weighted Average Rate of Depreciation		**4.88%**	**4.80%**	**4.73%**

Asset-II

2019-24	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	Annual Depreciation as per Regulations (₹ in lakh)	
Capital Expenditure		**2022-23**	**2023-24**	**Total**			**2022-23**	**2023-24**
Building Civil Works & Colony	293.16	518.31	206.84	725.15	1018.31	3.34%	18.45	30.56
Transmission Line	-	-	-	0.00	-	5.28%	-	-
Sub Station	2951.38	496.19	193.62	689.81	3641.19	5.28%	168.93	187.14
PLCC	-	-	-	0.00	-	6.33%	-	-
IT Equipment (Incl. Software)	33.97	5.88	2.29	8.17	42.14	15.00%	5.54	6.15
Total	**4607.91**	**1284.46**	**508.38**	**1792.84**	**6400.75**		**241.73**	**278.84**
					Average Gross Block (₹ in lakh)		**5250.14**	**6146.56**
					Weighted Average Rate of Depreciation		**4.60%**	**4.54%**

Asset-III

2019-24	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	Annual Depreciation as per Regulations (₹ in lakh)				
Capital Expenditure		**2022-23**	**2023-24**	**Total**			**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Building Civil Works & Colony	40.08	109.98	31.42	141.40	181.47	3.34%	1.34	1.34	1.34	3.18	5.54
Transmission Line	18539.52	1101.72	314.01	1415.73	19955.25	5.28%	978.89	978.89	978.89	1007.97	1045.35
Sub Station	1523.08	435.88	124.47	560.35	2083.43	5.28%	80.42	80.42	80.42	91.93	106.72
PLCC	137.21	64.72	18.49	83.21	220.42	6.33%	8.69	8.69	8.69	10.73	13.37
IT Equipment (Incl. Software)	15.76	11.52	3.29	14.81	30.58	15.00%	2.36	2.36	2.36	3.23	4.34
Total	**20255.64**	**1723.82**	**491.68**	**2215.50**	**22471.15**		**1071.69**	**1071.69**	**1071.69**	**1117.04**	**1175.31**
					Average Gross Block (₹ in lakh)		**0.00**	**0.00**	**0.00**	**21117.55**	**22225.31**
					Weighted Average Rate of Depreciation		**5.29%**	**5.29%**	**5.29%**	**5.29%**	**5.29%**

Asset-IV

2019-24	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	Annual Depreciation as per Regulations (₹ in lakh)		
Capital Expenditure		**2022-23**	**2023-24**	**Total**			**2021-22**	**2022-23**	**2023-24**
Building Civil Works & Colony	42.64	110.16	-	110.16	152.80	3.34%	1.42	3.26	5.10
Transmission Line	19849.74	1107.21	-	1107.21	20956.94	5.28%	1048.07	1077.30	1106.53
Sub Station	1621.62	442.82	-	442.82	2064.44	5.28%	85.62	97.31	109.00
PLCC	145.96	65.43	-	65.43	211.39	6.33%	9.24	11.31	13.38
IT Equipment (Incl. Software)	16.77	11.61	-	11.61	28.38	15.00%	2.52	3.39	4.26
Total	**21676.73**	**1737.22**	**-**	**1737.22**	**23413.95**		**1146.87**	**1192.57**	**1238.27**
					Average Gross Block (₹ in lakh)		**0.00**	**22545.34**	**23413.95**
					Weighted Average Rate of Depreciation		**5.29%**	**5.29%**	**5.29%**

Asset-V

2019-24	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	Annual Depreciation as per Regulations (₹ in lakh)	
Capital Expenditure		Total			2022-23	2023-24
Sub Station	99.23	47.11	146.34	5.28%	5.24	6.49
Total	**99.23**	**47.11**	**146.34**		**5.24**	**6.49**
			Average Gross Block (₹ in lakh)		**99.32**	**122.87**
			Weighted Average Rate of Depreciation		**5.28%**	**5.28%**