

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 3/TT/2023

Coram:

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

Date of Order: 12.11.2025

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for determination of transmission tariff from COD to 31.3.2024 for Asset-I: 2 Nos. 400 kV 80 MVAR line reactors of 400 kV Wardha-Aurangabad D/C line (upgradable to 1200 kV S/C) charged as bus reactors at Wardha Sub-station and Asset-II: Wardha-Aurangabad 400 kV D/C (quad) line with provision to upgrade the line to 1200 kV at a later date under Transmission System associated with Mundra Ultra Mega Power Project.

And in the matter of:

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

... Petitioner

Vs.

- 1. Madhya Pradesh Power Management Company Ltd.,
Shakti Bhawan, Rampur,
Jabalpur - 482 008**
- 2. Madhya Pradesh Power Transmission Company Ltd.,
Shakti Bhawan, Rampur,
Jabalpur - 482 008**
- 3. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd.,
3/54, Press Complex, Agra-Bombay Road, Indore-452 008**



4. **Maharashtra State Electricity Distribution Co. Ltd.,**
Hongkong Bank Building, 3rd Floor,
M.G. Road, Fort, Mumbai-400 001.
5. **Maharashtra State Electricity Transmission Co. Ltd.,**
Prakashganga, 6th Floor, Plot No. C-19, E-Block,
Bandra Kurla Complex, Bandra (East) Mumbai-400 051.
6. **Gujarat Urja Vikas Nigam Ltd.,**
Sardar Patel Vidyut Bhawan,
Race Course Road, Vadodara - 390 007
7. **Electricity Department,**
Government of Goa, Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa - 403 001
8. **Electricity Department,**
Administration of Daman & Diu,
Daman - 396 210
9. **DNH Power Distribution Corporation Ltd.,**
Vidyut Bhawan, 66kV Road, Near Secretariat Amli,
Silvassa - 396 230
10. **Chhattisgarh State Power Transmission Co. Ltd.,**
Office of the Executive Director (C&P),
State Load Despatch Building,
Dangania, Raipur – 492 013
11. **Chhattisgarh State Power Distribution Co. Ltd.,**
P.O. Sunder Nagar, Dangania, Raipur.
Chhattisgarh-492 013

... Respondent(s)

For Petitioner : Ms. Swapna Seshadri, Advocate, PGCIL
Shri Utkarsh Singh, Advocate, PGCIL
Ms. Sneha Advocate, PGCIL
Shri Mohd. Mohsin, PGCIL
Shri Zafrul Hasan, PGCIL
Shri Arjun Malhotra, PGCIL

For Respondents : Shri Ravi Sharma, Advocate, MPPMCL
Shri Anup Jain, Advocate, MSEDCL



ORDER

The Power Grid Corporation of India Limited (PGCIL), has filed this Petition for the determination of the transmission tariff from the date of commercial operation (COD) to 31.3.2024 for Asset-I: 2 Nos. 400 kV 80 MVAR line reactors of 400 kV Wardha-Aurangabad Double Circuit (D/C) line (upgradable to 1200 kV Single Circuit [S/C]) charged as bus reactors at Wardha Substation and Asset-II: Wardha-Aurangabad 400 kV D/C (quad) line with provision to upgrade the line to 1200 kV at a later date under “Transmission System associated with Mundra Ultra Mega Power Project” in the Western Region. Asset-I and Asset-II are hereinafter collectively referred to as ‘transmission assets’ in this order.

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

- “1) Condone the delay in the commissioning of assets covered under this petition.*
- 2) Approve the Transmission Tariff for the tariff block 2019-24 block for the assets covered under this petition, as per para –8.0 above.*
- 3) Admit the capital cost as claimed in the Petition and approve the Additional Capitalization incurred / projected to be incurred.*
- 4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 as per para 8 above for respective block.*
- 5) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.*
- 6) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
- 7) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.*



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

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

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

Background

3. The brief facts of the case are as follows:

a. The scheme of “Transmission System associated with Mundra Ultra Mega Power Project” (for short, ‘the transmission project’) was discussed and approved at the 25th Standing Committee meeting of the Western Region held on 30.9.2006. The same was also ratified at the 2nd WRPC meeting held on 12.10.2006.

b. Thereafter, the Investment Approval (IA) for the transmission project was accorded by the Competent Authority of the Petitioner in its 213th meeting held on 17.9.2008 and circulated vide the Memorandum Ref.: C/CP/Mundra dated 15.10.2008, with an estimated cost of ₹482412 lakh, including an Interest During Construction (IDC) of ₹44686 lakh based on the first quarter of 2008 price level. The scheduled date of commercial operation (SCOD) of the transmission assets was within 48 months from the date of Investment Approval. Accordingly, the SCOD of the transmission assets is 14.10.2012.

c. The details of the transmission assets, the scheduled commercial operation date (SCOD), date of commercial operation (COD), and time overrun, are as follows:

Asset	SCOD	COD	Delay
Asset-I: 2 Nos. 400 kV 80 MVA line reactors of 400 kV Wardha-Aurangabad D/C line (upgradable to	14.10.2012	3.7.2019	06 Years 08 Months 18 Days



1200 kV S/C) charged as bus reactors at Wardha Substation.			
Asset-II: Wardha-Aurangabad 400 kV D/C (quad) line with provision to upgrade the line to 1200 kV at a later date.	14.10.2012	1.4.2021	08 Years 05 Months 17 Days

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

Part (A): Transmission System associated with Mundra (4000 MW) UMPP

Transmission Lines:

- i) Mundra - Limdi 400 kV D/C : 301 km
- ii) Mundra-Bachchau-Ranchodpura
400 kV D/C (Triple snowbird) : 388 km
- iii) Mundra-Jetpur 400 kV D/C (Triple snowbird) : 328 km

Part (B): Regional System Strengthening in WR for Mundra UMPP

Transmission Lines:

- i) Gandhar-Navsari 400 kV D/C : 134 km
- ii) Navsari-Mumbai (new location) 400 kV D/C : 204 km
- iii) LILO of both circuits of Kawas-Navsari 220 kV D/C at Navsari : 50 km
- iv) Wardha-Aurangabad 400 kV D/C (Quad) along with 40% FSC with provision to upgrade the line to 1200 kV S/C : 400 km
- v) Aurangabad-Aurangabad (MSETCL) 400 kV D/C (Quad) line : 30 km

Sub-stations:

- i) Establishment of new 400/200 kV, 2x315 MVA Sub-stations at Bachchau
- ii) Establishment of new 400/200kV, 2x315 MVA GIS Sub-stations at Navsari
- iii) Establishment of a new 400 kV GIS switching station at Mumbai (New location)
- iv) Establishment of new 765/400 kV, 3x1500 MVA Sub-stations at Wardha
- v) 765 kV line bays for operation of Seoni-Wardha 2xS/C lines at 765 kV level
- vi) Establishment of new 400/220 kV, 2x315 MVA Sub-stations at Aurangabad

e. Subsequently, the Revised Cost Estimates (RCE) of the transmission project have also been approved by the Board of Directors of the Petitioner at its 326th meeting held on 9.3.2016, circulated vide the Memorandum No. C/CP/RCE/Mundra UMPP dated



11.3.2016, with an estimated cost of ₹507194 lakh, including an Interest During Construction (IDC) of ₹43189 lakh based on the October 2015 price level.

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

Part (A): Transmission System associated with Mundra (4000 MW) UMPP

Transmission Lines:

- i) Mundra – Limdi (GETCO) 400 kV D/C (Triple snowbird) Line
- ii) Mundra-Bachchau-Ranchodpura (GETCO) 400 kV D/C (Triple snowbird) Line
- iii) Mundra-Jetpur (GETCO) 400 kV D/C (Triple snowbird) Line

Part (B): Regional System Strengthening in WR for Mundra UMPP

Transmission Lines:

- i) Gandhar (NTPC)-Navsari 400 kV D/C
- ii) Navsari-Boisar 400 kV D/C
- iii) LILO of both circuits of Kawas-Navsari 220 kV D/C line at Navsari
- iv) Wardha-Aurangabad 400 kV D/C (Quad) along with 40% Fixed Series Compensation with provision to upgrade the line to 1200 kV S/C
- v) Aurangabad-Aurangabad (MSETCL) 400 kV D/C (Quad) line along with shifting of Akola-I- Aurangabad-I (MSETCL) line to Aurangabad (Power Grid), including multi-circuit towers.

Sub-stations:

- i) Establishment of new 400/200 kV, 2x315 MVA Sub-stations at Bachchau
- ii) Establishment of new 400/200 kV, 2x315 MVA GIS Sub-stations at Navsari
- iii) Bay extension at 400 kV Boisar substation
- iv) Establishment of new 765/400 kV, 3x1500 MVA Sub-stations at Wardha
- v) 765 kV line bays for operation of Seoni-Wardha 2xS/C lines at 765 kV level
- vi) Establishment of new 400/220 kV, 2x315 MVA substations at Aurangabad

g. Revised Cost Estimates-II (RCE-II) of the transmission project has also been approved by the Board of Directors of Petitioner in its 126th meeting held on 9.11.2021, circulated vide the Memorandum No. C/CP/PA2122-08-0W-RCE003 dated 18.11.2021 with an estimated cost of ₹552766 lakh based on the March 2021 price level.

h. The scope of work covered under the transmission project, as per the RCE-II, is as follows:



Part-I: Works excl. FSC for Wardha -Aurangabad 400 kV D/C (Quad) line at Wardha Sub-station

Part (A): Transmission System associated with Mundra (4000 MW) UMPP

Transmission Lines:

- i) Mundra – Limdi (GETCO) 400 kV D/C (Triple snowbird) Line
- ii) Mundra-Bachchau-Ranchodpura (GETCO) 400 kV D/C (Triple snowbird) Line
- iii) Mundra-Jetpur (GETCO) 400 kV D/C (Triple snowbird) Line

Sub-station

- i) Extension of 400 kV Bhachau Sub-station
- ii) Extension of 400 kV Limbdi (GETCO), 400 kV Ranchodpura (GETCO) and 400 kV Jetpur (GETCO) Substation

Reactive Compensation

Line Reactor

Line	From End	To End
Mundra – Limdi (GETCO) 400 kV D/C	-	2x63 MVAR
Mundra-Bachchau- 400 kV D/C	-	-
Bachchau-Ranchodpura (GETCO) 400 kV D/C	-	2x50 MVAR
Mundra-Jetpur (GETCO) 400 kV D/C	-	2x63 MVAR

Part (B): Regional System Strengthening in WR for Mundra UMPP

Transmission Lines:

- i) Gandhar (NTPC)-Navsari 400 kV D/C
- ii) Navsari-Boisar 400 kV D/C with intermittent common M/C portions
- iii) LILO of both circuits of Kawas-Navsari 220 kV D/C line at Navsari
- iv) Wardha-Aurangabad 400 kV D/C (Quad) with provision to upgrade the line to 1200 kV S/C
- v) Aurangabad-Aurangabad (MSETCL) 400 kV D/C (Quad) line along with shifting of Akola-I- Aurangabad-I (MSETCL) line to Aurangabad (Power Grid) including multi-circuit towers.

Sub-stations:

- i) Establishment of new 400/200 kV, 2x315 MVA Sub-stations at Bachchau
- ii) Establishment of new 400/200 kV, 2x315 MVA GIS Sub-stations at Navsari
- iii) Bay Extension at 400 kV Boisar Sub-stations.
- iv) Establishment of new 765/400 kV, 3x1500 MVA Sub-stations at Wardha
- v) 765 kV line bays for operation of Seoni-Wardha 2xS/C lines at 765 kV level
- vi) Establishment of new 400/220 kV, 2x315 MVA Sub-stations at Aurangabad
- vii) Extension of 400 kV Gandhar (NTPC) Sub-stations



viii) Extension of 400 kV Aurangabad -I (MSETCL) Sub-stations **Reactive Compensation**

Line Reactor

Line	From End	To End
Wardha-Aurangabad 400 kV D/C (Quad)	2x80 MVAR	2x80 MVAR
Charging of Seoni-Wardha 2xS/C at 765 kV level	2x240 MVAR*	2x240 MVAR

Bus Reactor

Sub-station	765 kV Bus	400 kV Bus
400 kV Bhachau		1x63 MVAR
400 kV Navsari		1x63 MVAR
765 kV Wardha Sub-station	1x240 MVAR	

Part-II : Work associated with FSC for Wardha -Aurangabad 400 kV D/C (Quad) line at Wardha Sub-station

Sub-station

40% Fixed Series Compensation for Wardha-Aurangabad 400 kV D/C (Quad) line at Wardha Sub-station.

- i. Details of the transmission assets covered under the transmission project are as follows:

Description	Asset name	COD
CERC order dated 26.5.2016 in Petition No. 20/TT/2015		
400 kV D/C Mundra- Bachchau TL, along with associated bays.	Combined Assets-A	1.10.2011
400 kV D/C Bachchau – Ranchoddhpura TL.		1.10.2011
Part of the 400 kV D/C Mundra – Limbdi (from tapping point at Surajbadi to Limbdi) line, along with associated bays.		1.12.2011
400 kV D/C Mundra – Surajbari (balance portion) TL.		1.3.2012
New 400/220 kV Bachchau Sub-station (Gujarat) and 1x63 MVAR Bus Reactor at Bachchau Sub-station (New) along with associated bays.		1.10.2011



Description	Asset name	COD
400/220 kV ICT-I and II along with associated bays at Bachchau Sub-station.		1.10.2011
400 kV D/C Surajbari-Jetpur TL (Part of 400 kV D/C Mundra-Jetpur) (Triple snowbird) with associated bays at Jetpur (GETCO).		1.9.2012
400 kV D/C Mundra – Surajbari TL (Part of 400 kV D/C Mundra-Jetpur) (Triple snowbird).		1.1.2013
400 kV Gandhar (NTPC) – Navsari TL ckt-II associated bays at Gandhar (NTPC)–Navsari (GIS) S/S, Navsari GIS S/S (new) and Bus reactor at Navsari GIS.		1.8.2012
400 kV Gandhar (NTPC) – Navsari TL ckt-I associated bays at Gandhar (NTPC) & Navsari (GIS) S/S, Navsari GIS S/S (new).		1.11.2012
LILO of 220 kV D/C Kawas – Navsari T/L at Navsari GIS S/S & 400/220 kV ICT-II along with associated bays at GIS S/S at Navsari.		1.8.2012
400/220 kV ICT-I along with associated bays at Navsari GIS S/S.		1.9.2012
CERC order dated 2.12.2019 in Petition No. 194/TT/2018		
Establishment of 765/400 kV Wardha SS with 1500 MVA ICT1, 240 MVAR Bus Reactor and Switchable 240 MVAR Line Reactor at Seoni, Bays for Seoni-Wardha Ckt-2 at Wardha SS & Seoni SS.	Combined Asset-B	1.3.2012
765/400 kV 1500 MVA ICT 3 at Wardha SS with bays.		1.3.2012
Bay Extension at 765 kV Seoni SS & Wardha SS for 765 Seoni-Wardha Ckt-1 along with switchable Line Reactor at Seoni.		1.6.2012
765/400 kV 1500 MVA ICT 2 at Wardha SS with bays.		1.4.2012
Aurangabad (MSETCL) – Aurangabad (PG) D/C Line and Shifting of Akola - Aurangabad (MSETCL) line to Aurangabad (PG) (twin) (LILO of 400 kV Akola – Aurangabad TL Ckt – II at Aurangabad (PG) with associated bays at both ends.		1.2.2014
400/220 kV 315 MVA ICT-I at Aurangabad with bays		1.2.2014
400/220 kV 315 MVA ICT-II at Aurangabad with bays.		1.2.2014
2 Nos. 80 MVAR Line reactor for 400kV D/C Wardha- Aurangabad TL Ckt#1&2 charged as Bus reactor 1 & 2 at 400/220kV Aurangabad S/S.		1.2.2014
400 kV D/C Navsari-New Mumbai (Boisar) {cut-off point of WRTS-II portion only} {Part of 400 kV Navsari-Boisar TL} along with respective bays at Navsari GIS SS associated with Regional System of Mundra UMPP (Interconnection with Vapi-Navi Mumbai line along with associated bays at Vapi SS) under an interim contingency arrangement.		1.4.2013

Description	Asset name	COD
CERC order dated 29.4.2016 in Petition No. 185/TT/2014		
Aurangabad (MSETCL)-Aurangabad (PG) 400kV D/C (Quad) Line (Ckt-#1) AND Shifting of 400kV D/C Akola-Aurangabad (MSETCL) line to Aurangabad (PG) along with associated bays at both ends	Asset-C1	30.4.2014
Aurangabad (MSETCL)-Aurangabad (PG) 400 kV D/C (Quad) Line (Ckt-#2) AND Shifting of 400kV D/C Akola-Aurangabad (MSETCL) line to Aurangabad (PG) along with associated bays at both ends.	Asset-C2	29.4.2014
400kV D/C Vapi -Kala TL WR1 portion from AP 38- AP44 and AP44- AP45A/0 (Part of 400kV D/C Navsari - Boisar TL).	Asset-C3	1.4.2014
CERC order dated 23.7.2018 in Petition no. 207/TT/2017		
Part of 400 kV D/C Navsari Boisar T/L from 45A/0 to 69/0 (D/C portion strung on M/C Twin-Twin portion comprising of 400 kV D/C Navsari-Boisar and 400 kV D/C Vapi-Kudus), Part of 400 kV D/C Navsari-Boisar T/L from 69/0 to 313/0 and Part of 400 kV D/C Navsari - Boisar from 313/0 to 332/0 (D/C portion strung on M/C Twin-Quad portion comprising of 400 kV D/C Navsari-Boisar and 400 kV D/C Aurangabad - Boisar).	Asset-D1	31.12.16
240 MVar Switchable Line Reactor for 765 kV Seoni-Wardha Ckt.#1 at Seoni S/S.	Asset-D2	2.5.2014
240 MVar Switchable Line Reactor for 765 kV Seoni-Wardha Ckt.#2 at Seoni S/S.	Asset-D3	1.4.2014
Part of 400 kV D/C Vapi-Kudus T/L from location 44-45A/0 (D/C portion strung on M/C Twin-Twin portion comprising of 400 kV D/C Navsari-Boisar and 400 kV D/C Vapi-Kudus)- {400 kV D/C Navsari - Boisar portion from location 44 to 45A/0 already commissioned on 01.04.2014}.	Asset-D4	1.3.2015
Part of 400 kV D/C Aurangabad - Boisar from 313/0 to 332/0 (D/C portion strung on M/C Twin-Quad portion comprising of 400 kV D/C Navsari-Boisar and 400 kV D/C Aurangabad-Boisar).	Asset-D5	29.12.2017
Part of 400 kV D/C Vapi-Kudus T/L from 45A/0 to 69/0 (D/C portion strung on M/C Twin-Twin portion comprising of 400 kV D/C Navsari-Boisar and 400 kV D/C Vapi-Kudus), Part of 400 kV D/C Vapi - Kudus T/L from 69/0 - 104/0.	Asset-D6	31.12.2017
Covered under instant petition		
2 Nos. 400 kV 80 MVar line reactors of 400 kV Wardha-Aurangabad D/C line (upgradable to 1200 kV S/C) charged as bus reactors at Wardha Sub-station.	Asset-I	3.7.2019



Description	Asset name	COD
Wardha-Aurangabad 400 kV D/C (quad) line with provision to upgrade the line to 1200 kV at a later date.	Asset-II	1.4.2021
Yet to achieve COD		
40% FSC on Wardha-Aurangabad 400kV D/C (quad) line at Wardha Sub-station.		

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

5. The Petitioner has served a copy of the Petition on the Respondents, and notice regarding the filing of this Petition has been published in newspapers in accordance with Section 64 of the Electricity Act, 2003 (the Act). No comments or suggestions have been received from the general public in response to the notice published by the Petitioner. The Respondents, namely, Madhya Pradesh Power Management Company Limited (MPPMCL) (Respondent No. 1) and Maharashtra State Electricity Distribution Company Limited (MSEDCL) (Respondent No. 4), have submitted their replies vide the affidavits dated 23.1.2024 and 15.1.2024, respectively. The Petitioner has filed its rejoinders through separate affidavits dated 9.2.2024. The responses provided by MPPMCL and MSEDCL, along with the clarifications offered by the Petitioner, are considered in the relevant portion of this order.

6. This order is issued considering the submissions made by the Petitioner in the Petition vide affidavits dated 9.12.2022, 18.12.2023, 16.1.2024 and 18.3.2024, MPPMCL and MSEDCL replies vide affidavits and rejoinder of the Petitioner to the replies of the Respondents.

7. After hearing the parties, the order in the matter was reserved on 30.9.2024.

8. Having heard the learned counsel for the Petitioner and Respondents and perused the documents on record, we now proceed to dispose of the Petition.



DETERMINATION OF ANNUAL FIXED CHARGES FOR THE 2019-24 TARIFF PERIOD

9. The Petitioner has claimed the following transmission charges in respect of the transmission assets from their respective CODs to 31.3.2024:

Asset-I

(₹ in lakh)

Particulars	2019-20 (Pro-rata for 273 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	77.71	107.85	110.00	110.00	110.00
Interest on Loan	55.97	72.29	67.07	60.30	53.60
Return on Equity	79.83	110.61	112.61	112.61	112.61
Operation & Maintenance Expenses	47.96	66.56	68.90	71.32	73.82
Interest on Working Capital	5.30	7.29	7.37	7.38	7.37
Total	266.77	364.60	365.95	361.61	357.40

Asset-II

(₹ in lakh)

Particulars	2021-22	2022-23	2023-24
Depreciation	7251.38	7528.30	7717.83
Interest on Loan	4111.94	3932.45	3717.65
Return on Equity	7737.98	8033.50	8235.76
Operation & Maintenance Expenses	493.46	510.89	528.66
Interest on Working Capital	269.23	275.05	277.31
Total	19863.99	20280.19	20477.21

10. The Petitioner has claimed the following Interest on Working Capital (IWC) in respect of the transmission assets for the period from their CODs to 31.3.2024:

Asset-I

(₹ in lakh)

Particulars	2019-20 (Pro rata for 273 days)	2020-21	2021-22	2022-23	2023-24
O&M Expenses	5.36	5.55	5.74	5.94	6.15
Maintenance Spares	9.65	9.98	10.34	10.70	11.07
Receivables	43.97	44.95	45.12	44.58	43.94
Total Working Capital	58.98	60.48	61.20	61.22	61.16
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	5.30	7.29	7.37	7.38	7.37



Asset-II

(₹ in lakh)

Particulars	2021-22	2022-23	2023-24
O&M Expenses	41.12	42.57	44.06
Maintenance Spares	74.02	76.63	79.30
Receivables	2,448.98	2,500.30	2,517.69
Total Working Capital	2,564.12	2,619.50	2,641.05
Rate of Interest (in %)	10.50	10.50	10.50
Interest on Working Capital	269.23	275.05	277.31

Date of Commercial Operation (COD)

11. The Petitioner has claimed the CODs of Assets-I and II as 3.7.2019 and 1.4.2021, respectively. In support of the COD of Asset-I, the Petitioner has submitted a copy of the CEA Energisation Certificate dated 9.2.2017, the WRLDC Charging Certificate dated 30.7.2019 certifying the successful completion of trial operation on 1.7.2019, in accordance with Regulation 6.3A (5) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code), the CMD Certificate certifying the capability to operate at full capacity, and the self-declaration COD letter dated 26.8.2019 as required under the Grid Code.

12. In support of the COD of Asset-II, the Petitioner has submitted a copy of the CEA Energisation Certificate dated 23.3.2021, the WRLDC Charging Certificate dated 15.4.2021 certifying the successful completion of trial operation on 31.3.2021, in accordance with Regulation 6.3A (5) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code), the CMD Certificate certifying the capability of operation at its full capacity, and the self-declaration COD letter dated 1.4.2021 as required under the Grid Code.

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

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

(2) In case the transmission system or element thereof executed by a transmission licensee is ready for commercial operation but the interconnected generating station or the transmission



system of other transmission licensee as per the agreed project implementation schedule is not ready for commercial operation, the transmission licensee may file petition before the Commission for approval of the date of commercial operation of such transmission system or element thereof: Provided that the transmission licensee seeking the approval of the date of commercial operation under this clause shall give prior notice of at least one month, to the generating company or the other transmission licensee and the long term customers of its transmission system, as the case may be, regarding the date of commercial operation:

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

(a) Energisation certificate issued by the Regional Electrical Inspector under Central Electricity Authority;

(b) Trial operation certificate issued by the concerned RLDC for charging element with or without electrical load;

(c) Implementation Agreement, if any, executed by the parties;

(d) Minutes of the coordination meetings or related correspondences regarding the monitoring of the progress of the generating station and transmission systems;

(e) Notice issued by the transmission licensee as per the first proviso under this clause and the response;

(f) Certificate of the CEO or MD of the company regarding the completion of the transmission system including associated communication system in all respects.

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

(a) the first date of the year succeeding the year in which 25% of the Peak Rated Capacity as per the Mining Plan is achieved; or

(b) the first date of the year succeeding the year in which the value of production estimated in accordance with Regulation 7A of these regulations, exceeds total expenditure in that year; or

(c) the date of two years from the date of commencement of production:

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

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

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

14. The Petitioner has submitted that it has put into commercial operation 2 Nos. 400 kV 80 MVar line reactors at Wardha Sub-station, which were being implemented for the 400 kV Wardha-Aurangabad D/C line as bus reactors at Wardha Sub-station.



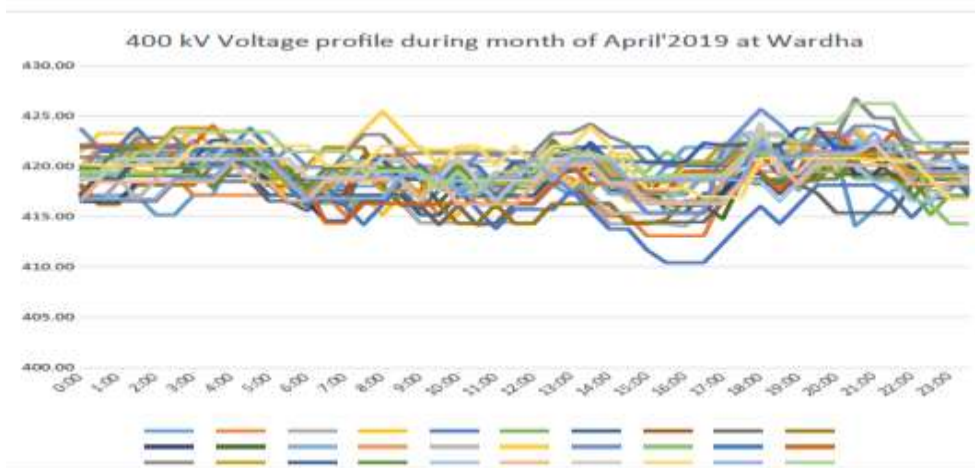
15. We have gone through the Petitioner's submissions. We think it appropriate here to refer to the relevant extracts of the Minutes of the 1st meeting of the Western Region Standing Committee on Transmission held on 5th September 2018, which are as follows:

“34. Charging of 400 kV Wardha – Aurangabad (1200 kV Wardha – Aurangabad) Line Reactor as Bus reactor

34.1. CTU stated that the voltage at Wardha substation remains persistently high throughout the year. The 400 kV Voltage profile of Wardha substation during last week of April 2019 is as follows:



The voltage observed at Wardha substation during the month of April, 2019 is as given below:



34.2. CEA stated that provision 1x330 MVar 765 kV bus reactor at Wardha substation has already been agreed in the 42nd meeting of SCPSPWR held on 17.11.2017 as a part of reactive power compensation to control high voltages in WR in the time frame of 2021 – 22. The scheme Provision of Bus Reactors at High Voltage Nodes in Western Region was recommended to be implemented under RTM in the 2nd ECT meeting held on 06.08.2018.

34.3. CTU stated that scheme is under implementation by POWERGRID as WRSS-20 scheme and the SCOD of the scheme is 25 months from IA (investment approval). The IA of the scheme is expected in June/July 2019. Commissioning of bus reactor at Wardha would take time. However, 80 MVAR line Reactors on each ckt of Wardha - Aurangabad 400 kV D/c line (Wardha – Aurangabad 1200 kV S/C line charged at 400 kV level) at Wardha end are ready for commissioning and the same may be used as bus reactors for voltage control at Wardha S/s. 34.4. CEA enquired about the commissioning of Wardha - Aurangabad 400 kV D/c line (Wardha – Aurangabad 1200 kV S/C line charged at 400 kV level). CTU stated that line is expected to be commissioned by December 2019.

34.5. Members agreed for utilisation of the 80MVAR line Reactors on each ckt of Wardha - Aurangabad 400 kV D/c line (Wardha – Aurangabad 1200 kV S/C line charged at 400 kV level) at Wardha end as bus reactors till the commissioning of the line (expected by Dec'19).

16. Perusal of the record reveals that the RLDC Charging Certificate dated 30.7.2019 was issued for the trial operation certification of the commissioning of 2 Nos. 80 MVAR line reactors as bus reactors at Wardha Sub-station, and the details are as follows:





पावर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड
(भारत सरकार का उद्यम)
POWER SYSTEM OPERATION CORPORATION LIMITED
(A Government of India Enterprise)



Amet-L

पश्चिमी क्षेत्रीय भार प्रेषण केन्द्र

एफ-3, सेंट्रल रोड, एम्.आई.डी.सी. एरिया, मरोल, अन्बेरी (पूर्व), मुंबई - 400 093.

दूरभाष : 022-28202690 • फैक्स : 022-28235434, 28202630 • ई-मेल : wrldc@posoco.in

WESTERN REGIONAL LOAD DESPATCH CENTRE

F-3, Central Road, MIDC Area, Marol, Andheri (East), Mumbai - 400 093.

Phone : 022-28202690 • Telefax : 28235434, 28202630 • E-mail : wrldc@posoco.in

CIN : U40105DL2009GOI188682

संदर्भ संख्या / Certificate Number: WRLDC/WR-1/87

Date: 30/07/2019

Certificate of Completion of Trial Operation of Transmission Element(s)/bay(s)

Reference:

- WRTS-1 Communication dated 30.05.2019 (Format-I and IA)
- WRLDC Communication to WRTS-1 dated 30.05.2019 (Format-II-Acknowledgement)
- WRTS-1 Communication dated 10.06.2019 (w.r.t. Formats-III,IIIA,IIIB,IIIC,IIID)
- WRLDC Communication to WRTS-1 dated 15.06.2019(Provisional Approval)
- WRTS-1 request dated 01.07.2019 for charging/trial operation
- WRLDC codes for charging/trial operation dated 01.07.2019
- Communication dated 26.07.2019 from WRTS-1 [C1-C4, related information]

Based on the above documents under reference, it is hereby certified that the following Transmission elements/bays have successfully completed trial operation.

Name of the Transmission Asset:	1. 400 kV, 80 MVAR Line reactor of Wardha-Aurangabad line-1 as Bus reactor at Wardha. 2. 400 kV, 80 MVAR Line reactor of Wardha-Aurangabad line-2 as Bus reactor with main bay 425 at Wardha. 3. 400 kV tie bay 426 of Wardha-Aurangabad line-2 at Wardha. 4. 400 kV Future bay 427 of Wardha-Aurangabad line-2 at Wardha.
Owner of the Transmission Asset:	WRTS-I, POWERGRID
Period of Trial Operation (From Date/Time – To Date/Time)	1. 01.07.2019 17:21 hrs to 02.07.2019 17:21 hrs 2. 01.07.2019 18:44 hrs to 02.07.2019 18:44 hrs 3. 01.07.2019 18:53 hrs to 02.07.2019 18:53 hrs 4. 01.07.2019 18:57 hrs to 02.07.2019 18:57 hrs

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

V. K. Shrivastava
Executive Director

To: ED, WRTS-I, POWERGRID

Copy to: 1. Member Secretary, WRPC | 2. Chief GM(I/C), NLDC



वी. के. श्रीवास्तव / V. K. Shrivastava
वर्यपालक निदेशक / Executive Director
पावर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड
POWER SYSTEM OPERATION CORPORATION LIMITED
प.क्षेत्रीय भार प्रेषण केन्द्र, मुंबई. / W.R.L.D.C., MUMBAI.



17. In view of the above, based on the approval in the first meeting of the Western Region Standing Committee on Transmission held on 5th September 2018, we approve the utilization of the 80 MVAR line Reactors on each circuit of the Wardha - Aurangabad 400 kV D/C line (Wardha – Aurangabad 1200 kV S/C line charged at 400 kV level) at Wardha end as Bus Reactors. Considering the CEA Energisation Certificate, RLDC Charging Certificate, and CMD Certificate, the COD of Asset-I is approved as 3.7.2019.

18. In the case of Asset-II, considering the CEA Energisation Certificate, RLDC Charging Certificate and CMD Certificate, the COD of Asset-II is approved as 1.4.2021.

Capital Cost

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

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

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

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) *Capitalised initial spares subject to the ceiling rates in accordance with these regulations;*
- (f) *Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) *Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
- (i) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to 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 up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
 - (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (4) The capital cost in case of existing or new hydro generating station shall also include:
- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
 - (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.
- (5) The following shall be excluded from the capital cost of the existing and new projects:
- (a) The assets forming part of the project, but not in use, as declared in the tariff petition;
 - (b) De-capitalised 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."



20. The Petitioner has claimed the following capital cost as on COD and Additional Capital Expenditure (ACE) projected to be incurred till FY 2023-24:

(₹ in lakh)

Asset	Apportioned Approved Cost		Cost as on COD	Projected Additional Capitalisation					Estimated Completion Cost
	FR	RCE		2019-20	2020-21	2021-22	2022-23	2023-24	
Asset-I	2163.13	2741.88	1908.51	18.88	71.24	-	-	-	1998.63
Asset-II	95181.03	152682.86	135938.48	-	-	3816.46	5639.14	1539.87	146933.95
Total	97344.16	155424.74	137846.99	18.88	71.24	3816.46	5639.14	1539.87	148932.58

21. The capital cost incurred up to the COD and projected to be incurred up to FY 2023-24 is duly certified in the Auditor's Certificate dated 24.6.2021.

22. The present Petition is for approval of the transmission tariff based on actual expenditure incurred up to the COD and additional capitalisation projected to be incurred from COD to 31.3.2024 in respect of the transmission assets. The Petitioner has submitted that the estimated completion cost is within the RCE-II approved cost. The Petitioner has submitted the following reasons of cost variation with respect to FR:

Asset-I:

(i) Sub-station (Decrease of ₹1.64 crore):

(a) Preliminary works, land, and Civil works (Decrease of ₹0.16 crore):

The cost under this head has decreased as per actual site conditions.

(b) Sub-station equipment (Decrease of ₹1.83 crore):

The variation in the cost of sub-station equipment is due to differences in the awarded costs obtained through competitive bidding. During procurement, an open competitive bidding process is used, offering equal opportunity to all eligible firms. This ensures that the lowest possible market prices for the required products or services are achieved, and that contracts are awarded to the lowest evaluated eligible bidder. The most competitive



bid prices received in tenders may be lower or higher than the estimated costs, depending on prevailing market conditions. Further, regarding the variation in the cost of individual items in the sub-station packages, the Petitioner has submitted that the packages under the scope of works comprise a large number of items, which are awarded through open competitive bidding. In this 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 identified or evaluated only on an overall basis. Therefore, item-wise unit prices in contracts and their variation from the unit rate considered in FR estimates are beyond the control of the Petitioner.

(ii) Increase in IDC (Increase of ₹1.46 crore):

The Petitioner has submitted that the increase in IDC is due to variations in the interest rate considered in FR compared to actuals, a decrease in overall capital costs relative to FR, and deployment of funds based on actuals. In FR, IDC was calculated assuming that loans would be available from domestic sources and that the interest rate on loans was considered @10% of domestic loans, subject to actuals. The actual IDC accrued up to COD has been included in the Auditor's Certificate.

(iii) Decrease in IEDC (Decrease of ₹1.11 crore):

The Petitioner has submitted that in the Investment Approval, 5% of the equipment cost and civil works have been considered for IEDC and contingency, respectively, whereas based on the actual expenditure under the subject head, IEDC has been considered in the Auditor's Certificate.



Asset-II:

(iv) Transmission Line (Increase of ₹393.24 crore)

a) Forest clearance and Crop/Tree compensation (Increase of ₹174.04 crore):

The Petitioner has submitted that ₹17.69 crore compensation was considered in FR in the 2007-08 period. However, as per the assessment of compensation by the revenue authorities, crop compensation is approximately ₹95 crore, and tree compensation of around ₹35 crore has been paid or is expected to be paid, based on actual damages and assessments by the authorities. The increase in crop compensation is due to higher crop rates, higher crop yields, and the high ROW width of the 1200 kV line, which led farmers to demand compensation for the entire corridor, as they were unable to farm during construction. Additionally, many farmers have started cultivating exotic vegetables such as tomato, bhindi, onion, haldi, and ginger, in addition to cotton and paddy. The approach road to most towers is long, and farmers also demanded compensation for the movement of vehicles along the approach. Further, higher tree compensation is mainly due to numerous grape gardens, orange orchards, sitaphal, pomegranate, mango plantations, guava orchards, and other fruit-bearing trees along the line. The per-tree rate has also increased significantly compared to the 2008 rates. Therefore, the overall crop and tree compensation has increased.

Further, as per the new Maharashtra GR 2017, land compensation has to be paid for tower base as well as along the corridor of the line; hence, on account of the new change in law, there is an increase of around ₹62 crore in land compensation.



b) Transmission line materials (Increase of ₹219.20 crore):

I. **Tower steel (Increase of ₹203.77 crore):** Approximately ₹23 crore additional cost incurred for prototype testing of newly designed 1200 kV towers. Further, approximately ₹92 crore cost increase resulted from re-awarding works to other agencies after terminating the contract with Aster, along with the associated risks and costs of BS Limited. Additionally, ₹88 crore more was spent due to increases in tower quantities, awarded rates, and price variations.

II. **Conductor, earth wire, insulator, hardware fittings and conductor and earth wire fittings (decrease of ₹51.98 crore):** As the line length decreased from 400 km to 350 km, the requirement of conductor and other transmission line materials has decreased. Hence, the cost has decreased.

III. **Erection, Stringing & Civil works including foundation (Increase of ₹67.41 crore):** Although the line length has decreased, the erection cost has increased due to an increase in tower quantity. Further, there is an increase in foundation civil works, such as fissured rocks, etc. There is also an increase in costs due to higher awarded rates and price variations.

(v) Sub-station (Increase of ₹12.74 crore):

(c) **Preliminary works, land and Civil works (decrease of ₹0.08 crore):**

The cost under this head has decreased as per actual site conditions.

(d) **Sub-station equipment (Increase of ₹12.66 crore):**

The Petitioner has submitted that for procurement, the open competitive bidding process is used, which offers equal opportunity to all eligible firms, guarantees the lowest possible market prices for the required products/services, and results in contracts being awarded



to the lowest evaluated eligible bidder. The most competitive bid prices against tenders can either be lower or higher than the cost estimate, depending on current market conditions. Additionally, regarding fluctuations in the cost of individual items within S/S packages, the Petitioner submitted that the packages under the scope of work include numerous items, all awarded through open competitive bidding. In this process, bids are received from multiple parties offering different rates for various BOQ items within the package. Moreover, the lowest bidder can only be identified or evaluated on an overall basis. Therefore, item-wise unit prices in contracts and their deviations from the unit rates considered in FR estimates are beyond the control of the Petitioner.

(vi) Increase in IDC (Increase of ₹151.83 crore):

The Petitioner has submitted that the increase in IDC is due to variations in the interest rate considered in FR compared to actuals, a decrease in overall capital cost with respect to FR, and the deployment of funds based on actuals. In FR, IDC was calculated assuming that loans would be available from domestic sources, with the interest rate on loans considered at 10% of domestic loans subject to actuals. The actual IDC accrued up to COD has been included in the Auditor's Certificate.

(vii) Decrease in IEDC (Decrease of ₹40.28 crore):

In the investment approval, 5% of the equipment cost and civil works have been considered for IEDC and contingency. However, based on the actual expenditure under the relevant head, IEDC has been included in the Auditor's Certificate.

23. According to MPPMCL, the cost of Asset-II has increased by more than 150%. MPPMCL has submitted that, since the RCE is approved by the Petitioner's Board of Directors, it is not sacrosanct and is subject to the Commission's scrutiny. Therefore, RCE II will not be regarded



as a reference point until the Commission completes its prudence check in accordance with the 2019 Tariff Regulations. MPPMCL has further submitted that the Petitioner's improper project planning and management have not only caused a time overrun but also a cost overrun, and therefore, the cost overrun should be disallowed.

24. In response to the queries raised by the Respondents, the Petitioner has submitted that its Board of Directors or Competent Authority approves the RCEs, prepared in accordance with the current Works and Procurement Policy, only after completing a comprehensive and rigorous approval process. This process is thorough, and the Petitioner's Board approves the RCE only after being fully satisfied with the incurred or projected expenditure and the reasons for it.

25. We have considered the submissions of the Petitioner and MPPMCL. In the case of Asset-I, the estimated completion cost has reduced by ₹164.50 lakh compared to the FR cost. This reduction is due to a decrease of ₹184.00 lakh in sub-station equipment costs, an increase of ₹146.00 lakh under IDC (Interest During Construction), and a decrease of ₹111.00 lakh under IEDC (Incidental Expenditure During Construction), as per the Petitioner's submissions. The estimated completion cost of Asset-I is less than the FR cost. Accordingly, we approve the capital cost of Asset-I claimed by the Petitioner.

26. In the case of Asset-II, the estimated completion cost has increased by ₹51752.92 lakh compared to the FR cost. The increase in the completion cost of Asset-II is due to an increase of ₹39324.00 lakh in transmission line costs, of which ₹17404.00 lakh is attributable to forest clearance and crop/tree compensation paid. Additionally, transmission line costs have increased by ₹21920.00 lakh, including ₹18327.00 lakh for tower steel. There has been a decrease of ₹3148.00 lakh for conductor, earth wire, insulator, hardware fittings, and related components due to a decrease in the length of the transmission line. However, expenditure on erection,



stringing, and civil works, including foundations, has increased by ₹6741.00 lakh. The sub-station head has increased by ₹1274.00 lakh, with ₹0.08 crore allocated towards preliminary, land, and civil works, and ₹1266.00 lakh for sub-station equipment. Further, the IDC increased by ₹15183.00 lakh due to an extended project timeline and an overall increase in capital costs, whereas ₹4028.00 lakh decreased under the IEDC head.

27. We have gone through the submissions of the Petitioner. According to the Petitioner, an amount of ₹1769.00 lakh is envisaged for crop and tree compensation, whereas crop compensation of approximately ₹95 crore and around ₹35 crore has been paid for trees as per the assessment by the Revenue Authorities. The Petitioner is directed to submit documentary proof of the assessment of compensation details by the Revenue Authorities, the actual compensation paid with valid documentary evidence, and the same will be reviewed at the time of truing-up.

28. It is observed that, according to the Petitioner's submission, costs of ₹88 crore and ₹67.41 crore increased due to the rise in tower quantity, awarded rates, and price variation, as well as increases in erection, stringing, and civil works, including foundation works, respectively. However, it is observed that the requirement for conductor and other transmission line materials decreased due to a reduction in line length from 400 km to 350 km. Therefore, the Petitioner is directed to submit documentary evidence explaining the reasons for the increase in tower quantity despite the reduction in transmission line length, which resulted in higher material costs and increased costs for erection, stringing, and civil works, at the time of true-up.

29. The Petitioner has submitted a Revised Cost Estimate-II, in which they have apportioned the capital cost of Asset-II as ₹152682.86 lakh, and the completion cost is ₹146933.95 lakh. The 40% FSC on the Wardha-Aurangabad 400 kV D/C (quad) line at the Wardha Sub-station is yet



to be put into commercial operation. The requirement of FSC in both the current and future scenarios needs to be reassessed by CTUIL, as the scheme was planned in 2006, and its investment approval was given by the Petitioner in 2008, but the scheme has yet to be operationalised. The costs of FSC in the FR and RCE-II need to be separated from the transmission line cost. We provisionally approve the variation in capital cost subject to the condition that the Petitioner provide reasons for the cost variation between the award cost and the actual completion cost, justifies the need for FSC now and in the future, segregates FSC costs from the transmission line costs, and supplies details as directed above in this order, including recovery of damages or compensation from contractors whose contracts were terminated at the time of true-up.

Time Overrun

30. As per the Investment Approval dated 15.10.2008, the commissioning schedule of the transmission assets was within 48 months from the date of Investment Approval, i.e., by 14.10.2012. However, Asset-I and Asset- II were put into commercial operation on 3.7.2019 and 1.4.2021, respectively, resulting in delays of 6 years, 8 months, and 18 days, and 8 years, 5 months, and 17 days, respectively.

Reasons for the time overrun of the Transmission Assets

Asset-I

31. The Petitioner has submitted that the 2 Nos. 400 kV 80 MVAR line reactors at Wardha Sub-station were being implemented for the 400 kV Wardha-Aurangabad D/C line (upgradable to 1200 kV S/C) (Asset-II). Despite the Petitioner's diligent efforts to execute the assets, there was a time overrun in the case of Asset-II due to land acquisition issues, RoW issues, court cases, etc.



32. Further, the Petitioner has submitted that in the 2nd meeting of WRSCT held on 21.5.2019, CTU stated that the voltage at Wardha Sub-station remained high throughout the year. CTU also mentioned that the 80 MVar line reactors on each circuit of the Wardha-Aurangabad 400 kV D/C line (with the Wardha-Aurangabad 1200 kV S/C line to be charged at 400 kV level) at the Wardha end are ready for commissioning and can be used as bus reactors for voltage control at Wardha Sub-station. Members agreed to utilise the above-mentioned line reactors as bus reactors until the line is put into commercial operation.

33. MPPMCL has submitted that the only reason given by the Petitioner for the delay of 6 years, 8 months, and 18 days is the time overrun in the case of Asset-II. This explanation is illogical and unacceptable because the 765/400 kV Wardha Sub-station achieved COD on 1.3.2012, and bus reactors or line reactors need to be installed at the connection or termination end of the sub-station. The Petitioner had the option to approach this Commission to seek deemed COD of Asset I, i.e. 2 Nos. 400 kV, 80 MVar line reactors, but it chose not to do so in an apparent attempt to conceal its inefficiency.

34. MPPMCL has further submitted that the COD of Asset-I was not linked to that of Asset-II, as Asset-I was put into commercial operation 21 months earlier. Therefore, the Petitioner's claim that the delay in Asset-I was due to the delay in Asset-II is unfounded and unacceptable. Additionally, the construction and commissioning of 2 Nos. 400 kV 80 MVar line reactors for the 400 kV Wardha-Aurangabad D/C Line are separate elements and can be commissioned and declared COD independently, without waiting for the 400 kV Wardha-Aurangabad D/C line to be completed. The line reactors are used as bus reactors at Wardha Sub-station for voltage control until the commissioning of the Wardha -Aurangabad D/C line. Therefore, it was a faulty, negligent



approach that caused a 6-year, 8-month, and 18-day delay in commissioning these two 400 kV 80 MVar line reactors. Therefore, the period of time overrun is not liable to be condoned.

35. In response, the Petitioner has submitted that line reactors are installed at one end or both ends of transmission lines to compensate for capacitive reactive power generated by a long transmission line and are useful once the said transmission lines have achieved COD. Therefore, the contention of MPPMCL regarding Asset-I, which was not linked to the COD of Asset-II, is highly misplaced and liable to be rejected.

Asset-2

36. The Petitioner has submitted the reasons for time overrun in the case of the 400 kV D/C Wardha Aurangabad TL (Upgradable to 1200 kV), and it is as follows:

a) Delay in Land acquisition:

<i>Force Majeure event details</i>	Start Date	End Date	Delay in days
Delay in land acquisition at Aurangabad and subsequent delay in finalisation of line termination at Aurangabad	30.6.2008	30.12.2011	1020

37. There was a delay in COD of Asset-II due to a delay in land acquisition at Aurangabad and subsequent delays in finalising the line termination at Aurangabad. The detailed chronology for the land acquisition of the Aurangabad Sub-station is furnished below.

<u>Chronology of Events - Land Acquisition for Aurangabad S/S</u>	
Nature of Work :- Acquisition of land for the establishment of 1200/765/400/220 kV Sub-station at Village Chittepimpalgaon, Tehsil & Distt. Aurangabad	
Total Acquired Land: - a) Govt. Land – 11. 72 hectares b) Private Land – 98.83 hectares c) Total Land – 110.55 hectares	
Date	Event
30.6.2008	Application submitted by PGCIL to the District Collector, Aurangabad, for the requirement of approximately 150 acres of land near Aurangabad for the establishment of a 1200/765/400 kV sub-station at Aurangabad. As per the application, a total of 7 sites were proposed for sub-station establishment at Aurangabad as per the Land Acquisition Act, 1894.



Approximately 12 months are taken by the state authority to finalise the site and obtain clearances from various departments.	Accordingly, various meetings and site visits were held with District Authorities and Local Revenue persons to explore all proposed sites for the establishment of the POWERGRID Aurangabad sub-station. Finally, the following State Departments have given clearance to provide the required land to POWERGRID Sub-station on one of the proposed sites on Aurangabad – Beed Road (NH-211) near village Chittepimpalgaon, Tehsil & District – Aurangabad. a) Tehsildar Aurangabad report dated 26.11.2009 to SDM Aurangabad. b) Certificate from Dy. Director regarding the non-involvement of Social Forestry Land. c) Clearance from Town Planning Department dated 10.12.2009.
3.8.2009	Based on the above, POWERGRID has given a request letter to the District Collector, Aurangabad, for the alienation of 17.15 hectares of Government land and 105.22 hectares of private land at the selected site near the village Chittepimpalgaon, Tehsil Aurangabad.
21.12.2009 to 5.1.2010	As per the demand letter from the District Collector, POWERGRID had deposited an amount of 2.03 crore towards the part amount for private land. Accordingly, POWERGRID had deposited an amount with the State Authority on 5.1.2010.
4.3.2010	Joint measurement was initiated by the State Land Record Department. However, all villagers strongly resisted it, and the work could not be completed.
5.3.2010	The matter was discussed with the Collector regarding its resolution. However, the Collector asked POWERGRID to explore other sites where there would be fewer objections from landowners. The Collector also suggested some sites from his side and requested that POWERGRID explore them to verify their suitability for the proposed sub-station.
25.3.2010	POWERGRID informed the Collector that the sites suggested by him have been explored and are found to be unsuitable for the establishment of a 1200 kV sub-station. POWERGRID informed the Collector to go ahead with the acquisition process at the original site at the village Chittepimpalgaon / Laigaon. The Collector, however, asked POWERGRID to obtain the consent of the land owners before proceeding with the joint measurement work.
25.3.2010 to 30.4.2010	Approximately 80% of landowners were convinced by the POWERGRID after a lot of persuasion. The landowners agreed for a joint meeting for finalisation of rates in the presence of the Collector.
4.5.2010	The matter was discussed with the Collector, and it was requested to hold a joint meeting with the landowners. The Collector directed SDO Aurangabad to hold a preliminary meeting with the land owners.
29.5.2010	The preliminary meeting between the landowners and POWERGRID was conducted by the SDO Aurangabad at Village Chittepimpalgaon. During the meeting, the majority of the land owners agreed to give the land. However, the compensation demanded by them was around ₹25-30 lakh per acre, which, according to them, is the prevailing market rate.
15.6.2010	The matter was discussed with the Collector in charge, who agreed to hold a joint meeting with the landowners on 30.6.2010.
30.6.2010	The meeting took place at the Collector's office, wherein the landowners asked for payment at the rate of ₹23 lakh per acre. The Collector-in-charge asked POWERGRID to give a request letter for the acquisition of land as per Section 17 of the Land Acquisition Act, 1894 by invoking the "Urgency Clause".



4.7.2010	Joint measurement of the government land commenced.
5.7.2010	Joint measurement of the government land completed.
6.7.2010	Joint measurement of the private land commenced but was obstructed by the landowners, asking POWERGRID first to finalise the rate for compensation to be given to them.
7.7.2010	The new Collector, who took charge on 5.7.2010, was approached and was apprised of the inordinate delay in the acquisition of land for the substation. He was requested to speed up the process of land acquisition.
20.7.2010	POWERGRID requested the Collector to hold a joint meeting with the land owners for negotiations. The Collector requested POWERGRID to wait until 10.8.2010, due to ongoing compensation payments at one of the MIDC sites in Ladgaon, Aurangabad district.
26.7.2010	Submission of the Land Area Measurement report for the Government land by the State Land Record Department to the District Collector, Aurangabad.
31.7.2010	POWERGRID gave a request to issue a Demand Note for alienation of government land based on the Land Record Department report.
4.8.2010	Meanwhile, the Government of Maharashtra passed a Resolution on 4.8.2010 for the acquisition of land required for upcoming power projects through joint negotiations with concerned land owners and not to acquire land directly as per provisions of the Land Acquisition Act, 1894. Accordingly, the state administration directed POWERGRID to go through negotiations.
31.8.2010	The Collector Aurangabad formed a Committee for land acquisition.
10.8.2010	Vide letter/demand dated 10.8.2010, the District Collector, Aurangabad, requested the deposit of an amount of ₹1.74 Crore for the allotment of Government land of 11.72 h.a. at village Chittepimpalgaon.
17.8.2010	The matter was discussed with the Collector along with the recently published GR dated 4.8.2010. The Collector was finally convinced that the land acquisition process can now be started in line with the guidelines provided in the GR and informed POWERGRID that the date of the meeting shall be fixed immediately after the Gram Panchayat Elections.
25.8.2010	The Collector, Aurangabad, fixed the date of the joint meeting on 4.9.2010 with the landowners. As per GR, the Competent Authority has already nominated members from the POWERGRID side who will negotiate with the land owners. The Collector of Aurangabad nominated other members from the administrative side.
27.8.2010	Accordingly, POWERGRID deposited an amount of ₹174.23 lakh to the Treasury Office, Aurangabad.
30.9.2010	The District Collector, Aurangabad, passed an order for allotment of government land admeasuring 11.72 hectares to POWERGRID.
7.10.2010	Possession of government land given to POWERGRID for the establishment of a substation, with encroachment in part of the land, which was later removed/cleared with the help of the State Administration.
30.6.2010 to 5.10.2010	Accordingly, based on the above resolution, the District Collector of Aurangabad empowered and initiated the procedure for acquiring private land adjacent to allotted Government land in the villages of Chittepimpalgaon and Laygaon, as per POWERGRID's requirements, through negotiation and not in accordance with the procedure outlined in the Land Acquisition Act, 1894.



	A series of meetings was held with concerned landowners and villagers in the presence of the District Collector, Aurangabad / the Land Acquisition Officer / the State Revenue Authorities / the Local MLA & MPs to satisfy farmers with their queries and to decide compensation towards land acquisition. However, farmers refused to give their land for the project and demanded compensation on a much higher .
11.11.2010	As negotiations with landowners failed and they refused to give their lands for the sub-station, the Land Acquisition Officer, Aurangabad, issued a Section 4 Notification for the Acquisition of Land as per the procedure of the Land Acquisition Act, 1894.
21.1.2011	Private land joint measurement was started by the State Administration and POWERGRID, however, landowners again requested the State Administration to conduct a meeting for further discussion.
1.2.2011	Finally, during the 5th Meeting, landowners agreed to give their land to POWERGRID at negotiated rates as per the provisions of the State GR dated 4.8.2010. All landowners gave their consents in writing.
31.3.2011	The Land Acquisition Officer withdrew the Section 4 Notification to enable the purchase of private land through the execution of Sale Deeds directly by POWERGRID with the concerned landowners.
9.4.2011	Paper Publication as a General Notice given in the local newspaper for the declaration of the purchase of private land from concerned farmers through Sale Deeds by POWERGRID.
18.4.2011	As per the provision of the Maharashtra State government Resolution dated with the intervention of the District Collector, Aurangabad, it was finalised to purchase land directly from landowners by POWERGRID through sale deeds at agreed rates and as finalised by the District Collector, Aurangabad. Collector's order dated 18.4.2021 enclosed. The finalised rates at which land is to be purchased are as below:- a) ₹15 lakh per acre for land cost b) ₹4.95 lakh as Rehabilitation and Resettlement allowance per acre on lump sum basis to avoid any further delay in land purchase. Total ₹19.95 lakh per acre
7.5.2011 to 30.8.2011	First Sale Deed executed between the landowner and POWERGRID for purchasing private land at rates decided by the District Collector, Aurangabad, as above. A total of 77 Nos Sale Deeds executed for purchasing private land at a decided rate within a span of 04 months.
30.8.2011 & 30.12.2011	Last 02 Nos Sale Deed, which were under dispute were executed with the state administration support and re-measurement of land. Accordingly, possession of the entire required private land admeasuring 98.54 hectares was obtained/given to POWERGRID by 30.12.2011.

38. The Petitioner has submitted that there was a time overrun of 33.5 months due to delay in land acquisition, which was beyond the Petitioner's control.

39. MPPMCL, in reply, has submitted that the transmission line and sub-station are two separate elements and can be executed simultaneously without waiting for one another. MPPMCL has further submitted that the Aurangabad Sub-station land was fully acquired on



30.12.2011, and the Wardha Sub-station land on 1.3.2021. However, the Petitioner has failed to show its bona fide reasons for the delay in the foundation and erection work for the 400 kV Wardha-Aurangabad D/C line until 2012. Furthermore, the 400 kV Wardha-Aurangabad D/C line could have commenced foundation and erection work without awaiting the commissioning of the sub-station land. A sub-station is necessary for termination and connection of the transmission line at both ends, but a 200-300 km transmission line does not require the acquisition of sub-station land for foundation and erection in between and stringing work at both ends can be carried out as the line approaches the sub-station. MPPMCL also stated that the Petitioner admitted to having commenced work on the transmission line only on 2.1.2011 but failed to provide a logical explanation for not starting the work from the date of Investment Approval, i.e., 15.10.2008, until 2.1.2011.

40. MSEDCL, in its reply, has stated that the Petitioner's lackadaisical approach in planning, follow-ups, and applying for land acquisitions before the authority has caused the delay. Further, the delay attributable to RoW is unjustified as the Petitioner has not clearly mentioned when the alleged RoWs at the stated locations ceased. The time period and the quantum of land affected on account of the alleged RoW are not clear from the Petition, and as such, the Petitioner's claim on this count should not be allowed.

41. In response, the Petitioner has submitted that the delay in land acquisition at Aurangabad affected the finalisation of the line termination at the Aurangabad end. This caused a delay in the construction of the 400 kV D/C Wardha-Aurangabad TL (Upgradable to 1200 kV), and the line reactor can only be charged with the charging of the transmission line. Reactors were ready for charging by December 2015. However, the 400 kV Wardha-Aurangabad line was not ready, hence it could not be charged. At the 2nd Meeting of WRSCT dated 21.5.2019, CTU stated that



the voltage at Wardha Sub-station remained high throughout the year. CTU also stated that the 80 MVar line reactors on each circuit of the Wardha-Aurangabad 400 kV D/C line (the Wardha-Aurangabad 1200 kV S/C line to be charged at the 400 kV level) at the Wardha end were ready for commissioning and could be used as bus reactors for voltage control at Wardha Sub-station. Accordingly, the line reactors of the Wardha-Aurangabad lines were charged as bus reactors on 1.7.2019.

b) RoW issues:

The details of the delay caused by RoW issues faced by the Petitioner are submitted as follows.

Force Majeure event details	Start Date	End Date	Delay in days
Severe ROW issues faced during construction	2.1.2011	17.3.2021	3727

42. The Petitioner has submitted that severe ROW issues persisted from 2011 to 2021. Various communications were sent to the Principal Secretary (Energy), Maharashtra, District Collectors, Police Officials, and other State Government officials to resolve these issues promptly. The detailed chronology of the delays caused by ROW issues is as follows:

S.No	Brief Details of ROW	Letter Addressed to	Date
1	Letter to Collector Buldhana for New Land Compensation GR as per the Maharashtra Govt.	To Collector Buldana	31.12.2010
2	ROW Newspaper Cutting.		2.1.2011
3	Letter regarding ROW issues.	To Tehsildhar Washim	13.1.2011
4	Newspaper cutting regarding ROW in Aurangabad.	Paper Cutting regd ROW	2.2.2011
5	Letter regarding ROW issues and for help from the administration.	To Tehsildhar Buldhana	27.7.2012
6	Letter regarding ROW issues and for help from the administration.	To Collector, Washim	17.9.2012
7	Legal notice to stop construction activities.	Farmer to Powergrid	29.10.2012
8	ROW created by the farmer.	Land Lord : ugemuge	2.4.2013
9	Letter regarding ROW issues and for help from the administration.	To Tehsildhar Buldhana	2.5.2013



S.No	Brief Details of ROW	Letter Addressed to	Date
10	Newspaper cutting regarding ROW in Aurangabad.	Paper Cutting regd ROW	5.9.2013
11	ROW newspaper cutting.		5.9.2013
12	Letter from Collector Washim to SP and SDM Washim for help in ROW.	Letter from Collector Washim to SP and SDM Washim for help in ROW	2.1.2014
13	Letter from the Secretary, Mantralay, Maharashtra, to resolve ROW issues and the speedy completion of the line.	To Collector Buldana	1.10.2016
14	Letter regarding ROW issues and for help from the administration.	Chief Secretary, Mantralay, Maharashtra	19.10.2016
15	Letter regarding ROW issues and for police protection.	To Police Inspector Risod	9.2.2019
16	Letter regarding ROW issues and for police protection.	SP Jalna Dist	16.3.2019
17	Letter to SDO for land compensation valuation.	SDO, Jalna	2.5.2019
18	Letter to SDO for land compensation valuation.	SDO, Mehkar, Buldhana	23.8.2019
19	Letter to the Collector regarding help for the clearance of right-of-way issues and Police Protection.	District Magistrate & District Collector, Washim	5.10.2019
20	Letter to SDO for land compensation valuation.	SDO Sindhkedraja, Buldhana	7.10.2019
21	Letter to the Collector regarding help for the clearance of right-of-way issues and police protection.	District Magistrate & District Collector, Jalna	7.10.2019
22	Letter to the Collector regarding help for the clearance of right-of-way issues and police protection.	District Magistrate & District Collector, Aurangabad	7.10.2019
23	Letter to the Collector regarding help for the clearance of right-of-way issues and police protection.	District Magistrate & District Collector, Buldhana	9.10.2019
24	Letter to the Collector regarding help for the clearance of right-of-way issues and police protection.	District Magistrate & District Collector, Aurangabad	4.11.2019
25	Letter to the Collector regarding help for the clearance of right-of-way issues and police protection.	District Magistrate & District Collector, Jalna	4.11.2019
26	Letter to the Collector regarding help for the clearance of right-of-way issues and police protection.	District Magistrate & District Collector, Washim	5.11.2019
27	Letter to the Collector regarding help for clearance of right-of-way issues and Police Protection.	District Magistrate & District Collector, Buldhana	5.11.2019
28	Letter to the Collector regarding help for the clearance of right-of-way issues and police protection.	District Magistrate & District Collector, Washim	18.11.2019



S.No	Brief Details of ROW	Letter Addressed to	Date
29	Letter to the Collector regarding help for the clearance of right-of-way issues and police protection.	District Magistrate & District Collector, Washim	3.12.2019
30	Letter to the Collector regarding help for the clearance of right-of-way issues and police protection.	District Magistrate & District Collector, Jalna	3.12.2019
31	Letter to the Collector regarding help for the clearance of right-of-way issues and police protection.	District Magistrate & District Collector, Aurangabad	3.12.2019
32	Letter to the Collector regarding help for the clearance of right-of-way issues and police protection.	District Magistrate & District Collector, Buldhana	3.12.2019
33	Letter to the Collector regarding assessment of compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Aurangabad	8.1.2020
34	Letter to the Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Jalna	8.1.2020
35	Letter to the Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Buldhana	13.1.2020
36	Letter to the Collector regarding help for the clearance of right-of-way issues.	District Magistrate & District Collector, Washim	22.1.2020
37	Police protection letter from Dy SP Jalna received for sections 75-0 to 76-0.	From DSP Jalna	27.1.2020
38	Police protection order by SP Aurangabad-Sections 76-0 to 78-0.	From SP Aurangabad	29.1.2020
39	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Buldhana	3.2.2020
40	Letter to the Collector regarding help for the clearance of right-of-way issues	District Magistrate & District Collector, Washim	3.2.2020
41	Letter to Collector regarding assessment of compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Aurangabad	4.2.2020
42	Letter regarding ROW issues and for police protection.	TO SP Jalna	10.2.2020
43	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Jalna	18.2.2020
44	Police protection letter from Dy SP Jalna.	Letter from DSP Jalna	26.2.2020
45	Police protection letter from SP Aurangabad.	Letter from SP Aurangabad	29.2.2020
46	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Jalna	4.3.2020



S.No	Brief Details of ROW	Letter Addressed to	Date
47	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Buldhana	4.3.2020
48	Letter to the Collector regarding help for the clearance of right-of-way issues.	District Magistrate & District Collector, Washim	5.3.2020
49	Section 144 in Aurangabad, in view of the Coronavirus pandemic.	Collector Aurangabad	22.3.2020
50	Letter for the district movement and start of work.	Home Secretary, Mantralay, Maharashtra	2.5.2020
51	Letter to the Collector regarding the assessment of compensation and the resolution of right-of-way issues.	District Magistrate & District Collector, Aurangabad	2.6.2020
52	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Jalna	4.6.2020
53	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Buldhana	4.6.2020
54	Letter to the Collector requesting assistance with the clearance of right-of-way issues.	District Magistrate & District Collector, Washim	8.6.2020
55	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Jalna	17.7.2020
56	Letter to the Collector regarding the assessment of compensation and the resolution of right-of-way issues.	District Magistrate & District Collector, Aurangabad	17.7.2020
57	Letter to the Collector requesting assistance with the clearance of right-of-way issues.	District Magistrate & District Collector, Washim	18.7.2020
58	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Buldhana	18.7.2020
59	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Buldhana	31.7.2020
60	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Jalna	31.7.2020
61	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Aurangabad	31.7.2020
62	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Washim	31.7.2020
63	Letter to TI for ROW issues and police protection.	Police Inspector Washim	11.8.2020



S.No	Brief Details of ROW	Letter Addressed to	Date
64	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Buldhana	14.8.2020
65	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Jalna	14.8.2020
66	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Aurangabad	14.8.2020
67	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Washim	14.8.2020
68	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Aurangabad	5.9.2020
69	Police protection letter.	Police Office Aurangabad	8.9.2020
70	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right-of-way issues.	District Magistrate & District Collector, Washim	21.9.2020
71	Letter to SP for ROW issues and police protection.	SP Aurangabad	22.9.2020
72	Letter to the Collector regarding help for clearance of right-of-way issues and police protection thereof.	District Magistrate & District Collector, Buldana	15.10.2020
73	Letter to Collector regarding Land Valuation for Land Compensation and resolution of right of way issues and police protection.	District Magistrate & District Collector, Aurangabad	16.1.2021
74	Letter to principal secretary from ED, WR-I regarding ROW issues	Principal Secretary (Energy)	26.2.2021
75	Letter from Principal Secretary to the Collector Aurangabad to resolve ROW issues.	Collector Aurangabad	4.3.2021
76	Letter from Collector Aurangabad to SP Aurangabad to resolve ROW issues and police protection.	SP Aurangabad	10.3.2021
77	Letter from Joint Secretary, MOP, New Delhi to CS MOP, Mumbai for police protection and completion of the line.	Chief Secretary, Mantralay, Maharashtra	17.3.2021

43. The Petitioner has submitted that it is evident from the chronology of events that it had carried out rigorous follow-ups with the concerned authorities to resolve the RoW issues as early as possible.

44. MPPMCL, in its reply, has submitted that the Petitioner has failed to provide any justifiable reasons for the three-year delay in addressing the difficulties faced due to RoW issues from 15.10.2008 to 2.1.2011. MPPMCL has further submitted that the Petitioner had already obtained



approval under Section 68 of the Act from the Ministry of Power, Government of India, in 2006-07. They further submitted that out of 77 letters submitted by the Petitioner, 63 are dated from February 2019 onwards. This indicates that PGCIL only seriously considered the matter from 2019 onwards. In view of the above, the time overrun in the case of the 400 kV Wardha Aurangabad D/C Transmission Line occurred solely due to the lethargic approach and inefficiency of the Petitioner. Additionally, the Petitioner has failed to present any documentary evidence showing that any court or tribunal granted a stay in execution and commissioning until 17.3.2021.

45. MSEDCL, in its reply, has submitted that the claim of delay on this account is unjustified. The Petitioner has not clearly specified when the alleged RoWs at the mentioned locations were discontinued. The period and extent of land affected by the alleged RoW are unclear from the Petition.

46. In response, the Petitioner, vide affidavit dated 9.2.2024, has submitted a detailed chronology of the events related to the delays in the present Petition. Additionally, through an affidavit dated 18.12.2023, consolidated reasons for the delay, along with new documentary evidence such as RoW and court cases, have been provided in respect of Asset-II.

RoW Issues at Pimpri Village:

47. The Petitioner has submitted that severe RoW issues were encountered in Pimpri Village, affecting all construction activities. Many farmers approached the District Courts, the Hon'ble High Court, etc., hindering the transmission project. The severe RoW issues in Pimpri village led many farmers to approach the District Court, the Hon'ble High Court, etc. After the Petitioner's persistent efforts and follow-ups, the matter was resolved in March 2021 following the involvement of top officials from the Maharashtra State Government.



Force Majeure Event Details	Start Date	End Date	Delay in days
Severe ROW issues in Pimpri Village, wherein all construction works were affected.	15.12.2014	17.3.2021	2284

48. The detailed chronology for the delay due to RoW issues is furnished below:

Date	Event
2013- 2014	During construction of the above transmission lines, damage occurred to standing fruit-bearing trees, and compensation payments were issued by POWERGRID, and site visits were conducted by the concerned Agriculture Officer for the valuation of fruit trees as per the routine procedure.
15.12.2014 & 28.5.2015	However, in certain cases of fruit-bearing trees compensation (Total 122 Nos), complaints were received from one of the farmers from Pimpri Village, Tehsil - Aurangabad and the office bearer of Shiv Sena, Badnapur Distt. Jalna, mentioning misappropriation in the valuation done by the Agriculture Deptt. and CCTC issued by POWERGRID.
18.6.2015	Upon receipt of complaints and subsequent POWERGRID representation, the District Collector, Aurangabad, had directed the Agriculture Deptt. and POWERGRID for verification of valuation in all 122 Nos disputed cases.
3.7.2015	In continuation of this, D.S.A.O. Aurangabad constituted the Agriculture Deptt. committee for the verification of fruit trees' valuation in all 122 disputed cases.
Aug to Nov – 2015, 1.11.2015	The Agriculture Deptt. Along with the POWERGRID representative, the Agriculture Department had conducted site visits, and the Agriculture Department submitted a revised valuation report on 28.11.2015, wherein the valuation in around 40 cases was revised by the Committee. (Change in valuation as saplings were shown as bearing trees).
Aug to Nov – 2015, 1.12.2015	POWERGRID had also constituted a Local Committee for verification of the actual damaged tree quantity and submitted a report dated 7.12.2015. In around 46 cases, the POWERGRID Committee had revised the quantity of damaged trees against the quantity mentioned in CCTC based on Google satellite images & site visits.
	Facts & figures regarding valuation and payable compensation in 122 cases are as follows:
	a) Initial compensation payable: ₹12.37 crore
	b) Revised payable compensation based on
	Agriculture committee report: ₹9.42 crore
	c) Revised payable compensation based on
	POWERGRID committee report: ₹2.83 crore
	d) Amount accepted / paid till date: ₹2.50 crore – Approx.
Apr-16	Due to rejection of the revised compensation amount, around 34 farmers filed their application at the District Collector, Aurangabad, and prayed to release the compensation payment as per the earlier / initial valuation and as per the quantity of damaged trees mentioned in CCTCs.
May – 2017 to March - 2018	Thereafter, DC, Aurangabad, transferred all these 34 cases to SDM, Aurangabad and hearings were conducted during the period May 2017 to March 2018 and reserved for orders.



Date	Event
Dec-18	SDM Aurangabad passed orders in 34 cases and directed POWERGRID to pay compensation to concerned farmers as per the initial valuation given by the Agriculture department and the quantity mentioned in CCTCs issued by POWERGRID.
Jan – 2019 to Feb – 2019	POWERGRID had filed Writ Petitions at the Hon'ble High Court, Aurangabad, against the orders issued by the SDM, Aurangabad, based on a jurisdiction point. The Hon'ble High Court quashed all orders passed by SDM Aurangabad and directed farmers to file a Civil Suit at the District Court, Aurangabad. Further, the Hon'ble High Court directed POWERGRID to pay the compensation amount to the concerned farmers as per the POWERGRID committee report. Accordingly, POWERGRID has paid compensation (₹49 lakh) to the concerned farmers, and the same has been accepted by the farmers under protest.
Jan-20	SDM Aurangabad transferred all these cases to the District Court Aurangabad, although the High Court had not directed SDM to send matters to the District Courts. However, farmers who skipped court fees somehow managed to send files to the District Court Aurangabad directly by the SDM Aurangabad, and accordingly, hearings have been in progress since then.
Jan'20 to March'21	Hearings continued for one year, but judgement still awaited. Works completed with the involvement of the top State Govt Officials and the Police.

49. The Petitioner has submitted that since the delay caused by RoW issues was beyond the Petitioner's control, the delay in commissioning the subject assets may be condoned.

c) Court Cases:

50. The Petitioner has submitted that several court cases were filed in District Courts and the Hon'ble High Court of Maharashtra for the enhancement of crop/tree compensation, and this caused a delay in the commissioning of the subject assets.

Force Majeure event details	Start Date	End Date	Delay in days
Various court cases filed in the District Court and the Hon'ble High Courts.	4.10.2013	15.3.2021	2719

51. The Petitioner has submitted that the delay caused by court cases filed against the Petitioner for the subject project was beyond the control of the Petitioner.

d) Cases in the Court of District Magistrate under section 16(1) of the Indian Telegraph Act, 1885 (wrongly mentioned by the Petitioner as Electricity Act, 2003):

52. The Petitioner has submitted that cases under Section 16(1) of the Indian Telegraph Act, 1885, were filed in the District Magistrate's office of various districts of Maharashtra. The non-



availability of RoW at these locations not only held up the work at those locations, but also led to stiff resistance from the landowners of the adjoining locations along the transmission line, which could be countered only after the disposal of the court cases.

53. Details of Section 16 (1) of the Indian Telegraph Act, 1885, cases filed in the Collectors' Courts of various Districts where the 400 kV D/C Wardha Aurangabad TL is passing through are furnished below:

S/No	Brief Details of the Case	Date of Appeal/Petition	Date of Order by District Magistrate
1	Severe ROW created by the farmer, preventing POWERGRID from starting work.	20.5.2013	14.7.2013
2	Severe ROW created by the farmer, preventing POWERGRID from starting work.	2.7.2013	24.8.2013
3	Severe ROW created by the farmer, preventing POWERGRID from starting work.	4.7.2013	27.1.2014
4	Severe ROW created by the farmer, preventing POWERGRID from starting work.	29.9.2014	29.10.2014
5	Severe ROW created by the farmer, preventing POWERGRID from starting work.	5.6.2015	4.12.2015
6	Severe ROW created by the farmer, preventing POWERGRID from starting work.	5.6.2015	2.2.2016
7	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	25.6.2015	26.11.2015
8	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	4.7.2015	22.7.2015
9	Severe ROW created by the farmer, preventing POWERGRID from starting work.	15.7.2015	26.11.2015
10	Severe ROW created by the farmer, preventing POWERGRID from starting work.	15.12.2015	16.4.2016
11	A severe ROW has been created by 08 Nos. of farmers, preventing POWERGRID from commencing works.	28.12.2015	12.2.2016
12	The severe ROW created by the farmers is preventing POWERGRID from starting work.	28.12.2015	11.4.2016
13	The severe ROW created by the farmers is preventing POWERGRID from starting work.	17.2.2016	7.12.2016
14	Severe ROW created by the farmers, preventing POWERGRID from starting work.	14.3.2016	4.6.2016
15	Severe ROW created by the farmers, preventing POWERGRID from starting the works.	19.5.2016	14.10.2016
16	A severe ROW has been created by 06 Nos. of farmers, preventing POWERGRID from commencing works.	20.5.2016	22.8.2016



S/No	Brief Details of the Case	Date of Appeal/Petition	Date of Order by District Magistrate
17	Severe ROW created by the farmer, preventing POWERGRID from starting work.	14.6.2016	7.12.2016
18	Severe ROW created by the farmers, preventing POWERGRID from starting work.	14.6.2016	16.12.2016
19	Severe ROW created by the farmers, preventing POWERGRID from starting the works.	13.7.2016	21.11.2016
20	Severe ROW created by farmers, preventing POWERGRID from starting the works.	14.7.2016	21.11.2016
21	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	14.12.2016	10.2.2017
22	Severe ROW created by the farmers, preventing POWERGRID from starting the works.	18.1.2017	3.8.2017
23	Severe ROW created by the farmers, preventing POWERGRID from starting the works.	24.1.2017	9.2.2017
24	Severe ROW created by the farmers, preventing POWERGRID from starting the works.	6.2.2017	24.5.2017
25	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	6.2.2017	23.8.2017
26	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	6.2.2017	12.5.2017
27	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	6.2.2017	24.5.2017
28	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	23.2.2017	1.8.2017
29	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	18.8.2017	18.11.2017
30	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	4.9.2017	18.11.2017
31	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	9.9.2017	2.11.2017
32	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	9.9.2017	18.11.2017
33	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	9.9.2017	2.11.2017
34	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	1.11.2017	18.11.2017
35	Severe ROW created by the farmer and not allowing POWERGRID to start the works.	24.11.2017	26.2.2018
36	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	27.11.2017	6.2.2018
37	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	15.3.2018	25.9.2018
38	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	9.4.2018	25.9.2018
39	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	15.3.2018	25.9.2018
40	Severe ROW created by the farmer and not allowing POWERGRID to start the works.	-	15.9.2016



S/No	Brief Details of the Case	Date of Appeal/Petition	Date of Order by District Magistrate
41	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	16.12.2015
42	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	12.5.2017
43	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	7.3.2018
44	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	26.11.2015
45	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	5.5.2017
46	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	16.11.2016
47	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	9.2.2017
48	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	5.5.2017
49	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	14.10.2016
50	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	27.12.2016
51	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	9.2.2017
54	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	22.8.2016
55	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	11.1.2017
56	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	22.8.2016
57	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	11.1.2017
60	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	24.7.2013
63	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	11.1.2017
64	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	15.9.2016
66	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	28.8.2019	
67	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	13.2.2021
68	Severe ROW created by the farmer, preventing POWERGRID from starting the works.	-	27.1.2021

54. The Petitioner submitted that the delay caused by court cases filed against the Petitioner for the transmission project was beyond the control of the Petitioner.



55. MPPMCL, in its reply, has submitted that all the documentary evidence produced by the Petitioner is from 2013-14 onwards for court cases related to the enhancement of compensation. However, court cases for the award of increased compensation could not, in any way, have halted the foundation, erection, and stringing work of the Petitioner. Therefore, this explanation is merely an excuse.

56. In response, the Petitioner has placed reliance on the submissions made in its Petition.

e) Severe Drought in Vidharbha Area:

57. The Petitioner has submitted that a severe drought from April 2013 to June 2013 in Aurangabad resulted in significant delays in the construction works. Due to an acute shortage of potable water during this period, the District Authorities imposed a ban on the use of water for construction activities.

Force Majeure Event Details	Start Date	End Date	Delay in days
Severe Drought in Vidharbha Area; Non-Availability of Sand and Water	2.4.2013	30.6.2013	89

58. The Petitioner has submitted that the delay caused by severe droughts in the Vidharbha area was beyond the control of the Petitioner.

59. MPPMCL, in its reply, has submitted that the Petitioner was executing a transmission line, and only the water-required portion was for foundation work. It is well known that foundation work for transmission lines requires minimal water, and the entire foundation of a transmission tower can be completed with just one tanker of water. Arranging tanker water is not impossible. Furthermore, the Petitioner has failed to produce any court or tribunal order declaring that the drought situation in the Vidarbha region of the State of Maharashtra from 2.4.2013 to 30.6.2013 was a case of *force majeure*.



f) Delay Due to COVID-19 Impact on Transmission Assets

60. The Petitioner has stated that all work was halted due to the COVID-19 pandemic and the subsequent nationwide lockdown, which caused time overrun in the case of the subject assets.

Force Majeure event details	Start Date	End Date	Delay in days
Stoppage of all works due to the COVID-19 pandemic and subsequent nationwide lockdown.	25.3.2020	15.10.2020	204

61. The Petitioner has submitted that the time overrun in execution of the transmission project was beyond its control and therefore requested to condone the same and allow the tariff as claimed in the Petition.

62. MPPMCL, in its reply, has submitted that Covid-19 began on 24.3.2020, and that a lockdown was imposed across the entire country. However, the SCOD of the project was much earlier than the start date of COVID-19. MPPMCL has further submitted that Asset II, the 400 kV Wardha-Aurangabad D/C Line, had already been delayed due to negligence and omissions on the part of the Petitioner. Therefore, the delay attributed to COVID-19 cannot be accepted as the Petitioner has failed to explain the earlier delay in the project.

63. The Petitioner has submitted that according to the Investment Approval dated 15.10.2008, the commissioning schedule for the transmission assets was within 48 months from the date of Investment Approval, i.e., 14.10.2012. However, Asset I and Asset II were put into commercial operation on 3.7.2019 and 1.4.2021, respectively, resulting in a time overrun of over 6 years, 8 months, and 18 days (2452 days) and 8 years, 5 months, and 17 days (3090 days), respectively.

64. The details of the time overrun claimed by the Petitioner are as follows:

Asset	SCOD	COD	Delay
Asset-I	15.10.2012	3.7.2019	06 Years 08 Months 18 Days (2452 days)



Asset-II	15.10.2012	1.4.2021	08 Years 05 Months 17 Days (3090 days)
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Analysis and Decision

65. As per the Investment Approval dated 15.10.2008, the scheduled COD of Asset-I and Asset-II was 15.10.2012, against which they were put into commercial operation on 3.7.2019 and 1.4.2021, respectively, resulting in a time overrun of 2452 days and 3090 days.

66. In the case of Asset-I, the Petitioner was required to install two 400 kV, 80 MVAR line reactors at the Wardha Sub-station for the termination of Asset-II, i.e. the 400 kV Wardha-Aurangabad D/C line. The Petitioner has submitted that the time overrun in the case of Asset-II caused the time overrun in the case of Asset-I. The Petitioner has charged the line reactors as bus reactors at Wardha Sub-station on 3.7.2019, whereas the transmission line, i.e. the 400 kV Wardha-Aurangabad D/C line (upgradable to 1200 kV S/C), was put into commercial operation on 1.4.2021. The Petitioner took an additional 638 days to put Asset-II into commercial operation. Since the COD of Asset-II depends on that of Asset-I, we first address the time overrun of Asset-II.

67. The Petitioner has submitted that the main reasons for time overrun in the case of transmission assets include a delay of 1020 days due to land acquisition at Aurangabad and the finalisation of line termination there (from 30.6.2008 to 30.12.2011), 3727 days due to RoW problems (2.1.2011 to 17.3.2021), 2284 days caused by severe RoW issues in Pimpiri village, 2719 days because of various court cases filed in District and High courts of Maharashtra for the enhancement of crop and tree compensation, 89 days due to severe drought in the Vidarbha area and 204 days attributable to COVID-19.



Delay in Land Acquisition for Aurangabad Sub-station:

68. The Petitioner has submitted that there was a time overrun in the case of Asset-II due to delays in land acquisition at Aurangabad and subsequent delays in finalising the line termination at Aurangabad. The Petitioner has claimed a time overrun of 1020 days, from 30.6.2008 to 30.12.2011, due to delays in land acquisition at Aurangabad.

69. The key question for our consideration is whether the land acquisition at Aurangabad impacted the construction of the 400 kV D/C Wardha-Aurangabad Transmission Line or not.

70. The land requirement for establishing the Aurangabad 400 kV Substation was approximately 110 hectares, including about 11 hectares of Government land. The District Collector, Aurangabad, passed an order dated 30.9.2010 for the allotment of 11.72 hectares of Government land to the Petitioner. Although the entire land for the Aurangabad Substation was acquired on 30.12.2011, the location of the substation has been available to the Petitioner since 30.9.2010. It is noted that the exact location of the terminal sub-station is a critical input for the construction of the transmission line, as it determines route alignment, tower spotting, structural design, and overall feasibility. Therefore, the period from 30.6.2008 (date of application for land) to 30.9.2010 (date of allotment of 11.72 hectares of Government land) is held to be beyond the control of the Petitioner and accordingly stands condoned.

71. However, the period from 30.9.2010 to 30.12.2011 cannot be attributed to land acquisition constraints, since the Petitioner, upon obtaining the allotment of Government land on 30.9.2010, was in possession of the tentative location necessary to finalise the route of the transmission line. Accordingly, the delay during this period is not condonable.



72. In view of the above, out of the total delay of 1020 days claimed by the Petitioner on account of land acquisition at Aurangabad, a period of 822 days stands condoned, while the balance period of 198 days is disallowed.

RoW Issues:

73. The Petitioner has submitted that severe RoW issues were encountered from 2011 to 2021, and various communications were made to the Principal Secretary (Energy), Maharashtra, District Collectors, Police Officials, and other State Government Officials to resolve these issues as promptly as possible. The Petitioner claims a time overrun of 3727 days, from 2.11. 2011 to 17.3.2021, due to the RoW issues faced during the execution of Asset-II, namely, the Wardha-Aurangabad D/C Line (quad) with provisions to upgrade the line to 1200 kV.

74. The Petitioner has referred to letters dated 31.12.2010, 2.1.2011, 13.1.2011, 2.2.2011 and 27.7.2012. After scrutiny, we observed that these letters are generic in nature and do not specify any particular location that might impact RoW issues. We have also examined the CEA progress report, month-wise, from the date of Investment Approval up to 2014. The CEA monthly report on the status of construction of transmission lines (220 kV & above) as on 1.7.2014 is as follows:

Sl No	Name of Transmission Lines	Ckts (S/C) & (D/C)	Voltage Level	Total Length CKM	Construction progress Status				Target Date		Remark (Status of all statutory clearances particularly forest clearance and ROW problem, if any needs to be mentioned here.)
					Towers				Schedule	Revised/ Anticipated	
					TL (Nos)	STC (Nos)	TE (Nos)	STG (cKM)			
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
180	Wardha - Aurangabad	D/C	765	690	928	928	928	690	MAY-15	JUL-14	Commissioned 07/14.
181	Wardha - Aurangabad (on 1200 kV)	D/C	1200	700	962	762	443	46	OCT-12	DEC-15	Contract terminated due to unsatisfactory performance and fresh tender being taken up.



75. The status report indicates that out of a total of 700 circuit kilometres (CKM) and 962 tower locations, stub setting has been completed at 936 locations, tower erection has been completed at 865 locations, and stringing of 46 CKM has been carried out of 690 CKM. The relevant extracts of the report indicating the status of construction of transmission lines (220 kV & above) against the programme during 2014-2015 as on 31.12.2014 are as follows:

184 Wardha - Aurangabad (on 1200 kV)

D/C 1200 700 962 762 456 60

OCT-12

MAR-16

Contract terminated due to unsatisfactory performance and fresh tender being taken up for 01 pkg.

76. As stated above, the contract was terminated due to the contractor's unsatisfactory performance. Therefore, we are not willing to condone the delay from 31.12.2010 to 2.1.2014 due to RoW issues.

77. The Petitioner has submitted a letter dated 1.10.2016 after 2.1.2014. The Petitioner has been away for approximately 2 years, 8 months, and 30 days. We have examined the CEA progress report of 31.12.2015, which records the following:

"Contract terminated 01 out of 02 nos due to unsatisfactory performance and fresh tender being taken up. The pkg. has been bifurcated into two pkgs. 01 pkg. award in Dec'14 & 2nd pkg. awarded in Feb'15. Remaining 01 pkg. also terminated in Aug'15 due to poor performance & fresh tender is being taken up"

78. According to the CEA progress report under para 73, it is observed that two transmission lines are present, the Wardha – Aurangabad 765 kV D/C line and the Wardha- Aurangabad 1200 kV line (Asset- II in the instant Petition). The Wardha- Aurangabad 765 kV D/C line was commissioned in July 2014. This line, along with the establishment of the 765/400 kV, 2 x 1500 MVA Aurangabad Substation, is covered under "Transmission System Strengthening in the Western Part of WR for IPPs generation projects in Chhattisgarh (IPP D) ". The Investment Approval for the project was granted by the Board of Directors of the Petitioner vide Memorandum No. C/CP/Chhattisgarh IPP dated 22.11.2011, with an estimated cost of Rs.



212751 lakh, including Interest During Construction of ₹13573 lakh, at the 2nd Quarter 2011 price level. According to the Investment Approval, the project was scheduled to be commissioned within 32 months from the date of Investment Approval. The approval date was 22. 11. 2011, making the scheduled completion date 21. 7. 2014, and the line was commissioned within the implementation time indicated in the Investment Approval. It is noted that the 765 kV D/C Wardha- Aurangabad Transmission Line, along with associated bays, the 765 kV 3 X 80 MVAR Line Reactor at Aurangabad Sub-station, and the 765/400 kV 1500 MVA ICT- 1 with bays and equipment at Aurangabad Sub-station, were commissioned on 8.7.2014 and 1.7.2014 without delays. In contrast, the Investment Approval for the Wardha–Aurangabad (1200 kV) transmission line was granted in 2008, and the line was only completed in 2021, taking nearly 13 years. Based on these facts, it is concluded that the Petitioner has been unable to complete the transmission line due to the contractor's unsatisfactory performance. Consequently, we are not inclined to condone the time overrun from 2.1.2014 to 1.10.2016 due to RoW problems. It is further observed that the time period from 19. 10. 2016 to 9.2.2019, the Petitioner did not provide any reasons for the delay. Therefore, we are not inclined to condone the period from 19.10.2016 to 9.2.2019.

79. The Petitioner has submitted various letters from 9.2.2019 to 17.3.2021. The period from 2019 to 2021 has been affected by various RoW issues, as also confirmed by the CEA progress report. Based on the letters communicated to the District Authorities, the period from 9.2.2019 to 17.3.2021 (774 days) has been impacted by RoW problems at several locations, which are beyond the Petitioner's control, and this has been condoned.



RoW Issues at Pimpri Village

80. The Petitioner has submitted that severe RoW issues are encountered in Pimpri Village, affecting all construction work. Many farmers approached the District Court, the High Court, etc., hindering the transmission project. The Petitioner has claimed a time overrun of 2284 days, from 15.12.2014 to 17.3.2021, due to the severe RoW issues faced in Pimpri Village during the construction of the transmission project.

81. We have gone through the documents placed on record. It is noted that the delay caused by RoW issues from 9.2.2019 to 17.3.2021 (774 days) has already been condoned due to RoW problems. Therefore, the period from 9.2.2019 to 17.3.2021 is not considered separately, and the same is subsumed under the ROW problems mentioned above. We are now scrutinising whether the period from 15.12.2014 to 9.2.2019 can be condoned due to RoW problems. The monthly progress report of CEA during this period indicates that, due to unsatisfactory performance, the Petitioner terminated the contract. Accordingly, we are not inclined to condone the delay from 2.1.2014 to 1.10.2016. It is observed that the period from 19.10.2016 to 9.2.2019 (843 days) is impacted by severe RoW issues in Pimpri Village. Therefore, we are inclined to condone the delay for the period 19.10.2016 to 9.2.2019 (843 days).

Court cases:

82. The Petitioner has submitted that several court cases were filed in the District Court and High Court of Maharashtra seeking enhancement of crop/tree compensation. The Petitioner has claimed an overrun of 2719 days, from 4.10.2013 to 15.3.2021, against the delays caused by various court cases filed against the Petitioner concerning the transmission project.

83. We have gone through the documents placed on record and noted that various court cases in District Court, Aurangabad, with civil claims numbered 08/2019, 16/2019, 21/2019,



20/2019, 22/2019, 25/2019, 06/2019, 24/2019, 07/2019, 02/2019, 08/2019, etc., were filed by the farmers seeking compensation.

84. We have gone through the above-mentioned court cases. The petitioner is directed to submit the court case details in the following format at the time of truing-up

Sl. No.	Brief Details of Court Case	Court before which the cases have been filed, and Petition/Case/Appeal No	Date of Appeal/Petition	Whether stay order issued or not	Date of Order by Court	Loc. No impacted on account of court case	Delay

85. Based on the submission of the petitioner as per the above format, the time overrun on account of court cases will be reviewed at the time of truing-up.

Cases in the Court of District Magistrate under Section-16(1) of the Indian Telegraph Act, 1885

86. The Petitioner has submitted that several cases under Section 16(1) of the Indian Telegraph Act, 1885, were filed at the District Magistrates' offices across various districts in Maharashtra. The Petitioner has stated that the unavailability of RoW at these locations not only delayed work at those sites but also met with stiff resistance from landowners of adjoining areas along the transmission line, which could only be addressed after the court cases were disposed of.

87. We have observed that the Petitioner has submitted the details of court cases along with the date of the order against the several court cases filed under section 16 (1) of the Indian Telegraph Act, 1885, at the District Magistrates' offices of various districts in Maharashtra. However, it is observed that the Petitioner has not claimed any time overrun or delay caused by



the said court cases filed under section 16(1) of the Indian Telegraph Act, 1885, in the District Magistrates' offices of various districts in Maharashtra.

Severe Drought in the Vidarbha Area

88. The Petitioner has submitted that a severe drought from April 2013 to June 2013 at Aurangabad caused a considerable delay in the construction work. Due to an acute shortage of potable water during this period, the District Authorities imposed restrictions on water usage for construction works. The Petitioner has claimed a time overrun of 89 days, from 2.4.2013 to 30.6.2013, due to difficulties encountered during construction.

89. We have gone through the documents on record and noted that the Petitioner failed to provide detailed justification, evidentiary support, or documentation substantiating the delay in implementation due to severe drought in the Vidarbha area. Therefore, we are not inclined to grant the 89-day delay claimed by the Petitioner due to the severe drought in the Vidarbha area in the implementation of Asset-II.

Delay Due to COVID-19 and Its Impact on the Transmission System

90. The Petitioner has submitted that due to illness, delays in issuing permits, travel restrictions, and inefficiencies caused by the need for social distancing on job sites are just a few of the issues that could have profit, cost, and schedule consequences. Lack of engineering and technical support, along with supply chain disruptions, were major factors affecting project schedules and implementation. The commissioning of power projects faced delays due to the squeezing of supply lines and construction delays. The coronavirus situation posed the greatest potential for harm as an unforeseen or unplanned interruption or delay.



91. In connection with COVID-19, the Ministry of Power (MoP), vide letter dated 27.7.2020, has extended the SCOD of the inter-state transmission projects by 5 months due to the COVID-19 pandemic. The relevant portions of the letter dated 27.7.2020 are as follows.

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

Sir,

I am directed to state that transmission utilities have 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.*

92. However, in view of the above, it is observed that as per IA, the SCOD of Asset-II considered in this Petition was on 15.10.2012. Therefore, as per the MoP letter dated 27.7.2020, the 05-month extension is not applicable in this case, as the said order does not apply to projects whose SCOD dates were prior to 25.3.2020. Thus, we are not inclined to condone the time overrun of 204 days, i.e., from 25.3.2020 to 15.10.2020, claimed by the Petitioner on account of the COVID-19 impact on the transmission project.

93. Therefore, as per the above discussions and considering the overlapping of time overrun delay, the details of time overrun condone/not condone for Asset-II are as follows:

Asset	SCOD	COD	Time Overrun Claimed	Time Overrun Condoned	Time Overrun Not Condoned
Asset-II	15.10.2012	1.4.2021	3090 days	774 days + 822 days +843 days =2439 days	651 days



Asset-I:

94. Regarding the time overrun related to Asset-I, we refer to Form-12 submitted by the Petitioner, and the details of Form-12 submitted by the Petitioner are as follows:

Transmission system associated with Mundra UMPP Asset-1

S no.	Name of Element	Activities	Start as per L2	Finish as per L2	Actual Start	Actual Finish	Reasons for delay with Documentary Proof
1	2 Nos 400kV, 80 MVAR Line reactors of 400kV D/C Wardha- Aurangabad Tr. Line (Upgradable to 1200KV S/C) as bus reactors at Wardha	Land					
		LOA	03.10.2011	03.10.2011	03.10.2011	03.10.2011	
		Supplies (Structure, Equipments etc)	26.09.2012	31.03.2013	27.12.2012	25.09.2013	Reason for delay has been summarised as petition para 6 (pleading page no- 18 to 24) and supporting documents has been attached as Encl-7 of the instant petition (pleading page no 109 to 1324). Further, vide affidavit dtl 18.12.2023 a consolidated reason of delay along with new documents of ROW/cases has been submitted at pleading page no 2332 to 2421.
		Civil works and erection	26.04.2012	31.05.2013	19.03.2012	30.11.2015	
		Testing and commissioning	01.05.2013	30.06.2013	16.11.2015	05.12.2015	

*Delay in land acquisition at Aurangabad affected the finalisation of the line termination at Aurangabad and. This caused delay in construction of 400KV D/C Wardha Aurangabad TL (Upgradable to 1200KV) and line reactor can only be charged with charging of transmission line. Award of LOA has been strategically delayed to prevent the burden on beneficiaries. Reactors were made ready for Charging by Dec'15, however as 400KV Wardha - Aurangabad Line was not ready hence the same couldn't be charged. Later as Wardha S/s voltage has got increased so to control the voltage fluctuations after approval of constituents line reactors of Wardha - Aurangabad line were charged as bus reactors on 01.07.2019. However, it may be appreciated that with prudent deployment of funds, total cost of asset decreased by Rs 1.64 Cr. w.r.t. PR inspite of the delay of 6 years 9 months (approx.) from approved schedule.

95. According to the above Form-12, it is observed that the Petitioner completed testing and commissioning in December 2015. However, the Petitioner delayed the COD of the reactors, matching the time frame of the transmission line. As per Regulation 22(2) of the 2019 Tariff Regulations, time overrun can only be condoned if the transmission asset is impacted by “uncontrollable factors”, such as *Force Majeure* events and *Changes in law*. In this case, from December 2015 until the COD of Asset-I, i.e. 3.7.2019, is not impacted by any *Force Majeure* or *Change in Law* events. Therefore, we are not inclined to condone the time overrun from December 2015 to the COD of the Asset-I, i.e. 3.7.2019.

96. Regarding the SCOD of the asset up to December 2015, it was not addressed separately. However, for Asset-I, we have already discussed above in this order, and we do not condone the time overrun from the SCOD of Asset-II, i.e., from 15.10.2012 to December 2015.

97. As discussed above, the total time overrun of 2452 days in the case of Asset-I is not condoned.



Asset	SCOD	COD	Time Overrun Claimed	Time Overrun Condoned	Time Overrun Not Condoned
Asset-I	15.10.2012	3.7.2019	2452 days	None	2452 days

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

98. The Petitioner has claimed ₹336.79 lakh and ₹23583.65 lakh as actual IDC for Assets- I and II, respectively

99. MPPMCL, in its reply, has submitted that in terms of Regulation 21 of the 2019 Tariff Regulations, IDC and IEDC should not be allowed for the delay in commissioning of the transmission project attributable to the Petitioner. Further, IDC and IEDC are directly linked to the time overrun and as such, the claim of the Petitioner on account of IDC and IEDC is legally misconceived.

100. In response, the Petitioner has submitted that the increase in IDC of ₹1.46 crore was mainly attributable to the increase in the project time cycle and deployment of funds based on actuals; the increase in IDC was contained despite the delay of 6 years 9 months from the approved schedule.

101. Regarding the decrease in IDEC of ₹1.11 crore, the Petitioner has submitted that in the IA, 5% of the equipment cost and civil works have been considered for IEDC and contingency, respectively, whereas based on actual expenditure under the subject head, IEDC has been considered in the Auditor's certificate.

102. We have considered the submissions of the Petitioner and MPPMCL. As discussed earlier in this order, the delay in commissioning the transmission assets has been partially condoned only for Asset-II. The allowable IDC has been worked out considering the information submitted by the Petitioner regarding the communication assets. The loan details provided in Form-9C for the 2019-24 tariff period and the IDC computation sheet have been considered for



calculating IDC. The details of IDC claimed and considered as on COD, for tariff determination subject to revision at the time of truing-up, are as follows:

(₹ in lakh)

Assets	IDC claimed (A)	IDC Disallowed (B)	IDC Allowed as on COD (C)=(A)-(B)
I	336.79	277.63	59.15
II	23583.65	4749.64	18834.01

103. The Petitioner has claimed ₹34.86 lakh and ₹2396.55 lakh as actual IEDC for Assets- I and II, respectively. Since the time overrun for the transmission assets has been partially condoned only for Asset-II, there are disallowances of IEDC. Accordingly, the details of IEDC allowed and disallowed for the transmission assets are as follows.

(₹ in lakh)

Assets	IEDC claimed (A)	IEDC disallowed due to time overrun, not condoned (B)	IEDC allowed (C) = (A-B)
I	34.86	21.84	13.02
II	2396.55	342.82	2053.73

Initial Spares

104. Initial Spares claimed by the Petitioner, are as follows:

(₹ in lakh)

Assets	Particulars	Plant & Machinery cost for calculation of Initial Spares	Initial Spares Claimed	Percentage (in %)	Ceiling as per Regulations (in %)
Asset I	Sub-station	1552.68	33.46	2.11	4
Asset II	Trans. Line	119392.25	691.22	0.58	1
	Sub-Station	1553.10	0.00	0.00	4

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



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

106. We have considered the submissions made by the Petitioner and are of the view that the Initial Spares claimed within the limit specified in the 2019 Tariff Regulations. Hence, we approve the Initial Spares as claimed by the Petitioner.

Assets	Particulars	Plant & Machinery cost (excluding IDC and IEDC, land cost & cost of civil works)	Initial Spares Claimed	Ceiling as per Regulations (in %)	Initial Spares allowable (₹ in lakh)	Excess Disallowed (₹ in lakh)	Initial Spares Allowed
		A	B	C	$D = (A-B) * C / (100-C)$	E=B-D	
I	Sub-station	1552.68	33.46	4	63.30	0.00	33.46
II	Trans. Line	119392.25	691.22	1	1199.00	0.00	691.22
	Sub-Station	1553.10	0.00	4	0.00	0.00	0.00

Capital Cost allowed as on COD

107. Accordingly, the capital cost allowed in respect of the transmission assets as on COD, excluding the IDC and IEDC disallowed on account of non-condonation of delay, is as follows:

(₹ in lakh)

Assets	Capital Cost claimed till COD	Less: IDC Disallowed	Less: IEDC Disallowed	Capital Cost as on COD
Asset-I	1908.51	277.63	21.84	1609.04
Asset-II	135938.48	4749.64	342.82	130846.02



Additional Capital Expenditure

108. The Petitioner has submitted that the admissibility of Additional Capital Expenditure (ACE) incurred after COD is to be dealt with in accordance with the provisions of Regulation 24 of the 2019 Tariff Regulations.

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

“24. Additional Capitalization

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

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

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

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

25. Additional Capitalisation within the original scope and after the cut-off date:

(1) The ACE incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cutoff date may be admitted by the Commission, subject to prudence check:

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

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

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



- b. *The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;*
- c. *The replacement of such asset or equipment is necessary on account of obsolescence of technology; and*
- d. *The replacement of such asset or equipment has otherwise been allowed by the Commission.”*

110. MSEDCL, in its reply, has submitted that the Petitioner has proposed costs for additional capitalisation during the 2019-24 tariff period for undischarged liability. However, it did not support its claim with proper documents or justification. Therefore, no interference is needed now, and the same can be reviewed during the true-up stage if necessary. Further, the claim for undischarged liability requiring additional capitalization should be carefully reviewed by the Commission to ensure the liability is not due to the Petitioner’s fault. Approving the additional capitalization might encourage Petitioner’s inefficiency at Respondent’s expense.

111. In response, the Petitioner has submitted that undischarged liability towards the final payment/withheld payment as per the contractual provision for work executed within the cut-off date and unexecuted work within the cut-off date is claimed as ACE. The CODs of the Assets-I and II are 3.7.2019 and 1.4.2021, and as per the 2019 Tariff Regulations, the cut-off date will be 31.7.2022 and 30.4.2024, respectively. Thus, the ACE claims are within the cut-off dates as per Regulation 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations. The Petitioner has given the following details of ACE for the transmission assets:

Asset	Apportioned Approved Cost		Cost as on COD	Projected ACE					Estimated Completion Cost
	FR	RCE		2019-20	2020-21	2021-22	2022-23	2023-24	
Asset-I	2163.13	2741.88	1908.51	18.88	71.24	-	-	-	1998.63
Asset-II	95181.03	152682.86	135938.48	-	-	3816.46	5639.14	1539.87	146933.95



112. We have gone through the submissions made by the Petitioner and MSEDCL. It is observed that ACE claimed is on account of balance and retention payments and is therefore allowed under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations. The summary of the ACE allowed for the 2019-24 tariff period concerning the transmission assets is as follows:

(₹ in lakh)

Assets	ACE allowed				
	2019-20	2020-21	2021-22	2022-23	2023-24
Asset I	18.88	71.24	0.00	0.00	0.00
Asset II	0.00	0.00	3816.46	5639.14	1539.87

113. Accordingly, the capital cost allowed as on 31.3.2024 is as follows:

(₹ in lakh)

Assets	Capital cost as on COD	Allowed ACE					Capital Cost as on 31.3.2024
		2019-20	2020-21	2021-22	2022-23	2023-24	
Asset I	1609.04	18.88	71.24	0.00	0.00	0.00	1699.16
Asset II	130846.02	0.00	0.00	3816.46	5639.14	1539.87	141841.49

Debt Equity Ratio

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

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

Provided that:

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

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

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

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

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



to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

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

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

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

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

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

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

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

Asset I

Particulars	Cost as on COD (₹ in lakh)	(in %)	Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	1126.33	70	1189.41	70
Equity	482.71	30	509.75	30
Total	1609.04	100	1699.16	100

Asset II

Particulars	Cost as on COD (₹ in lakh)	(in %)	Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	91592.21	70	99289.04	70
Equity	39253.81	30	42552.45	30
Total	130846.02	100	141841.49	100

Depreciation

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



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

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

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

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

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

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

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

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

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

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the Asset-of the generating station and transmission system: Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the asset

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

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

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

(9) Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date



of operation of the emission control system are the same, depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (8) of this Regulation.

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

a) twenty-five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or

b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or

c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life.”

117. The depreciation has been worked out considering the admitted capital cost as on COD and the ACE allowed during the 2019-24 tariff period. The Weighted Average Rate of Depreciation (WAROD) has been worked out as per the rates of depreciation prescribed in the 2019 Tariff Regulations, and the WAROD is placed as Annexure-I to this order. The depreciation allowed for the transmission assets is as follows:

Asset I

(₹ in lakh)

		2019-20 (Pro-rata for 273 days)	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	1609.04	1627.92	1699.16	1699.16	1699.16
B	Addition during the year 2019-24 due to projected ACE	18.88	71.24	0.00	0.00	0.00
C	Closing Gross Block (A+B)	1627.92	1699.16	1699.16	1699.16	1699.16
D	Average Gross Block (A+C)/2	1618.48	1663.54	1699.16	1699.16	1699.16
E	Average Gross Block (90% depreciable assets)	1559.78	1601.98	1634.75	1634.75	1634.75
F	Average Gross Block (100% depreciable assets)	58.70	61.56	64.41	64.41	64.41
G	Depreciable value (excluding IT equipment and software) (E*90%)	1403.80	1441.78	1471.27	1471.27	1471.27
H	Depreciable value of IT equipment and software (F*100%)	58.70	61.56	64.41	64.41	64.41
I	Total Depreciable Value (G+H)	1462.50	1503.34	1535.68	1535.68	1535.68
J	Weighted average rate of Depreciation (WAROD) (in %)	5.52	5.53	5.54	5.54	5.54



	Particulars	2019-20 (Pro-rata for 273 days)	2020-21	2021-22	2022-23	2023-24
K	Lapsed useful life at the beginning of the year (Year)	0	0	1	2	3
L	Balance useful life at the beginning of the year (Year)	24	24	23	22	21
M	Depreciation during the year (D*J)	66.68	92.04	94.19	94.19	94.19
N	Cumulative Depreciation at the end of the year	66.68	158.72	252.91	347.10	441.29
O	Remaining Aggregate Depreciable Value at the end of the year	1395.82	1344.62	1282.77	1188.58	1094.39

Asset II

(₹ in lakh)

	Particulars	2021-22	2022-23	2023-24
A	Opening Gross Block	130846.02	134662.48	140301.62
B	Addition during the year 2019-24 due to projected ACE	3816.46	5639.14	1539.87
C	Closing Gross Block (A+B)	134662.48	140301.62	141841.49
D	Average Gross Block (A+C)/2	132754.25	137482.05	141071.56
E	Average Gross Block (90% depreciable assets)	132748.53	137476.27	141065.78
F	Average Gross Block (100% depreciable assets)	5.73	5.78	5.78
G	Depreciable value (excluding IT equipment and software) (E*90%)	119473.67	123728.64	126959.20
H	Depreciable value of IT equipment and software (F*100%)	5.73	5.78	5.78
I	Total Depreciable Value (G+H)	119479.40	123734.42	126964.98
J	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28
K	Lapsed useful life at the beginning of the year (Year)	0	1	2
L	Balance useful life at the beginning of the year (Year)	35	34	33
M	Depreciation during the year (D*J)	7009.82	7259.46	7449.00
N	Cumulative Depreciation at the end of the year	7009.82	14269.29	21718.29
O	Remaining Aggregate Depreciable Value at the end of the year	112469.57	109465.14	105246.69

Interest on Loan (IoL)

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

“32. Interest on loan capital: (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan. (2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan. (3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of asset, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis



and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.

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

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized: Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered;

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

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

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

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

119. The Weighted Average Rate of Interest on Loan (WAROI) has been considered as claimed by the Petitioner. The Petitioner has prayed that any change in the interest rate due to the floating rate applicable, if any, during the 2019-24 tariff period, be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up.

120. MSEDCL has submitted that the Petitioner had claimed costs on account of the refund of excess annual fixed charges and interest on loan, and the same is not supported by proper documentary evidence. MSEDCL has submitted that the same may not be allowed.

121. In response, the Petitioner has submitted that the detailed justifications of time overrun and cost overrun are provided in the Petition and subsequent affidavits/ rejoinder.

122. We have considered the submissions of the Petitioner and MSEDCL. The Petitioner has

123. IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations.

IoL allowed for the transmission assets is as follows:

Asset I

(₹ in lakh)

	Particulars	2019-20 (Pro rata for 273 days)	2020-21	2021-22	2022-23	2023-24
A	Gross Normative Loan	1126.33	1139.54	1189.41	1189.41	1189.41
B	Cumulative Repayments up to Previous Year	0.00	66.68	158.72	252.91	347.10
C	Net Loan-Opening (A-B)	1126.32	1072.86	1030.69	936.50	842.31
D	Addition due to ACE	13.22	49.87	0.00	0.00	0.00
E	Repayment during the year	66.68	92.04	94.19	94.19	94.19
F	Net Loan-Closing (C+D-E)	1072.86	1030.69	936.50	842.31	748.12
G	Average Loan (C+F)/2	1099.59	1051.78	983.60	889.41	795.22
H	Weighted Average Rate of Interest on Loan (in %)	5.8132	5.8181	5.7892	5.7512	5.7109
I	Interest on Loan (G*H)	47.68	61.20	56.94	51.15	45.41

Asset II

(₹ in lakh)

	Particulars	2021-22	2022-23	2023-24
A	Gross Normative Loan	91592.21	94263.74	98211.14
B	Cumulative Repayments up to Previous Year	0.00	7009.82	14269.29
C	Net Loan-Opening (A-B)	91592.21	87253.91	83941.85
D	Addition due to ACE	2671.52	3947.40	1077.91
E	Repayment during the year	7009.82	7259.46	7449.00
F	Net Loan-Closing (C+D-E)	87253.91	83941.85	77570.75
G	Average Loan (C+F)/2	89423.06	85597.88	80756.30
H	Weighted Average Rate of Interest on Loan (in %)	4.4451	4.4291	4.4429
I	Interest on Loan (G*H)	3974.94	3791.22	3587.92

Return on Equity (RoE)

124. Regulations 30 and 31 of the 2019 Tariff Regulations provide as follows:

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

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

Provided that return on equity in respect of Additional Capitalization after cutoff date beyond the original scope excluding Additional Capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the



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

Provided further that:

- i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;
- ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;
- iii. in case of a thermal generating station, with effect from 1.4.2020:
 - a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
 - b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:
Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.

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

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

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

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

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

Illustration-

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

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



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

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;

(b) Estimated Advance Tax for the year on above is Rs 240 crore;

(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;

(d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.

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

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

Asset I

(₹ in lakh)

	Particulars	2019-20 (Pro rata for 273 days)	2020-21	2021-22	2022-23	2023-24
A	Opening Equity	482.71	488.37	509.75	509.75	509.75
B	Addition due to ACE	5.66	21.37	0.00	0.00	0.00
C	Closing Equity (A+B)	488.37	509.75	509.75	509.75	509.75
D	Average Equity (A+C)/2	485.54	499.06	509.75	509.75	509.75
E	Return on Equity (Base Rate)	15.50	15.50	15.50	15.50	15.50
F	Tax Rate applicable	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity (Pre-tax) (D*G)	68.02	93.73	95.74	95.74	95.74



Asset II

		(₹ in lakh)		
	Particulars	2021-22	2022-23	2023-24
A	Opening Equity	39253.81	40398.74	42090.49
B	Addition due to ACE	1144.94	1691.74	461.96
C	Closing Equity (A+B)	40398.74	42090.49	42552.45
D	Average Equity (A+C)/2	39826.28	41244.62	42321.47
E	Return on Equity (Base Rate)	15.50	15.50	15.50
F	Tax Rate applicable	17.472	17.472	17.472
G	Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782
H	Return on Equity (Pre-tax) (D*G)	7480.17	7746.56	7948.82

Operation & Maintenance Expenses (O&M Expenses)

126. The Petitioner has submitted the O&M Expenses for the transmission assets as summarised below:

Asset I

(₹ in lakh)					
Particulars	2019-20*	2020-21	2021-22	2022-23	2023-24
Sub-station					
Wardha Aurangabad Bay	2	2	2	2	2
Norms					
Sub-station					
GIS Sub-station Bays	32.15	33.28	34.45	35.66	36.91
O&M Expenses					
Sub-station	64.30	66.56	68.90	71.32	73.82
Total O&M Expenses	47.96	66.56	68.90	71.32	73.82

* Pro rata for 273 days

Asset II

(₹ in lakh)			
Particulars	2021-22	2022-23	2023-24
Transmission Lines			
D/C with 4 Sub-conductors	348.492	348.492	348.492
Norms			
Transmission Lines			
DC (Bundle Conductor with Four Sub Conductor)	1.416	1.466	1.517
O&M Expenses			
Transmission Lines	493.46	510.89	528.66
O&M Expenses	493.46	510.89	528.66



127. Regulations 35(3)(a) and 35(4) of the 2019 Tariff Regulations provide as follows:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.26	0.27	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
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 justification.

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

128. We have considered the Petitioner's submissions. The Wardha-Aurangabad 400 kV D/C (quad) line, along with 40% FSC and a provision to upgrade the line to 1200 kV S/C, was initially implemented as a 400 kV D/C line on towers designed for 1200 kV S/C. Accordingly, we allow the O&M Expenses for Asset-II to be treated as the O&M Expenses for the 400 kV D/C (quad) transmission line. The O&M Expenses approved for the transmission assets are as follows:



(₹ in lakh)

O&M Expenses	2019-20	2020-21	2021-22	2022-23	2023-24
Asset I	47.96*	66.56	68.90	71.32	73.82
Asset II	0.00	0.00	493.46	510.89	528.66

* pro-rata for 273 days

Interest on Working Capital (IWC)

129. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019

Tariff Regulations specify as follows:

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

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

(i) Receivables equivalent to 45 days of annual fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and

(iii) Operation and maintenance expenses, including security expenses for one month.

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019- 24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

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

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

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

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

130. The Petitioner has considered the IWC rates as 12.05% as on 1.4.2019 and 10.50% as on 1.4.2021 for Asset-I and Asset-II, respectively. 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 FY 2019-20, 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for FY 2020-21, 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 & 1.4.2022 of 7.00% plus 350 basis points) for FY 2021-22 and FY 2022-23 and 12.00% (SBI 1-year MCLR applicable as on



1.4.2023 of 8.50% plus 350 basis points) for FY 2023-24. The components of the working capital and interest allowed thereon for the transmission assets are as follows:

Asset I

(₹ in lakh)

Particulars	2019-20 (Pro-rata for 273 days)	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M expenses for one month)	5.36	5.55	5.74	5.94	6.15
Working Capital for Maintenance Spares (15% of O&M Expenses)	9.64	9.98	10.34	10.70	11.07
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	38.76	39.42	39.65	39.24	38.84
Total Working Capital	53.77	54.95	55.73	55.88	56.06
Rate of Interest for Working Capital (in %)	12.05	11.25	10.50	10.50	12.00
Interest on Working Capital	4.83	6.18	5.85	5.87	6.73

Asset II

(₹ in lakh)

Particulars	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	41.12	42.57	44.06
Working Capital for Maintenance Spares (15% of O&M Expenses)	74.02	76.63	79.30
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	2369.50	2413.24	2437.09
Total Working Capital	2484.64	2532.45	2560.44
Rate of Interest for working capital (in %)	10.50	10.50	12.00
Interest on working capital	260.89	265.91	307.25

Annual Fixed Charges (AFC) for the 2019-24 Tariff Period

131. The transmission charges allowed for the transmission assets after prudence check for the 2019-24 tariff period are as follows:

Asset I

(₹ in lakh)

Particulars	2019-20 (Pro-rata for 273 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	66.68	92.04	94.19	94.19	94.19



Particulars	2019-20 (Pro-rata for 273 days)	2020-21	2021-22	2022-23	2023-24
Interest on Loan	47.68	61.20	56.94	51.15	45.41
Return on Equity	68.02	93.73	95.74	95.74	95.74
Operation & Maintenance Expenses	47.96	66.56	68.90	71.32	73.82
Interest on Working Capital	4.83	6.18	5.85	5.87	6.73
Total	235.17	319.71	321.62	318.27	315.89

Asset II

(₹ in lakh)

Particulars	2021-22	2022-23	2023-24
Depreciation	7009.82	7259.46	7449.00
Interest on Loan	3974.94	3791.22	3587.92
Return on Equity	7480.17	7746.56	7948.82
Operation & Maintenance Expenses	493.46	510.89	528.66
Interest on Working Capital	260.89	265.91	307.25
Total	19219.29	19574.04	19821.65

Filing Fee and Publication Expenses

132. The Petitioner has sought reimbursement of the fee it paid for filing the petition and publication expenses. The Petitioner shall be entitled to reimbursement of the filing fees and publication expenses related to 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 and RLDC Fees and Charges

133. 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 recover the RLDC fee and charges in accordance with Regulation 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.

Goods and Services Tax

134. The Petitioner has submitted that if GST is levied at any rate and at any future time on charges for the transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner, and shall be charged and billed separately by the Petitioner.



Further, any additional taxes, if applicable, resulting from demands by Government/ Statutory Authorities may be allowed to be recovered from the beneficiaries.

135. MSEDCL and MPPMCL have submitted that the prayer of the Petitioner for GST is premature and hence the same may not be allowed. In response, the Petitioner has reiterated the submissions as made in the Petition.

136. We have considered the submissions of the Petitioner, MSEDCL and MPPMCL. Since GST is not currently imposed on transmission service, we are of the view that the Petitioner's prayer is premature.

Security Expenses

137. The Petitioner has submitted that security expenses regarding transmission assets are not claimed in the present petition, and it will file a separate petition to claim the overall security expenses and consequential IWC.

138. We have considered the Petitioner's above submissions . The Petitioner has claimed consolidated security expenses for all its transmission assets owned by it on a projected basis for the 2019-24 tariff period, based on the actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The Commission has already disposed of that petition through an order dated 3.8.2021. Therefore, the Petitioner's prayer in the present petition to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

Capital Spares

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



140. The Petitioner in this Petition has prayed for allowing an interim tariff as per Regulation 10(3) of the 2019 Tariff Regulations for the purpose of inclusion in the PoC charges.

141. We have considered the Petitioner's submissions. Since we have determined the transmission tariff in this Petition, the Petitioner's prayer for an interim tariff has become infructuous.

Sharing of Transmission Charges

142. The COD of Asset-I and Asset-II is approved as 3.7.2019 and 1.4.2021, respectively. Accordingly, the billing, collection, and disbursement of transmission charges shall be recovered in accordance with the provisions of the 2010 Sharing Regulations until 30.10.2020, and based on the 2020 Sharing Regulations from 1.11.2020, as provided in Regulation 57 of the 2019 Tariff Regulations.

143. To summarise, AFC allowed for the transmission assets in respect of the 2019-24 tariff period is as follows in this order:

(₹ in lakh)

AFC	2019-20*	2020-21	2021-22	2022-23	2023-24
Asset -I					
AFC claimed	266.77	364.60	365.95	361.61	357.40
AFC allowed	235.17	319.71	321.62	318.27	315.89
Asset II					
AFC claimed			19863.99	20280.19	20477.21
AFC allowed			19219.29	19574.04	19821.65

* Pro rata for 273 days

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

145. This order disposes of Petition No. 3/TT/2023 in terms of the above findings and discussions.

sd/-
(Harish Dudani)
Member

sd/-
(Ramesh Babu V.)
Member

sd/-
(Jishnu Barua)
Chairperson



Annexure

Asset I

(₹ in lakh)

Capex	Capital Cost as on COD	Projected ACE					Capital Cost as on 31.3.2024	Dep Rate	Annual Depreciation				
		2019-20	2020-21	2021-22	2022-23	2023-24			2019-20	2020-21	2021-22	2022-23	2023-24
Building	91.20	0.00	0.86	0.00	0.00	0.00	92.06	3.34%	3.05	3.06	3.07	3.07	3.07
TL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
S/s	1459.14	18.88	64.67	0.00	0.00	0.00	1542.69	5.28%	77.54	79.75	81.45	81.45	81.45
PLCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.33%	0.00	0.00	0.00	0.00	0.00
IT Eqpt.	58.70	0.00	5.71	0.00	0.00	0.00	64.41	15.00%	8.81	9.23	9.66	9.66	9.66
Total	1609.04	18.88	71.24	0.00	0.00	0.00	1699.16		89.39	92.04	94.19	94.19	94.19
									Avg. Gross Block				
										1618.48	1663.54	1699.16	1699.16
									WAROD	5.52%	5.53%	5.54%	5.54%

Asset II

(₹ in lakh)

Capex	Capital Cost as on COD	Projected ACE			Capital Cost as on 31.3.2024	Dep Rate	Annual Depreciation		
		2021-22	2022-23	2023-24			2021-22	2022-23	2023-24
Building	9.49	0.71	0.00	0.00	10.20	3.34%	0.33	0.34	0.34
TL	128917.12	3815.22	5639.14	1539.87	139911.35	5.28%	6907.56	7157.16	7346.69
S/s	1913.74	0.42	0.00	0.00	1914.16	5.28%	101.07	101.08	101.08
PLCC	0.00	0.00	0.00	0.00	0.00	6.33%	0.00	0.00	0.00
IT Eqpt.	5.67	0.11	0.00	0.00	5.78	15.00%	0.86	0.87	0.87
Total	130846.02	3816.46	5639.14	1539.87	141841.49		7009.82	7259.46	7449.00
							Avg. Gross Block		
								132754.25	137482.05
							WAROD	5.28%	5.28%

