

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 159/TT/2024

Coram:

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

Date of Order: 14.11.2025

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 the COD to 31.3.2024 under “Establishment of Fibre Optic Communication System in the Western Region under Master Communication Plan (Additional Requirement)”

And in the matter of:

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

.....Petitioner

Versus

- 1. Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Rampur,
Jabalpur-482008.**
- 2. Madhya Pradesh Audyogik Kendra,
Vikas Nigam (Indore) Limited,
3/54, Press Complex, Agra-Bombay Road, Indore-452008.**
- 3. Maharashtra State Electricity Distribution Company Limited,
Hongkong Bank Building, 3rd Floor,
M.G. Road, Fort, Mumbai-400001.**
- 4. Gujarat Urja Vikas Nigam Limited,
Sardar Patel Vidyut Bhawan,
Racecourse Road, Vadodara-390007.**
- 5. Electricity Department,
Government of Goa, Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa-403001.**



6. **Electricity Department,**
Administration of Daman & Diu,
Daman-396210.
7. **DNH Power Distribution Corporation Limited,**
Vidyut Bhawan, 66 kV Road, Near Secretariat Amla,
Silvassa-396230.
8. **Chhattisgarh State Power Distribution Company Limited,**
P.O. Sunder Nagar, Dangania, Raipur,
Chhattisgarh-492013.

...Respondent(s)

Parties Present: Ms. Nishtha Goel, Advocate, MSEDCL
Shri Mohd. Mohsin, PGCIL
Shri Vishal Sagar, PGCIL
Shri Arjun Malhotra, PGCIL
Shri Divyanshu Mishra, PGCIL
Shri Amit Garg, PGCIL
Shri Ranjeet Kumar Pandey, PGCIL

ORDER

The instant Petition has been filed by the Power Grid Corporation of India Limited for the determination of tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) for the period from the date of commercial operation (COD) to 31.3.2024 in respect of the following assets (hereinafter referred to as “the communication asset”) under “Establishment of Fibre Optic Communication System in Western Region under Master Communication Plan (Additional Requirement)” (hereinafter referred to as “the communication project”) in the Western Region:

Sr. No.	Name of Asset
1	Asset 1- OPGW link for 765 kV Bina-Jabalpur (230 km) under Central Sector
2	Asset 2- OPGW link for 220 kV Vapi-Kharadpada (30 km) & 66 kV Kharadpada-Ambali (15 km) under Central Sector,
3	Asset 3- OPGW link for 400 kV Bina-Bina (JP) (20 km) under Central Sector,
4	Asset 4- OPGW link for 220 kV RBPH-CHPH (1.2 km) under Central Sector
5	Asset 5- OPGW link for 400 kV Bhachau-Vasrana (9.251 km) under Central Sector
6	Asset 6- OPGW link for 765 kV Bina-Indore (311 km) under Central Sector
7	Asset 7- OPGW link for 400 kV Nagda-Dehgam (331 km) under Central Sector
8	Combined Assets 8, (Asset 8A- OPGW link for 220 kV Indore-Indore (SZ) (7



	km) under State Sector, Asset 8B- OPGW link for 132 kV Waidhan-Singrauli (10 km) under State Sector, Asset 8C- OPGW link for 220 kV Malanpur-Gwalior (40 km) under State Sector, Asset 8D- OPGW link for 220 kV Neemuch-Gandhisagar (78 km) under State Sector, Asset 8E- OPGW link for 220 kV Shivpuri-Bina (170 km) under State Sector),
9	Asset 9- OPGW link for 220 kV Xeldom-Ambewadi-Narendra (144 km) under Central Sector
10	Asset 10- OPGW link for 400 kV Mundra-Jetpur under Central Sector

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

- “1) Condone the delay in completion of subject asset on merit of the same being out of the control of Petitioner in line with CERC Regulations’2019 22(2) “uncontrollable factors” and approve the tariff as claimed.*
- 2) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred/projected to be incurred.*
- 3) Approve the Transmission Tariff for the tariff block 2019-24 block for the asset covered under this petition, as per para –8.3 above.*
- 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 claim the overall security expenses and consequential IOWC on that security expenses separately.*
- 9) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*
- 10) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*



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

12) Allow Final tariff in accordance with Regulation 10 (5) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.

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

Background

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

- a. The Investment Approval (IA) for the communication project was accorded by the Board of Directors of the Petitioner in its 313th meeting held on 17.4.2015 and communicated vide Memorandum Ref No. K/K.A./F.O.C.S.-W.R.(AD.) dated 24.4.2015 at an estimated cost of ₹12072 lakh, including an Interest During Construction (IDC) of ₹7.55 lakh based on the December 2014 price level.
- b. The communication project was discussed and agreed upon for implementation in the 14th, 21st, and 23rd WRPC meetings held on 19.8.2010, 9.11.2012 and 12.6.2013, respectively.
- c. Originally, Xeldem-Ambewadi-Narendra Link was not in the list of Goa Electricity Department (GED) links. This link was included after getting permission from the WRPC/SRPC for Reliable Network for GED SLDC Links. Initially, this link was approved in the SRPC on 25.2.2017 and permission was given by KPTCL on 25.10.2017 for providing tower schedule and for coordination.
- d. The scope of the work covered under the communication project broadly includes:



1. Implementation of OPGW fiber optic cable on the EHV transmission line of the Petitioner and the constituents, the estimated length of such cable is approximately 3483 km.
 2. Installation of 56 nos. of terminal equipment based on Synchronous Digital Hierarchy (SDH) technology at the Sub-stations of the Petitioner and the constituents; 56 nos. of Mux/D&I/DACS at wideband nodes; and Network Management System (NMS).
 3. DC Power Supply, presently envisaged at all the wideband locations where equipment is to be installed. However, the requirement shall be optimized during the detailed engineering.
 4. Approach Cable for providing connectivity between the OPGW and equipment.
- e. The details of the Petitions filed under the instant communication project are as under:

Sr. No.	Name of Asset	SCOD as per IA	COD	Covered in Petition
1	OPGW link for Betul-Khandwa under Central Sector	17.10.2017	1.5.2017	Determined for the 2014-19 tariff period vide order dated 25.7.2022 in Petition No. 731/TT/2020, subsequently trued-up for the 2014-19 tariff period and determined for the 2019-24 period vide order dated 18.12.2024 in Petition No. 323/TT/2023
2	OPGW link (125 km) for Mauda-Wardha under Central Sector		1.9.2017	
3	6 nos. OPGW link (92.66 km) under State sector for following links: Mapusa-Amona Amona-Ponda Mapusa-Tivim Ponda-Xeldem Ponda-Verna Xeldem-Cuncolim		2.7.2018	
4A	3 nos. OPGW link (656.926 km) under Central Sector for following links: Korba-Birshingpur Bilaspur-Dharamjaygarh Parli-Wardha		2.9.2018	
4B	OPGW link for Korba-Birsinghpur under Central Sector		2.9.2018	
5A	OPGW link (15.462 km) for 400 kV Xeldom-Madgaon under State Sector		1.3.2019	
5B	OPGW link for 400 kV Vapi-Magarwada under Central Sector		1.3.2019	
6	9 nos. OPGW link under State Sector for following links:		1.3.2019	



Sr. No.	Name of Asset	SCOD as per IA	COD	Covered in Petition
	Chindwada-Seoni Ratlam-Nagda Shujalpur-Shujalpur Neemuch-Nagda Itarsi-Itarsi Rajgarh-Rajgarh Pithampur-Pithampur Indore-Indore Seoni-Pench			
1	Asset 1- OPGW link for 765 kV Bina-Jabalpur (230 km) under Central Sector		21.6.2019	Covered under instant Petition
2	Asset 2- OPGW link for 220 kV Vapi-Kharadpada (30 km) & 66 kV Kharadpada-Ambali (15 km) under Central Sector,		29.6.2019	
3	Asset 3- OPGW link for 400 kV Bina-Bina (JP) (20 km) under Central Sector,		24.1.2020	
4	Asset 4- OPGW link for 220 kV RBPH-CHPH (1.2 km) under Central Sector		17.9.2020	
5	Asset 5- OPGW link for 400 kV Bhachau-Vasrana (9.251 km) under Central Sector		29.9.2020	
6	Asset 6- OPGW link for 765 kV Bina-Indore (311 km) under Central Sector,		19.1.2021	
7	Asset 7- OPGW link for 400 kV Nagda-Dehgam (331 km) under Central Sector		4.7.2021	
8	Combined Assets 8, (Asset 8A - OPGW link for 220 kV Indore-Indore (SZ) (7 km) under State Sector, Asset 8B - OPGW link for 132 kV Waidhan-Singrauli (10 km) under State Sector, Asset 8C - OPGW link for 220 kV Malanpur-Gwalior (40 Kms) under State Sector, Asset 8D - OPGW link for 220 kV Neemuch-Gandhisagar (78 km) under State Sector, Asset 8E - OPGW link for 220 kV Shivpuri-Bina (170 km) under State Sector),		29.6.2019	
9	Asset 9- OPGW link for 220 kV Xeldom-Ambewadi-Narendra (144 km) under Central Sector		4.10.2019	
10	Asset 10- OPGW link for 400 kV Mundra-Jetpur under Central Sector		31.3.2024 (Ant.)	



- f. The details of the communication assets including the scheduled commercial operation date (SCOD), date of commercial operation (COD) and time over-run are as under:

S. No	Name of Asset	Scheduled commissioning as per IA	COD	Delay (in days)
1	Asset 1	17.10.2017	21.6.2019	612 days
2	Asset 2		29.6.2019	620 days
3	Asset 3		24.1.2020	829 days
4	Asset 4		17.9.2020	1066 days
5	Asset 5		29.9.2020	1078 days
6	Asset 6		19.1.2021	1190 days
7	Asset 7		4.7.2021	1356 days
8	Combined Assets 8		29.6.2019	620 days
9	Asset 9		4.10.2019	717 days
10	Asset 10		31.3.2024 (Ant.)	2357 days

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

5. The Petitioner has served the Petition on the Respondents and notice regarding filing of this Petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner. Respondent No. 1, Madhya Pradesh Power Management Company Limited (MPPMCL) and Respondent No. 3, Maharashtra State Electricity Distribution Company Limited (MSEDCL) have filed their reply vide affidavits dated 21.12.2024 and 16.12.2024, respectively, raising issues of time over-run and GST claim. The Petitioner has filed rejoinder in response to the reply filed by MPPMCL and MSEDCL vide separate affidavits dated 3.1.2025.



6. The hearing in this matter was held on 23.1.2025 and the order was reserved. This order is being passed considering the submissions made by the Petitioner in the Petition vide affidavit dated 11.3.2024 and the Petitioner's subsequent affidavits dated 12.9.2024 and 6.12.2024, reply filed by MPPMCL and MSEDCL vide affidavits dated 21.12.2024 and 16.12.2024, respectively, and the Petitioner's rejoinders to the reply of MPPMCL and MSEDCL vide separate affidavits dated 3.1.2025.

7. In response to the Commission's query, the Petitioner vide affidavit dated 6.12.2024 has submitted that Asset-10 (OPGW Link for 400 kV Mundra-Jetpur under central sector) is still under execution and delayed due to the severe RoW issues. The Petitioner is rigorously following up with the administrative authorities and putting hard efforts in resolving the RoW issues to complete the work at the earliest. As per the latest progress of works, the anticipated COD of the OPGW link for Mundra-Jetpur is 31.3.2025. The Petitioner shall file a separate Petition for the same as per the 2024 Tariff Regulations upon its commissioning. Thus, the tariff claims for Asset-10 are not being dealt with in the present order.

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

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD

9. The Petitioner has claimed the following transmission charges in respect of the communication assets:

Asset-1

(₹ in lakh)						
	Particulars	2019-20 (pro-rata 285 days)	2020-21	2021-22	2022-23	2023-24
A	Depreciation	14.56	21.92	31.06	31.33	31.33
B	Interest on Loan	11.87	16.58	22.32	20.21	17.80



	Particulars	2019-20 (pro-rata 285 days)	2020-21	2021-22	2022-23	2023-24
C	Return on Equity	12.96	19.52	27.65	27.89	27.89
D	O&M Expenses	0.93	1.31	1.66	1.63	1.59
E	Interest on Working Capital	7.71	9.90	9.90	9.90	9.90
F	Total	48.03	69.23	92.59	90.96	88.51

Asset-2

(₹ in lakh)

	Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
A	Depreciation	4.47	7.12	9.76	9.76	9.76
B	Interest on Loan	3.66	5.42	7.02	6.28	5.52
C	Return on Equity	3.98	6.34	8.69	8.69	8.69
D	O&M Expenses	0.28	0.42	0.52	0.51	0.50
E	Interest on Working Capital	2.33	3.08	3.08	3.08	3.08
F	Total	14.72	22.38	29.07	28.32	27.55

Asset-3

(₹ in lakh)

	Particulars	2019-20 (pro-rata 68 days)	2020-21	2021-22	2022-23	2023-24
A	Depreciation	0.74	4.06	4.9	4.90	4.90
B	Interest on Loan	0.62	3.22	3.57	3.18	2.81
C	Return on Equity	0.66	3.62	4.36	4.36	4.36
D	O&M Expenses	0.04	0.23	0.26	0.26	0.25
E	Interest on Working Capital	0.29	1.55	1.55	1.55	1.55
F	Total	2.35	12.68	14.64	14.25	13.87

Asset-4

(₹ in lakh)

	Particulars	2020-19 (Pro-rata 196 days)	2021-22	2022-23	2023-24
A	Depreciation	0.39	0.72	0.73	0.73
B	Interest on Loan	0.29	0.49	0.45	0.40
C	Return on Equity	0.35	0.64	0.64	0.64
D	O&M Expenses	0.02	0.03	0.03	0.03
E	Interest on Working Capital	0.12	0.23	0.23	0.23
F	Total	1.17	2.11	2.08	2.03



Asset-5

(₹ in lakh)

	Particulars	2020-19 (Pro-rata 184 days)	2021-22	2022-23	2023-24
A	Depreciation	1.75	3.98	4.02	4.02
B	Interest on Loan	1.30	2.76	2.51	2.24
C	Return on Equity	1.56	3.55	3.58	3.58
D	O&M Expenses	0.09	0.2	0.19	0.19
E	Interest on Working Capital	0.64	1.27	1.27	1.27
F	Total	5.34	11.76	11.57	11.30

Asset-6

(₹ in lakh)

	Particulars	2020-19 (Pro-rata 72 days)	2021-22	2022-23	2023-24
A	Depreciation	10.88	56.4	57.48	58.49
B	Interest on Loan	8.17	40.24	37.38	34.2
C	Return on Equity	9.69	50.2	51.16	52.07
D	O&M Expenses	0.58	2.95	2.94	2.91
E	Interest on Working Capital	4.29	21.75	21.75	21.75
F	Total	33.61	171.54	170.71	169.42

Asset-7

(₹ in lakh)

	Particulars	2021-22 (Pro-rata 271 day)	2022-23	2023-24
A	Depreciation	39.24	56.92	58.10
B	Interest on Loan	27.47	36.97	34.03
C	Return on Equity	34.93	50.67	51.72
D	O&M Expenses	1.85	2.59	2.58
E	Interest on Working Capital	13.63	18.36	18.36
F	Total	117.12	165.51	164.79

Asset-8

(₹ in lakh)

	Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
A	Depreciation	31.79	47.59	53.26	54.42	54.42
B	Interest on Loan	26.97	37.36	38.32	35.06	30.67
C	Return on Equity	28.29	42.36	47.4	48.44	48.44
D	O&M Expenses	1.88	2.67	2.85	2.83	2.76
E	Interest on Working Capital	13.01	17.20	17.20	17.20	17.20
F	Total	101.94	147.18	159.03	157.95	153.49



Asset-9

(₹ in lakh)

	Particulars	2019-20 (pro-rata 180 days)	2020-21	2021-22	2022-23	2023-24
A	Depreciation	22.56	50.28	54.33	54.33	54.33
B	Interest on Loan	18.76	39.08	38.47	34.27	30.08
C	Return on Equity	20.08	44.76	48.36	48.36	48.36
D	O&M Expenses	1.29	2.77	2.88	2.81	2.74
E	Interest on Working Capital	8.44	17.16	17.16	17.16	17.16
F	Total	71.13	154.05	161.20	156.93	152.67

10. The Petitioner has claimed the following Interest on Working Capital (IWC) in respect of the communication assets:

Asset-1

(₹ in lakh)

	Particulars	2019-20 (pro-rata 285 days)	2020-21	2021-22	2022-23	2023-24
A	O&M Expenses	0.83	0.83	0.83	0.83	0.83
B	Maintenance Spares	1.49	1.49	1.49	1.49	1.49
C	Receivables	7.58	8.54	11.42	11.21	10.88
D	Total Working Capital	9.90	10.86	13.74	13.53	13.20
E	Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
F	Interest on Working Capital	0.93	1.31	1.66	1.63	1.59

Asset-2

(₹ in lakh)

	Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
A	O&M Expenses	0.26	0.26	0.26	0.26	0.26
B	Maintenance Spares	0.46	0.46	0.46	0.46	0.46
C	Receivables	2.39	2.76	3.58	3.49	3.39
D	Total Working Capital	3.11	3.48	4.30	4.21	4.11
E	Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
F	Interest on Working Capital	0.28	0.42	0.52	0.51	0.50

Asset-3

(₹ in lakh)

	Particulars	2019-20 (pro-rata 68 days)	2020-21	2021-22	2022-23	2023-24
A	O&M Expenses	0.13	0.13	0.13	0.13	0.13
B	Maintenance Spares	0.23	0.23	0.23	0.23	0.23
C	Receivables	1.56	1.56	1.80	1.76	1.71
D	Total Working Capital	1.92	1.92	2.16	2.12	2.07



	Particulars	2019-20 (pro-rata 68 days)	2020-21	2021-22	2022-23	2023-24
E	Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
F	Interest on Working Capital	0.04	0.23	0.26	0.26	0.25

Asset-4

(₹ in lakh)

	Particulars	2020-21 (pro-rata 196 days)	2021-22	2022-23	2023-24
A	O&M Expenses	0.02	0.02	0.02	0.02
B	Maintenance Spares	0.03	0.03	0.03	0.03
C	Receivables	0.27	0.26	0.26	0.25
D	Total Working Capital	0.32	0.31	0.31	0.30
E	Rate of Interest (in %)	11.25	11.25	11.25	11.25
F	Interest on Working Capital	0.02	0.03	0.03	0.03

Asset-5

(₹ in lakh)

	Particulars	2020-21 (pro-rata 184 days)	2021-22	2022-23	2023-24
A	O&M Expenses	0.11	0.11	0.11	0.11
B	Maintenance Spares	0.19	0.19	0.19	0.19
C	Receivables	1.31	1.45	1.43	1.39
D	Total Working Capital	1.61	1.75	1.73	1.69
E	Rate of Interest (in %)	11.25	11.25	11.25	11.25
F	Interest on Working Capital	0.09	0.20	0.19	0.19

Asset-6

(₹ in lakh)

	Particulars	2020-21 (pro-rata 72 days)	2021-22	2022-23	2023-24
A	O&M Expenses	1.81	1.81	1.81	1.81
B	Maintenance Spares	3.26	3.26	3.26	3.26
C	Receivables	21.01	21.15	21.05	20.83
D	Total Working Capital	26.08	26.22	26.12	25.90
E	Rate of Interest (in %)	11.25	11.25	11.25	11.25
F	Interest on Working Capital	0.58	2.95	2.94	2.91

Asset-7

(₹ in lakh)

	Particulars	2021-22 (pro-rata 271 days)	2022-23	2023-24
A	O&M Expenses	1.53	1.53	1.53
B	Maintenance Spares	2.75	2.75	2.75
C	Receivables	19.45	20.41	20.26
D	Total Working Capital	23.73	24.69	24.54
E	Rate of Interest (in %)	10.50	10.50	10.50
F	Interest on Working Capital	1.85	2.59	2.58



Asset-8

(₹ in lakh)

	Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
A	O&M Expenses	1.43	1.43	1.43	1.43	1.43
B	Maintenance Spares	2.58	2.58	2.58	2.58	2.58
C	Receivables	16.56	18.15	19.61	19.47	18.87
D	Total Working Capital	20.57	22.16	23.62	23.48	22.88
E	Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
F	Interest on Working Capital	1.88	2.67	2.85	2.83	2.76

Asset-9

(₹ in lakh)

	Particulars	2019-20 (pro-rata 180 days)	2020-21	2021-22	2022-23	2023-24
A	O&M Expenses	1.43	1.43	1.43	1.43	1.43
B	Maintenance Spares	2.57	2.57	2.57	2.57	2.57
C	Receivables	17.78	18.99	19.87	19.35	18.77
D	Total Working Capital	21.78	22.99	23.87	23.35	22.77
E	Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
F	Interest on Working Capital	1.29	2.77	2.88	2.81	2.74

Date of Commercial Operation ("COD")

11. The Petitioner has claimed the actual COD for the communication assets as under:

Sr. No.	Name of Asset	COD
1	Asset 1- OPGW link for 765 kV Bina-Jabalpur (230 km) under Central Sector	21.6.2019
2	Asset 2- OPGW link for 220 kV Vapi-Kharadpada (30 km) & 66 kV Kharadpada-Ambali (15 km) under Central Sector,	29.6.2019
3	Asset 3- OPGW link for 400 kV Bina-Bina (JP) (20 km) under Central Sector,	24.1.2020
4	Asset 4- OPGW link for 220 kV RBPH-CHPH (1.2 km) under Central Sector	17.9.2020
5	Asset 5- OPGW link for 400 kV Bhachau-Vasrana (9.251 km) under Central Sector	29.9.2020
6	Asset 6- OPGW link for 765 kV Bina-Indore (311 km) under Central Sector	19.1.2021
7	Asset 7- OPGW link for 400 kV Nagda-Dehgam (331 km) under Central Sector	4.7.2021
8	Combined Assets 8, (Asset 8A- OPGW link for 220 kV Indore-Indore (SZ) (7 km) under State Sector, Asset 8B- OPGW link for 132 kV Waidhan-Singrauli (10 km) under State Sector, Asset 8C- OPGW link for 220 kV Malanpur-Gwalior (40 km) under State	29.6.2019



	Sector, Asset 8D - OPGW link for 220 kV Neemuch-Gandhisagar (78 km) under State Sector, Asset 8E - OPGW link for 220 kV Shivpuri-Bina (170 km) under State Sector),	
9	Asset 9 - OPGW link for 220 kV Xeldom-Ambewadi-Narendra (144 km) under Central Sector	4.10.2019

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

“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."

13. The communication assets under the aforementioned project considered in the instant Petition comprises the Fibre Optic Communication Systems. The operating voltage for the communication system operation is 24/48-volt D/C supply. Therefore, as per the Central Electricity Authority (Measures Relating to safety and Electric Supply) Regulation 2010 (the 2010 CEA Regulations), minimum 650 volt is required for inspection. Further, the Central government has specified the notified voltage for the purpose of self-certification under Regulation 30 and Regulation 43 of the 2010 CEA Regulations as 11 kV, that is up to 11 kV no inspection is required by the CEA inspector. Hence, the CEA clearance letter is not applicable in case of the communication system.

14. Further, the Petitioner vide affidavit dated 12.9.2024 has submitted that the Commission, vide order dated 27.1.2017 in Petition No. 53/TT/2016 acknowledged that for the assets under a communication system, the CMD's approval is not required. The same was further reinforced vide corrigendum order dated 7.7.2017, wherein, the Commission has mentioned that CMD's approval is not required in case of the communication system.



15. The Petitioner has submitted the WRLDC Energisation Certificate and Self-declaration COD Certificates in support of the COD of the communication assets considered in the instant Petition. The detail of the same are as under:

Asset	COD	Document Submitted
Asset-1	21.6.2019	WRLDC Certificate dated 18.7.2019 of completion of commissioning on 20.6.2019, COD Letter dated 22.7.2019
Asset-2	29.6.2019	WRLDC Certificate dated 16.7.2019 of completion of commissioning on 28.6.2019, COD Letter dated 18.7.2019
Asset-3	24.1.2020	WRLDC Certificate dated 8.4.2020 of completion of commissioning on dated 23.1.2020, COD Letter dated 8.5.2020
Asset-4	17.9.2020	WRLDC Certificate dated 1.10.2020 of completion of commissioning on 16.9.2020, COD Letter dated 9.10.2020
Asset-5	29.9.2020	WRLDC Certificate dated 1.10.2020 of completion of commissioning on 28.9.2020, COD Letter dated 9.10.2020
Asset-6	19.1.2021	WRLDC Certificate dated 25.1.2021 of completion of commissioning on dated 18.1.2021, COD Letter dated 27.1.2021
Asset-7	4.7.2021	WRLDC Certificate dated 9.7.2021 of completion of commissioning on 3.7.2021, COD Letter dated 12.7.2021
Asset-8	29.6.2019	WRLDC Certificate dated 10.10.2019 of completion of commissioning on 3.10.2019, COD Letter dated 18.7.2019
Asset-9	4.10.2019	WRLDC Certificate dated 13.10.2022 of completion of commissioning on dated 16.9.2022, COD Letter dated 16.10.2019

16. Taking into consideration the submissions made by the Petitioner, WRLDC Certificate of completion of trial operation, and self-declared COD letter, the COD of the communication assets is approved as under:

Asset	COD
Asset-1	21.6.2019
Asset-2	29.6.2019
Asset-3	24.1.2020
Asset-4	17.9.2020
Asset-5	29.9.2020
Asset-6	19.1.2021
Asset-7	4.7.2021



Asset	COD
Asset-8	29.6.2019
Asset-9	4.10.2019

Capital Cost

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

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

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

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



18. The Petitioner vide Auditor's Certificate dated 11.1.2024 for Asset-1, Asset-2, Asset-3, Asset-4, Asset-5, Asset-6, dated 31.12.2021 for Asset-7, dated 31.8.2020 for Asset-8 and dated 3.6.2020 for Asset-9 has claimed the capital cost incurred as on the COD and the Additional Capital Expenditure (ACE) projected to be incurred in respect of the communication assets and the same are as under:

(₹ in lakh)

Assets	Apportioned Approved Cost	Actual Expenditure Up to COD	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Estimated Completion Cost
1	503.88	397.10	-190.82	280.15	8.50	0.00	0.00	0.00	494.93
2	164.28	119.28	-48.59	83.52	0.00	0.00	0.00	0.00	154.21
3	79.24	77.35	-24.55	24.55	0.00	0.00	0.00	0.00	77.35
4	14.86	12.10	0.00	-0.62	0.00	0.00	0.00	0.00	11.48
5	70.90	48.36	0.00	15.09	0.00	0.00	0.00	0.00	63.45
6	1100.00	874.12	-	3.46	30.46	0.00	31.97	147.35	1087.36
7	924.22	789.45	-	-	91.16	37.29	0.00	0.00	917.9
8	868.48	655.73	25.07	142.04	36.94	0.00	0.00	0.00	859.78
9	898.15	729.13	5.23	123.86	0.00	0.00	0.00	0.00	858.22

Cost Overrun

19. The Petitioner has submitted that the total FR apportioned approved cost is ₹6370.07 lakh and the estimated completion cost is ₹6261.57 lakh. Thus, there is no cost overrun with respect to the communication assets.

Time overrun

20. As per the IA dated 17.4.2015, the communication project was scheduled to be commissioned within 30 months from the date of the IA, i.e., by 17.10.2017. Further, in response to the Commission's query regarding the justification for the SCOD of the new link (Asset-5: Bhachau-Versana) as 22.4.2020, the Petitioner vide affidavit dated 12.9.2024 has submitted that Asset-5 was added in the scope of the current scheme subsequent to the IA and the same was approved vide 35th WRPC held on 19.12.2017



and minutes issued on 1.3.2018 based on the recommendation of the expert group on CGPL disturbance held on 10.10.2017 at WRPC Mumbai. As per the IA, the scheduled completion timeline of the original project is within 30 months from the date of the IA (17.4.2015), i.e., by 17.10.2017. The Petitioner has further submitted that the newly added link requires re-planning of material procurement, drum schedule, mobilization of agency to new location and other associated activities which requires substantial revision in completion time equivalent to as good as new project at new location in the OPGW cases. Further, the SCOD for this link has been anticipated 30 months after the approval in the 35th WRPC meeting dated 19.12.2017 as 22.4.2020 in the main Petition. The Petitioner has further calculated the SCOD as per the IA, i.e., 30 months' timeline, from the date of addition of the current link in the instant project in the 35th meeting held on 19.12.2017, which comes to as 19.6.2020. The Petitioner has requested to consider the revised SCOD for Asset-5 as 19.6.2020. The details of the actual commissioning of the communication assets with respect to the SCOD as submitted by the Petitioner are as under:

Name of Asset	SCOD as per IA	COD	Delay (in days)
Asset-1	17.10.2017	21.6.2019	612 days
Asset-2		29.6.2019	620 days
Asset-3		24.1.2020	829 days
Asset-4		17.9.2020	1066 days
Asset-5*		29.9.2020	1078 days
Asset-6		19.1.2021	1190 days
Asset-7		4.7.2021	1356 days
Asset-8		29.6.2019	620 days
Asset-9		4.10.2019	717 days

**The Petitioner vide affidavit dated 12.9.2024 has requested to consider the revised SCOD of Asset-5 as 19.6.2020.*



21. There is a delay ranging from 612 days to 1356 days in commissioning of the communication assets with respect to the SCOD. The detailed reasons submitted by the Petitioner for the time overrun in case of the communication assets are as under:

Reasons for Delay for Asset-1, Asset-3 and Asset-4

22. The Petitioner has submitted that there is a delay of 612 days in case of Asset-1 (OPGW Link for 765 kV Bina-Jabalpur), 829 days in case of Asset-3 (OPGW Link for 400 kV Bina-Bina (JP)) and 1066 days in case of Asset-4 (OPGW Link for CHPH-RBPH). The Petitioner has submitted the following reasons for delay:

- i. There was frequent deferral of work permitted by the WRLDC due to grid constraints. Further, 2 Nos. lines covered under MCP-Additional project, i.e., 765 kV Bina-Jabalpur & 765 kV Bina-Indore were originating from same sub-station and WRLDC did not permit work on both lines simultaneously due to the grid constraints. Consequently, the work on Bina-Bina (JP) was carried out after completion of work on the above two links. The total delay in getting the shutdown approval from the WRLDC for the various links are about 451 days. The request for the shutdown and the shutdown deferral due to the grid constraints was discussed in various Operation and Coordination Committee (OCC) (491, 492, 493, 494, 495, 497, 499, 500, 501, 502, 503, 504, 505, 506 etc.) meetings of the WRPC and CEA. The outage requested and its approval of shutdown period from the WRLDC to work in different intervals from 14.2.2017 to 7.5.2018 (451 days) took considerable amount of time in completion of the work.
- ii. Some work was to be carried out under live line conditions and a permit to work was to be given by the WRLDC which depends upon the load conditions



and availability of the alternate arrangement to avoid any exigency arising during the execution. Hence, the permit to work is not provided regularly but after the considerable intervals of time which took longer time than expected. The lines of 765 & 400 kV are more difficult to work with under live line conditions with almost no work possible during the rainy and the winter season to avoid any line tripping or unwanted accident due to the high induction during the rainy/winter season. Thus, the total time period including when shutdown was required and wherever the permit to work was required took around 1066 days in completion of the work.

23. Respondent No. 1, MPPMCL vide affidavit dated 21.12.2024, and Respondent No. 2, MSEDCL vide affidavit dated 16.12.2024 have submitted that the Petitioner has attributed alleged delay of 612 days, 829 days and 1066 days, respectively, on account of not getting the shutdowns at appropriate time, such exorbitant delay due to the shut-down related issues where a 30 months project timeline is provided, it inherently includes the need for planning and scheduling outages in consideration of grid constraints. A delay of 20 months due to shut-down-related issues within a 30-month project timeline is neither reasonable nor justifiable. Further, the Petitioner may clarify whether the constraint associated with working under live conditions in the rainy and the winter season were discovered only during the execution of this project and the Petitioner was not aware of those constraints while finalizing the time period in the IA. The Respondents have further submitted that the Petitioner has not furnished any documentary evidence, such as records from the WRLDC denying the requested shutdowns or any adjudication by a court of law supporting the alleged refusal. In the absence of any corroborative evidence, the claim for condonation of the delay becomes baseless.



24. In response to the MPPMCL's and MSEDCL's reply the Petitioner has reiterated its submissions and in addition has submitted that since both the lines were originating from 765 kV Bina Sub-station, WRLDC was not granting Permit to Work on 02 lines simultaneously. Therefore, the work on Bina-Jabalpur was taken up at first and Bina-Indore was taken up after the completion of the OPGW installation on Bina-Jabalpur link.

Reason for delay for Asset-2 and Asset-8:

25. The Petitioner has submitted the following reasons for the delay in commissioning of Asset-2 and Asset-8:

- i. The Petitioner has submitted that there was substantial delay from MPPTCL end towards providing line parameters for engineering and design of the OPGW cable suited for their lines. Initial letter from CC-GA&C, POWERGRID was sent to MPPTCL vide letter ref: C-LDC-ER-BSPTCL-Ltr-9 dated 19.2.2016 requesting line parameters, reminder mail dated 5.4.2016 was again sent by CC-GA&C to MPPTCL for sharing the line parameters, finally vide email dated 24.5.2016, preliminary details were submitted by MPPTCL. On review of these details and subsequent clarifications, design and engineering of OPGW cable suitable for these lines was done. As the cable was new, type testing was done. A period of almost 4 months was necessary since the date of parameter submission by MPPTCL and type test approval for the cable finalized.
- ii. There was delay in commissioning of the MPPTCL's links due to the delay in signing of the survey reports by the site officials of MPPTCL. In many cases, site officials of MPPTCL were not ready to sign the survey reports. The same



was pursued by the Petitioner while coordinating with department of MPPTCL, however, without duly signed survey reports, it was not possible for the Petitioner to finalize the OPGW drum schedule. Furthermore, in addition to this several MPPTCL's lines covered under MCP-Additional were getting LILoed resulting in the change in the scope, addition of the LILo portion in the execution scope, survey and finalization of drum schedule/BOQ for LILo portion. Any delay in execution of the LILo by MPPTCL resulted in direct delay in commissioning of the links. For instance, MPPTCL vide letter Ref: 07-05/E&T/713/508 dated 4.11.2016 from Chief Engineer (SLDC-MP) to GM(AM), POWERGRID informed about the LILo of 4 Nos. lines covered under MCP-Additional including Neemuch-Gandhisagar & Indore-Indore SZ. Such modifications introduced by MPPTCL in advanced stages of project execution resulted in the delay of the link commissioning.

- iii. There were links such as Bina-Shivpuri which got delayed due to diversion undertaken by MPPTCL for NHAI. The same has been communicated vide letter ref: EE/EHT-Main/Gwl/2017/479 dated 2.7.2018 for realignment of OPGW on Bina-Shivpuri (TN-479 to TN-482).
- iv. Further, most of the MPPTCL links covered under subject Petition were already commissioned by 10.8.2018 and emails sent to WRLDC for issue of the Trial-run Certificate. However, the confirmation of the status of the links to WRLDC was delayed by MPPTCL. Furthermore, vide email dated 3.10.2018, WRLDC was again requested to issue the Trial-run Certificate for these links. Then vide email dated 4.10.2018, WRLDC requested MPPTCL to confirm the link status and finally vide email dated 6.10.2018, MPPTCL confirmed that most of the links covered under the instant Petition were



working fine. It may be noted that the primary scope of this project was commissioning of OPGW links including the wideband communication equipment. The responsibility of extending the voice, data from control room, PMU, RTU up to the wideband communication equipment is with MPPTCL. On repeated reminders and follow ups, same was done by the concerned site officials of MPPTCL.

- v. Towards the delay in commissioning of Vapi-Kharadapada-Amli links, the link was specially challenging, as the OPGW was proposed on 66 kV Kharadapa-Amli line as well. As no cable was approved for this voltage level, design and engineering for new type of cable was done on receipt of line parameters from the line owner, i.e., Dadar & Nager Haveli (DNH). Further, the input online parameters were themselves delayed. On so many reminders and follow ups, the line parameters were received only on 27.3.2017. Based on these inputs, cable design was approved, and drum schedule was issued on 15.5.2017. Minimum 3-month time was required for manufacturing, inspection, dispatch and receipt at site. Further, during the execution, there were multiple sections in DNH lines where shutdown was required. DNH delayed the shutdown permission due to industrial load of Silvassa area. DNH Power distribution Corporation Limited accorded the shutdown in June 2018. In addition to this, some portion of Vapi-Kharadapada & Kharadpada-Amli was on multi-circuit towers, line parameters along with the tower details were delayed from DNH-end resulting in delay towards cable design and engineering.
- vi. Regarding the 132 kV Waidhan-Singrauli line of MPPTCL, a lot of sections on this line were without earth wire and OPGW stringing under live line



conditions was not possible, shutdown was delayed from MPPTCL-end. OPGW stringing was completed on shutdown confirmation from MPPTCL-end.

- vii. The shutdown of the communication lines was required for installation of OPGW on various links under the said project, but WRLDC deferred permit to work due to the constraint of grid stability in 2017. The total delay in getting the shutdown approval from WRLDC for various links covered in the instant Petition is about 337 days. The list of the documents as cited above are as under:

Sr. No.	Letter/Document reference	Letter/Document date
1	Letter from CC-GA&C, POWERGRID was sent to MPPTCL vide letter ref: C-LDC-ER-BSPTCL-Ltr-9 dated 19.2.2016 requesting line parameters.	19.2.2016
2	Reminder mail from CC-GA&C to MPPTCL requesting line parameters for the links covered under MCP-Additional.	5.4.2016
3	MPPTCL mail providing the preliminary inputs online parameters for the lines covered under MCP-Additional.	24.5.2016
4	MPPTCL letter ref: CE(EHT-M&I)/Main/3742 from Chief Engineer (EHT-M&I) to MPPTCL site officials for expediting the survey reports for links covered under MCP-Additional.	16.11.2016
5	MPPTCL vide letter ref: 07-05/E&T/713/508 from Chief Engineer (SLDC-MP) to GM(AM), POWERGRID informing about LILO of 04 Nos. lines covered under MCP-Additional including Neemuch-Gandhisagar & Indore-Indore SZ.	4.11.2016
6	MPPTCL letter Vide letter ref: EE/EHT-Main/Gwl/2017/479 informing about diversion of Bina-Shivpuri line for NHAI.	2.7.2018
7	Mail communication from POWERGRID WR-II to WRLDC/SLDC informing about commissioning of MPPTCL links covered under the subject Petition.	10.8.2018
8	Reminder mail from POWERGRID WR-II to WRLDC/SLDC requesting the trial run certificate for MPPTCL links covered under the subject Petition.	4.10.2018
9	MPPTCL mail confirming working of most of the links covered under the subject Petition.	6.10.2018
10	Mail from DNH confirming line parameters for Vapi-Kharadoada-Amli.	27.3.2017
11	OPGW Drum Schedule approval for Vapi-Kharadapa-Amli issued to implementing agency.	15.5.2017
12	Letter from implementing agency informing unavailability of earth wire on certain section of Kharadpada- Amli and requirement of shutdown.	4.4.2018



Sr. No.	Letter/Document reference	Letter/Document date
13	Line shutdown notice issued by DNH.	17.5.2018
14	Letter from the implementing agency requesting additional 1-day shutdown on Kharadpada-Amli	25.6.2018

26. The Respondent No. 1, MPPMCL and Respondent No. 3, MSEDCL have submitted that the Petitioner has attributed alleged delay of 620 days each on account of delay in signing of the survey reports by site officials of MPPTCL. Such general activities constitute routine functions that any prudent transmission licensee is expected to undertake while developing transmission assets. The Commission has consistently held that a transmission licensee cannot seek condonation of delay for activities that should have been reasonably anticipated and planned for. Further, the Petitioner has casted certain allegations for the delay on MPPTCL, which is not a Respondent in this Petition. Furthermore, the Petitioner has also attributed the delay to issues related to obtaining shutdowns, for which no documentary evidence has been provided to substantiate the claims. Specifically, there is no record substantiating when the shutdown was requested and when it was finally granted to confirm the alleged delay. In the absence of such corroborative evidence, the justification for the delay remains unsubstantiated.

27. In response to the MPPMCL's and MSEDCL's reply, the Petitioner has submitted that the OPGW link was required to be implemented on Vapi-Kharadpada and Kharadpada-Amli and these lines are owned by DNH. The OPGW link on these lines are part of MCP-Additional project and was planned for system improvement and better data availability at WRLDC/NLDC. Being the state-owned lines, the actual condition/healthiness of these transmission lines was not known to the Petitioner in advance. During the survey, after the project approval, it was found that the condition of the earth wire was in very poor condition. Live line OPGW installation was not



possible in case of the poor earth wire conditions and therefore, the shutdown was required. Further, in the case of these 02 lines, the Trial-run Certificate was applied to the WRLDC on 1.5.2019 for Vapi-Kharadpada and Kharadpada-Amli. Both these links were ready in all respect by these dates; However, the issue of certificate was delayed due to the confirmation from DNH and was issued only on 28.6.2019. The Petitioner has further submitted that in the case of the OPGW link on the transmission lines of MPPTCL (Asset-8), Significant delay of 271 days occurred due to the unavailability of the line and earth wire parameters from MPPTCL end. Initial letter from the Petitioner dated 19.2.2016 followed up by reminders was finally responded by MPPTCL only by 16.11.2016 with full details. These 271 days delay is not attributable to the Petitioner and ought to be condoned. The Petitioner has also submitted that the shutdown of the transmission lines was required for the installation of the OPGW on various links under the said project, but WRLDC deferred Permit to Work due to the constraint of grid stability in 2017. The total delay in getting the shutdown approval from the WRLDC for various links covered in the instant Petition is about 337 days.

Reason for delay for Asset-5:

28. With regard to Asset-5, the Petitioner has submitted as under:

- i. The link was added in the current scheme at a later stage as per 35th meeting of WRPC on 19.12.2017 and the minutes were issued on 1.3.2018. As per the IA, the original scope has the completion timeline of 30 months from the date of the IA. The Petitioner vide affidavit dated 12.9.2024 has submitted that the new link added requires re-planning of material procurement, drum schedule and other associated activities which entails substantial revision in completion time. Calculating 30-month timeline (as per IA) from the date of adding current link in instant scheme in 35th WRPC held on 19.12.2017 the



SCOD comes out to be 19.6.2020. The drum schedule was issued in January 2018 for procurement of the additional OPGW accordingly. The material was received at site in January 2019 and accordingly the work was started. While executing the work, severe RoW issues arose along with the shutdown unavailability from SLDC/WRLDC.

ii. List of documents supporting above delay are as follows:

S.N.	Letter/Document reference	Letter/Document date
1	Record notes of WRPC 3 rd meeting of expert group on Power swing study for evacuation lines of CGPL.	19.1.2018
2	Jointly signed hindrance register showing continuous idling from 21.8.2019 to 30.9.2019 due to severe RoW issues.	23.9.2019
3	Letter to Superintendent of Police-Gandhidham for Police protection towards completion of OPGW work on Bhachau-Varsana.	22.8.2019
4	Demand note received from Superintendent of Police office- Gandhidham towards Police protection for completion of OPGW work on Bhachau-Varsana.	23.9.2019
5	Mail confirmation from POWERGRID Bhachau office towards availability of Police protection.	4.1.2020
6	GETCO letter confirming permission for Diamond formation between Bhachau-Varsana & Mundra-Zerda lines for POWERGRID request dtd 24.1.2020	10.2.2020
7	Signed hindrance register towards continuous idling from 23.1.2020 to 18.3.2020 due to unavailability of permit to work on GETCO line for diamond formation.	31.3.2020
8	Mail from POWERGRID WR-II to GETCO informing Bhachau-Versana link readiness. As per the CERC Communications Regulations 2017. It is the responsibility of individual users towards extending data of VOIP, PMU and RTU up to the wideband equipment. So, any delay in confirmation from GETCO or issue of trial run certificate is not in control of POWERGRID.	19.6.2020

iii. The completion of this link took around 102 more days from the revised SCOD (19.6.2020).

29. The Respondent No. 1, MPPMCL and Respondent No. 3, MSEDCL have submitted that the Petitioner has attributed alleged delay of 1078 days, on account of



the RoW issues and the requirement for police protection. Even after considering the issue of re-planning due to the late addition of the communication asset on 1.3.2018, the permissible project timeline of 30 months has been exceeded. Furthermore, the delay attributed to RoW issues and police protection are squarely the responsibility of the Petitioner. As the largest transmission licensee in the country, the Petitioner is expected to anticipate such challenges and take necessary steps to mitigate them. The onus to address and resolve these issues rests with the Petitioner, and they cannot form the basis for seeking condonation of delay.

30. In response to the MPPMCL's and MSEDCL's reply, the Petitioner has submitted that the delay was caused by a severe RoW issues and the event-wise chronology along with supporting documents have been provided in the Petition which significantly hindered the timely progress of the project. Therefore, the delay was due to the circumstances beyond the Petitioner's control, however, all efforts were made to minimise the impact and expedite the work as soon as the conditions allowed. The Petitioner undertook all the reasonable efforts to obtain the necessary RoW clearance with the help of local administration to complete the work as promptly as possible.

Reasons for delay for delay for Asset-6 and Asset-7:

31. With regard to Asset-6 and Asset-7, the Petitioner has submitted as under:

- i. There were frequent deferral of work permits by WRLDC due to grid constraints. Further 2 Nos. lines covered under MCP-Additional project, i.e., 765 kV Bina-Jabalpur & 765 kV Bina-Indore were originating from same Sub-station and WRLDC did not permit work on both lines simultaneously due to the grid constraints. Therefore, the total delay in getting the shutdown approval from the WRLDC for various links covered in the instant Petition is about 337 days. The request for shutdown and shutdown deferral due to the



grid constraints was discussed in various OCC (491, 492, 493, 494, 495, 499, 500, 501, 502, 503, 504, 505, 506 etc.) meetings of the CEA. The outage requested and its approval of shutdown period from WRLDC to work in different intervals from 4.3.2017 to 14.12.2017 (285 days) took considerable amount of time in completion of the work.

- ii. The OPGW installation under the live line conditions and especially on 765 kV lines has a very restricted opportunity window avoiding rainy & winter season. Further, the Permit to Work on these transmission lines was deferred by WRLDC / NLDC very frequently due to grid constraints. The total delay in getting the shutdown approval from the WRLDC for various links covered in the instant Petition is about 337 days.
- iii. WRLDC/NLDC did not permit simultaneous work on 2 Nos. 765 kV lines originating from the same Sub-station as OPGW work on Bina-Jabalpur was also in the scope of this project, work on Bina-Indore was taken after completion of work on Bina-JBP from 1.3.2017 to 27.1.2019. Hence, there was a delay of 698 days in initiating the execution work of Bina-Indore transmission line. Similarly, the deferral of work permits by WRLDC due to the grid constraints took considerable amount of time from 5.2.2017 to 14.12.2017 (about 312 days) additionally in completion of OPGW link for 400 kV Nagda-Dehgam.
- iv. Furthermore, the work of erection of repeaters requires the 15 kVA LTE connection from Gujarat Electricity Transmission Corporation Limited (GETCO) for under construction Bina- Indore & Nagda-Degham link but there was delay in installing from GETCO's end and the connection was finally



completed in 2021 which attributed additional delay. The period of almost 6-month delay was due to delay in extension of LT supply at Nagda-Dehgam repeater by MGVCL. Even multiple reminders, requests over phone calls, visit at site and head office at Vadodara, connection was only extended on 12.3.2021.

Sr. No.	Letter/Document reference	Letter/Document date
1	POWERGRID request letter to MGVCL for extending LT connection to Nagda-Dehgam repeater station.	18.9.2020
2	MGVCL demand note released after so many follow ups at site level.	6.1.2021
3	Mail communication from POWERGRID to GETCO informing deposit of LT connection charges.	19.1.2021
4	4 th reminder to GETCO/MGVCL for extending LT connection to Nagda-Dehgam repeater sent over mail by POWERGRID-RHQ Vadodara.	22.2.2021
5	Mail confirmation from POWERGRID RHQ Vadodara to equipment commissioning team for LT power availability at Nagda-Dehgam repeater.	12.3.2021
6	After execution of LT connection at Jhalod substation in February 2021 and completing pending works associated with laying of OPGW link for 400 kV Nagdha- Degham transmission line, the work could be completed on 4.7.2021.	4.7.2021

32. The Respondent No. 1, MPPMCL has submitted that such justification for the time over-run are trivial and lack merit. The Petitioner, as a transmission licensee, is expected to anticipate and address such basic requirements during project planning and execution. Further, the Petitioner has mentioned certain constraints in working under live conditions in rainy & winter season and the Petitioner may be asked to clarify as to whether those constraints were discovered only during the execution of this project and the Petitioner was not aware of those constraints while finalizing the time period in the IA and finally, the delay is neither reasonable nor justifiable.

33. The Respondent No. 3, MSEDCL has submitted that the Petitioner has attributed alleged delay of 1190 days and 1356 days with respect to Asset-6 and Asset-7,



respectively, to the absence of LT supply and such a justification for the time overrun is trivial and lacks merit. The Petitioner, as a transmission licensee, is expected to anticipate and address such basic requirements during project planning and execution. As such, the delay on this account is neither reasonable nor justifiable.

34. In response to the MPPMCL's and MSEDCL's reply, the Petitioner has submitted that both the lines were originating from 765 kV Bina Sub-station and WRLDC was disallowing Permit to Work on 02 lines simultaneously originating from a single Sub-station. Such decisions by grid operators are subject to grid constraints and real-time situations in the Power System and are beyond the control of the Petitioner. So, the work on Bina-Jabalpur was taken up at first and Bina-Indore was taken up after completion of OPGW installation on Bina-Jabalpur. The OPGW installation on Bina-Jabalpur was completed around May 2019 and the work on Bina-Indore could only be started after this. So, the portion of delay from 17.10.2017 to 31.05.2019 (591 days) may be condoned for Asset-6. Further, WRLDC/NLDC did not permit simultaneous work on 02 nos. 765 kV lines originating from same Sub-station as OPGW work on Bina-Jabalpur was also in the scope of this project, work on Bina-Indore was taken after completion of work on Bina-JBP from 1.3.2017 to 27.1.2019. Hence there was a delay of 698 days in initiating the execution work of Bina- Indore transmission line. In case of Nagda-Dehgam (Asset-7), there was severe delay of 157 days in extending the LT supply from MGVCL to the repeater station at Dahod. Despite so many requests starting from 18.9.2020 and subsequent follow ups up to 22.2.2021, the LT connection at this repeater station was delayed. The petitioner has further submitted that the execution of the transmission line or the laying of the OPGW cable faces the similar RoW issues and to the extent possible, these issues are cleared by the Petitioner promptly and diligently. It is settled preposition of law that the RoW constrain is an uncontrollable factor and



delay attributable to the RoW constrain is condoned. The deferred work due to the RoW issues sometimes falls under the rainy season in which the setting of plant & machinery could not be possible due to muddy site conditions. Some of the issues which includes the severe RoW issues where the intervention of local administration is required takes considerable time which can only be known during the execution phase. The Petitioner, however, continuously follow up with the local administration by either reaching to the higher authorities or taking police protection, wherever, required. The issues are unpredictable while finalising the timeline in the IA, the Petitioner by being prudent utility, endeavour to complete the work avoiding any further delay.

Reasons for delay for delay for Asset-9:

35. With regard to Asset-9, The Petitioner has submitted as under:

- i. Originally, Xeldem-Ambewadi-Narendra Link was not a part of list of Goa Electricity department (GED) links. This link was included after getting permission from WRPC/SRPC for Reliable Network for GED SLDC Links. Initially this link was approved in the SRPC on 25.2.2017 and the permission was given by KPTCL on 25.10.2017 for providing the tower schedule and for coordination. During the Survey, it was found that about 30 km line did not have Earthwire and required shutdown of the line.
- ii. During the execution, the Agency faced difficulties due to poor Condition of Earth Wire & Approach Road in Dense Forest & Hilly Terrain. Due to the incessant rainfall in the Southern Goa Portion during Monsoons, the Agency could not continue the work due to high induction as any tripping would create a complete blackout as this line only feeds the South Goa. After resuming the work in post monsoon, the agency completed the stringing work where Earth Wire was available. The Agency did not get confirmation for Shutdown



of the transmission line for doing the stringing where the Earth-wire was not available. Shutdown was available after continuous follow up from 13.1.2019.

- iii. Furthermore, 1 km stringing was pending due to the severe RoW issues. After completion of the link on 24.5.2019, WRLDC did not issue Trial Operation Certificate due to the D/C supply issues of KPTCL Ambewadi Location. KPTCL took up the Station D/C supply issue and completed the repair work, however, the equipment still did not work properly. Finally, the Petitioner diverted the D/C supply and commissioned the link and got the Trial Operation certificate w.e.f. 3.10.2019. The chronology of the events responsible for the delay in commissioning of the above communication asset along with the supporting documents are as under:

Sl. No.	Letter/Document reference	FROM	TO	Letter/Document date
1	Permission for coordination with the Petitioner	CE, KPTCL, Bagalkot KPTCL	Director (KPTCL)	25.10.2017
2	Earthwire not available for 35 km and Site Conditions of Dense Forest	Sterlite	POWERGRID	11.4.2018
3	Stooping of Work due to Incessant rainfall in South Goa in view of Safety and Reliable Power Supply in South Goa	Sterlite	POWERGRID/ GED	19.6.2017
4	Expressing Concern due to continuous rainfall and ground Situation in Dense Forests in South Goa	Sterlite	POWERGRID/ GED	8.8.2018
5	Re-Deployment of Gang after receding Monsoons	Sterlite	POWERGRID/ GED	19.9.2018
6	Requesting for PTW/Shutdown	Sterlite	POWERGRID/ GED	29.9.2018
7	Requesting for PTW/Shutdown	Sterlite	POWERGRID/ GED	13.10.2018
8	Requesting for PTW/Shutdown	POWERGRID	GED	17.10.2018
9	Finalization of Shutdown	POWERGRID	GED	22.11.2018
10	MoM for finalizing Shutdown	GED Sterlite & POWERGRID		5.12.2018
11	Request for preponing Shutdown	Sterlite	GED	10.12.2018



Sl. No.	Letter/Document reference	FROM	TO	Letter/Document date
12	Informing Shutdown will be available from 13-01-2019	GED	Sterlite & POWERGRID	17.12.2018
13	For resolving RoW	POWERGRID	KPTCL	3.1.2019
14	For resolving RoW	POWERGRID	KPTCL	11.2.2019
15	For resolving RoW	POWERGRID	KPTCL	20.2.2019
16	informing Commissioning of Link	POWERGRID	WRLDC	28.5.2019
17	Informing that there is issue in DCPS Issue	POWERGRID	GED	28.5.2019
18	Informing to WRLDC that DCPS Issue solved by KPTCL	POWERGRID	WRLDC	1.7.2019

In view of the reasons explained above and based on the documentation shared, the delay in execution of Xeldem-Ambewadi-Narendra Link is beyond the control of the Petitioner.

36. The Respondent No. 1, MPPMCL and Respondent No. 3, MSEDCL have submitted that the Petitioner has attributed alleged delay of 717 days, on account of the absence of an earth wire over a 30 km stretch, necessitating a shutdown. Such issues should have been identified during the initial survey and planning stages of the project. The lack of this critical information cannot be accepted as a valid justification for the delay in the implementation of the project, as it reflects inadequate diligence on the part of the Petitioner.

37. In response to the MPPMCL's and MSEDCL's reply, the Petitioner has reiterated its submissions made in the pleadings.

Analysis and Decision

38. We have considered the submissions made by the Petitioner and the Respondents and have gone through the documents in support of their contentions. As per the IA approval on 17.4.2015, the scheme covered under the instant Petition was scheduled to be commissioned within 30 months from the date of IA, i.e., by 17.10.2017.



The details of the time over-run with respect to different communication assets considered under the instant Petition are as under:

Name of Asset	Scheduled commissioning as per IA dated 17.4.2015	COD	Delay (in days)
Asset-1	17.10.2017	21.6.2019	612 days
Asset-2		29.6.2019	620 days
Asset-3		24.1.2020	829 days
Asset-4		17.9.2020	1066 days
Asset-5		29.9.2020	1078 days
Asset-6		19.1.2021	1190 days
Asset-7		4.7.2021	1356 days
Asset-8		29.6.2019	620 days
Asset-9		4.10.2019	717 days

39. The instant communication project was discussed and deliberated upon in the 14th, 21st, and 23rd WRPC meetings held on 19.8.2010, 9.11.2012 and 12.6.2013, respectively. Further, Asset 5 was added in the project after the 35th WRPC meeting on 19.12.2017 with minutes issued on 1.3.2018. With respect of Asset-5, the Petitioner has contended that the said asset was added in the instant transmission project after deliberation in 35th WRPC meeting held on dated 19.12.2017 and minutes issued on 1.3.2018. Therefore, in line with the time schedule defined in IA i.e. 30 months, the Petitioner has requested to considered the SCOD of the Asset-5 as on 22.4.2020

40. We have considered the submission of petitioner and perused the minutes of 35th WRPC meeting held on 20.12.2017 preceded by TCC meeting held on 19.12.2017. It is observed that in line with decision taken in the 34th WRPC, the Group of experts was formed to study the CGPL disturbance of 13th July 2016. As per suggestions of a group of experts, the WRLDC has done a dynamic study for the analysis of CGPL events. After a dynamic study done by the WRLDC, the group of experts has come to the conclusion that the root cause for CGPL disturbance of 13th July 2016 was the delayed fault clearance at the Varsana end. The Fault has persisted for 370 milli seconds(ms)



and the tripping of Bachau-Ranchorpura was due to a protection issue. If CGPL's one unit has tripped, it would save the system. Then Protection coordination was discussed in PCM and the suggestion of line differential protection on the short line Bachau-Varsana line was made, which was to be implemented by PGCIL by laying OPGW. Also, it was discussed that the line differential protection on Bachau- Varsana should be implemented at the earliest. The relevant extract of the 35th WRPC meeting is as follows:

7	Multiple tripping of evacuation lines at CGPL on 13.07.2016 leading to tripping 5x830 MW generators and 400 kV lines at 400 kV Bachhau S/S
	Agenda Background:
	A complete blackout at CGPL took place on 13.07.2016. A group comprising of CGPL, GETCO, Powergrid WR-II, WRLDC and WRPC representatives met at Vadodara on 18.07.2016 to discuss the blackout. A Committee comprising of representative from CGPL, GETCO, WRLDC was formed to study the power swing phenomenon observed in the CGPL system. Based on the discussions and details received, a report is prepared by WRPC and it is available in WRPC website under PCM Minutes. Subsequently the issue was discussed in the 128th, 129th PCM & 33rd & 34th WRPC meetings. <u>34th TCC/WRPC Decision (27th & 28th July 2017):</u> <u>TCC Discussions:</u> Chairperson TCC suggested that a group of experts shall look into this issue afresh and give its recommendations. It was decided that:

Minutes of 35th TCC/WRPC meeting (19/20 Dec-2017) at Jabalpur, MP

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- A group of experts from WRLDC, CTU, STU, CGPL, APL and Industries shall be formed and nominations should be sent to WRPC to look into matter once again within 2-3 days.
- The newly formed group shall study the disturbance afresh and if it is felt necessary that studies are required to be carried out by professional bodies such as IIT-B, CPRI, PRDC, etc. the same shall be funded through contribution from WR constituents. No need to wait for next WRPC meeting but studies may be awarded by WRPC Secretary directly / through a circular resolution.

WRPC Discussions:

MP requested that they are also included in the study group. Tata Power opined that if committee agrees for studying by IIT-B, then the report has to be submitted to WRPC for deciding further course of action.

WRPC agreed for Chairman TCC suggestion as above.

Follow-up after 34th WRPC:

Expert Group meetings and recommendations:

The Expert Group was formed in line with the decision taken in the 34th WRPC to study the CGPL disturbance of 13th July 2016 afresh and come out with recommendation.

The 1st Meeting of Expert Group to study the CGPL disturbance of 13th July 2016 afresh was held on 23.8.2017 (MoM at **Annexure -7A**) and 2nd meeting was held on 10.10.2017 (MoM is at **Annexure -7B**)

The key-findings of expert group based on studies is as follow :

1. It is observed that if the 3-Ph fault current contribution from CGPL end for lines emanating from CGPL is around 7-8kA and if any of 400kV Bacchau-Ranchodpura D/C and 400kV CGPL-Bacchau-1 lines senses the fault in Zone 2, from Ranchodpura and CGPL end respectively and if it is persistent for 300 ms, then it is desirable to trip one unit out of the four (4) running units of CGPL.
2. As per the simulation results for the updated network case with LILO of 400 kV CGPL-Choronia and 400 kV CGPL-Halwad at Bhachau substation (45 simulations case studies were carried out and as per the Transmission Planning criteria) the network was found to be stable for a fault of 100 ms. However, it was further observed from the study that the system is not stable for any three phase faults at CGPL/Bhachau, if the fault clearance time is more than 150 ms. The detailed study report of the CGPL with the future network is attached as **Annexure -7C.**

	Meeting Discussion:
	TCC Discussion: (i) M.S., WRPC stated that based on decision taken in 34th WRPC meeting, an expert group was formed to study the CGPL disturbance of 13th July 2016 afresh and come out with recommendation. Two meetings of this expert group were held. In the first meeting RLDC was assigned to carry out study and dynamic simulation and the same was presented in the second meeting of expert group. He requested RLDC to present a summery of study. (ii) Representative of WRLDC stated the following: In first meeting of expert group the events were discussed in detail and members suggested that the WRLDC would do the dynamic study for analysis of CGPL events. Accordingly, WRLDC has done the study by taking into account different scenarios. One study we have conducted is an exact case what had happened on 13.07.2016 that time one unit of CGPL was out. The member actually validated the result and output. The CGPL has suggested that for future case, when Chorania – CGPL line is LILO at Bachau is also has to be studied with the full generation. In the first case the expert group has come to conclusion that the root cause was the delayed fault clearance at Varsana end. The fault was persisted for 370 ms and the tripping of Bachau – Ranchorpura due to some protection coordination issue. If CGPL one unit has tripped, it would have saved the system. Then protection coordination was discussed in PCM and it was done and there was a suggestion of line differential protection on short line Bachau-Varsana line which has to be implemented by PGCIL by laying OPGW. In the second study with network change, and full generation, the system is not stable if the fault is persisting beyond 150 ms so the group recommended that all protection should be in service at CGPL and Bachau and system should be in place so that fault can be cleared within 100 ms as per standard and all testing to be done on regular basis. There should not be any delayed fault clearance at CGPL and Bachau. Line differential protection on Bachau –Varsana should be implemented at the earliest. The CGPL has suggested some changes in SPS that we will consider. (iii) TCC, Chairman asked representative of CGPL to make comments. A representative of CGPL stated that they are agreeing with the study carried out by expert group. However, he said that regarding tripping of one unit of CGPL they are discussing with their management to decide which unit is to be tripped. He further stated that the condition is going to be dynamic to decide the unit to be tripped. Probably system strengthening should resolve this problem. He also stated that differential protection at Bachau –Varsana will certainly

	help the stability of the system. He also appreciated study carried out by expert group by taking into account 40+ scenarios. He informed that the other recommendation is to trip one unit of CGPL to make the system stable. He informed that they are working on this recommendation by taking into account various aspects and they will come back with the identification of the CGPL unit to be tripped in eventuality. (iv) TCC, Chairman enquired that even with tripping of one unit at of CGPL, what is the significant of 150 ms delay? Representative of WRLDC replied that the group has observed if there is any fault at Bachau or CGPL, the system becomes unstable after 150 ms. (v) TCC, Chairman stated that the CGPL need to decide which unit they are allocating for tripping in case of eventuality. He further elaborated that CGPL need to decide whether it is unit no. 1 or unit no. 2 or unit no.3. (vi) Representative of CGPL stated that we are ok with the present scenario where there seems to be no option other then tripping the CGPL unit. However, we are saying that this cannot become regular norms because system strengthening should be able to take out of this situation. We have lot of SPS system which are in place so there is lot of loss due to operation of SPS. (vii) E.D., WRLDC stated that the tripping of CGPL unit would certainly not be frequent therefore CGPL need not worry. He suggested that CGPL should participate in final discussion with study group by 15th of January, 2018 for making decision on identification of CGPL unit for tripping in future eventuality. TCC recommended convening a final meeting of expert group by 15th January 2018 to identify CGPL unit for tripping in future eventuality. WRPC Discussion & Decision: <u>WRPC noted TCC recommendations as above. Further, it was decided that no protection settings would be changed without the knowledge PCM or TCC for all elements which are part of evacuation system of CGPL and CGPL complex. It is also agreed that no protection settings would be changed without consent of PCM / TCC of WRPC for any element of WR Grid</u>
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41. As per the above minutes, the group of experts suggested the implementation of line differential protection on the short line Bachau-Varsana line of PGCIL by laying OPGW. However, it is observed that the same was not recorded in the decisions taken in the 35th WRPC meeting, and the minutes are about Multiple tripping of evacuation lines at CGPLon13.07.2016 leading to tripping 5x830 MW generators and 400 kV lines at 400 kV Bachhau S/S.

42. Hence, taking into consideration of decisions taken in the 35th WRPC meeting held on 19/20.12.2017, the claim of the Petitioner that Asset-5 was added in the scheme at a later stage as per the 35th WRPC meeting held on 19.12.2017 has no merit and the revision of SCOD from 17.10.2017 to 22.04.2020 is rejected.

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

Asset-1: OPGW Link for 765 kV Bina -Jabalpur (230 Kms) under the central secto

43. The Petitioner has submitted that there was frequent delay in obtaining the work permits from the WRLDC due to grid constraints. Further the work on two 765 kV lines, Bina-Jabalpur and Bina-Indore, was delayed because both lines originated from the same Sub-station and could not be worked on simultaneously. As a result, work on the Bina-Bina (JP) line was postponed until these two lines were completed, leading to a total delay of about 451 days in getting shutdown approval from the WRLDC. This issue was discussed in various meetings of the WRPC and CEA. Additionally, some work required live line conditions, which depended on load conditions and alternate arrangements to prevent emergencies. Due to these factors, permits were not granted regularly, causing further delays. The challenging conditions of working on 765 kV and 400 kV lines, especially during the rainy and winter seasons, also contributed to the extended timeline. The Respondents, MPPMCL and MSEDCL, have submitted that the Petitioner has not furnished any documentary evidence, such as records from the



WRLDC denying the shutdown requests, and in the absence of any corroborative evidence, the claim for condonation of the delay becomes baseless.

44. The respondents MPPMCL and MSEDCL vide affidavit dated 21.12.2024 and 16.12.2024 respectively have submitted that the Petitioner may clarify “whether the constraint associated with working under live conditions in rainy & winter season not aware of while finalising the time period in the Investment Approval.” Furthermore, the Respondents have also submitted that the Petitioner has not furnished any documentary evidence, such as records from the WRLDC denying the requested shutdowns or any adjudication by a court of law supporting the alleged refusal. In the absence of any corroborative evidence, the claim for condonation of the delay becomes baseless.

45. The Petitioner, in its rejoinder vide affidavit dated 6.1.2025, has again submitted similar facts as submitted earlier in the main petition, and for the sake of convenience, the same is hereby not repeated

46. We have considered the submission of Petitioner and respondents, MPPMCL and MSEDCL and have gone through the documents placed on record. The Petitioner has submitted the minutes of various OCC meetings depicting the status of the shutdown as deferred. Taking into consideration various OCC minutes, the time delay from 14.02.2017 to 07.05.2018, i.e. 447 days, for the delay in receiving approval of the shutdown is hereby condoned.

Asset-2: OPGW link for 220kV Vapi-Kharadpada (30 Kms) & 66 kV Kharadpada-Ambali (15 Kms) under Central Sector

47. The Petitioner has submitted that the commissioning of 220 kV Vapi-Kharadpada-Ambali links was specially challenging as the OPGW was proposed on the 66 kV Kharadpada-Ambali line as well. The design and engineering for a new type of cable



was done on receipt of line parameters from the line owner, i.e., Dadar & Nager Haveli (DNH), as no cable was approved for this voltage level. Further, the line parameters were received only on 27.3.2017. Based on these inputs, the cable design was approved, and the drum schedule was issued on 15.5.2017. Minimum 3-month time was required for manufacturing, inspection, dispatch and receipt at site. Further, during execution, shutdown was required at multiple sections in the DNH lines. The shutdown permission was delayed by DNH due to the industrial load of the Silvassa area and was accorded by DNH Power Distribution Corp. Ltd. in June 2018. In addition to this, line parameters along with tower details for multi circuit towers were also delayed by DNH, resulting in a delay towards cable design and engineering.

48. The respondents, MPPMCL and MSEDCL, have submitted that such general activities constitute routine functions that any prudent transmission licensee is expected to undertake while developing transmission assets. The Commission has consistently held that a transmission licensee cannot seek condonation of delay for activities that should have been reasonably anticipated and planned for. Furthermore, the Respondents have submitted that no documentary evidence has been provided to substantiate the claims of delay attributed to shutdowns. Specifically, there is no record of when the shutdown was requisitioned and when it was finally granted to confirm the alleged delay. In the absence of such corroborative evidence, the justification for the delay remains unsubstantiated.

49. The Petitioner, in its rejoinder, has submitted that, being the state-owned lines, the actual conditions/healthiness of these lines was not known to the Petitioner. Also, on completion of the links, the trail run certificate was applied with the WRLDC on 1.5.2019. However, the issue of the certificate was delayed due to confirmation from DNH and was issued only on 28.6.2019.



50. We have considered the Petitioner's, MPPMCL's, and MSEDCL's submission and have gone through the documents placed on record. It is observed that the Earth wire parameters for OPGW of 66 kV Kahardpara-Amli link were requested by the Petitioner vide email dated 20.3.2017, and the same were provided by the concerned vide return email dated 27.3.2017. The relevant extracts of the same is as follows:

Mayank Dhar Shukla (मयंक धर शुक्ला)

From: Kapil Gupta (कपिल गुप्ता)
Sent: 24 August 2023 14:52
To: Mayank Dhar Shukla (मयंक धर शुक्ला)
Subject: FW: Requirement of Earthwire parameter in the format enclosed for opgw of 66kV Kahardpara Amli line
Attachments: 66 kV kharadpara - amli Line Details for opgw design.xlsx

From: It wr2 <itwr2@powergrid.co.in>
Sent: Thursday, March 30, 2017 12:08
To: Kapil Gupta (कपिल गुप्ता) <kapil.gupta@powergridindia.com>
Cc: Manoj Kumar Singh (मनोज कुमार सिंह) <manoj.singh@powergridindia.com>
Subject: Fwd: Requirement of Earthwire parameter in the format enclosed for opgw of 66kV Kahardpara Amli line

Dear Sir,

Please find the EW parameter in respect of 66kV Kharadpara - Amli line provided by M/s DNH.

Regards,

R. K. Soni
Manager(SC&C/IT)

From: "Sldc Dnh" <sldc.dnh@gmail.com>
To: "It wr2" <itwr2@powergrid.co.in>
Cc: "bb_dnh" <bb_dnh@yahoo.com>, "Manoj Singh" <manoj.singh@powergridindia.com>, "manish_rajput75" <manish_rajput75@yahoo.co.in>, "Ramesh Rohit" <rohitramesh23478@gmail.com>
Sent: Monday, March 27, 2017 1:09:37 PM
Subject: Re: Requirement of Earthwire parameter in the format enclosed for opgw of 66kV Kahardpara Amli line

Sir,

With reference to your mail received we have tried to gather some of the information and filled the same in your prescribed format please find the attachment here with the mail.

with regards

On Mon, Mar 20, 2017 at 10:56 AM, It wr2 <itwr2@powergrid.co.in> wrote:

Dear Sir,



With reference to the OPGW work to be done in 66kV Kharadpara- Ambli line for connectivity of DNH SLDC. We are enclosing herewith format for filling the required parameter of 66kV earth wire parameter for the line. It is requested to kindly arrange the same at the earliest please to avoid further delay in supply of OPGW.

Regards,

R. K. Soni
Manager

આઈ ટી/અસી & સી/અરટી/અસી/IT/SC&C/RTAMC)
પોવરગ્રિડ, વ.બી.-II / POWERGRID, WR-II
વડોદરા, ગુજરાત / VADODARA, GUJARAT

SLDC = DNH,
215,Vidhya Bhavan,
Second Floor,
Near, Secretariat,
Silvasa-395230,
Dadra & Nagar Haveli
Phone NO: 0260 2406561
0260 2406562
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આઈ ટી/અસી & સી/અરટી/અસી/IT/SC&C/RTAMC)
પોવરગ્રિડ, વ.બી.-II / POWERGRID, WR-II
વડોદરા, ગુજરાત / VADODARA, GUJARAT

51. As per the above communication, it is observed that DNH had provided the earth wire parameters within seven days. Therefore, we do not agree with the petitioner's submission that DNH had failed to provide the said parameters. It is further observed that the petitioner obtained Investment Approval on 17.4.2015, and the asset was scheduled to be commissioned on 17.10.2017. The petitioner requested the earth wire parameters vide email dated 20.3.2017, i.e., merely six months prior to the SCOD. Hence, the claim that DNH did not provide the required details is not acceptable.

52. The petitioner received the earth wire parameters on 27.03.2017 and, based on these parameters, issued the revised drum schedule on 15.05.2017. We are of the view that a minimum time was required for the petitioner to revise the drum schedule based on the received parameters. Accordingly, the period from 27.03.2017 to 15.05.2017 (49 days) is considered to be beyond the control of the petitioner, and the same is condoned.

53. Further, it is observed that the contractual agency has requested the Petitioner to arrange the shutdown for 4 days (3 days in Drum No. 2 and 1 day in Drum No. 1) vide letter dated 4.4.2018. The requisite shutdown was accorded by the concerned



authority of DNH Power distribution Corporation limited on 23.5.2018 & 28.5.2018, intimated vide letter dated 17.5.2018. The shutdown details are extracted as under:

दादरा नगर हवेली उर्जा वितरण निगम लिमिटेड
(सरकार का उपक्रम)
DNH POWER DISTRIBUTION CORPORATION LTD.
(A Government Undertaking)
CIN: U40100DN2012GO1000405

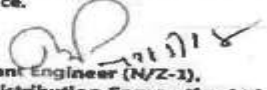
No. DNHPDCL/NZ/AE/2014/16/Part-3/ १६९ Date: १२ May-18

SHUTDOWN NOTICE

This is to inform you that the power supply will not be available to all EHV/HT/LT and Domestic, Commercial, Agriculture and other Consumer on date and time as indicated below.

Date of Power cut	Day	Time	Taken By	Effected Consumer & Area	Remarks
23/05/2018	Wed	08.00 - 18.00 Hrs	Chief Manager, PGCL, Daman	66/11kV Piparia Sub-Station & 66/11kV Amli Sub-Station & 66kV Amli-Sili Line	Stringing of OPGW wire on 66kV Kharadpada-Amli Line
28/05/2018	Mon	08.00 - 18.00 Hrs	Chief Manager, PGCL, Daman	66/11kV Piparia Sub-Station & 66/11kV Amli Sub-Station & 66kV Amli-Sili Line	Stringing of OPGW wire on 66kV Kharadpada-Amli Line

Note: The power supply will be restored without any notice.


Assistant Engineer (N/Z-1),
DNH Power Distribution Corporation Ltd.,
Dadra & Nagar Haveli
Silvassa

54. As per the above communication, it is observed that DNH had provided the shut down from 23.05.2018 and 28.05.2018. Therefore, we are of the view that the time period from 4.4.2018 to 28.05.2018 (54 days) on account obtaining shutdown is beyond the control of the petitioner, and the same has been condoned.

55. Therefore, in view of the above facts, we are inclined to condone the total time delay of 103 days in the commissioning of Asset-2.

Asset-3 : OPGW Link for 400 kV Bina-Bina (JP) (20 Kms) under Central Sector and

Asset-4 : OPGW Link for 220 kV RBPH-CHPH (1.2 Kms) under Central Sector



56. The Petitioner has submitted that there are frequent delays in obtaining work permits from WRLDC due to grid constraints. Further, the work on two lines, i.e. 765 kV Bina-Jabalpur and 765 kV Bina-Indore, originated from the same substation, as both lines were covered under the MCP -additional project. The WRLDC did not permit work on both Lines simultaneously due to grid constraints. Consequently, the work on Bina-Bina (JP) was carried out after completion of work on both of the above links. Therefore, the total delay in obtaining WRLDC's shutdown approval for the various links is about 451 days. The Petitioner further submitted that the assets are delayed on account of difficulties in working under live line conditions during the rainy & winter seasons. The total time, including links where a shutdown was required and where a permit was required, took around 1066 days to complete the work.

57. The Respondents MPPMCL and MSEDCL vide affidavit dated 21.12.2024 and 16.12.2024, respectively, have also submitted similar contentions as submitted under Asset-1.

58. The Petitioner, in its rejoinder vide affidavit dated 6.1.2025, has again submitted similar facts as submitted earlier in the main petition, and for the sake of convenience, the same is hereby not repeated.

59. We have considered the Petitioner's and MPPMCL and MSEDCL submissions and have gone through the documents placed on record. It is observed that similar to the Asset-1, the Petitioner has submitted the minutes of the various OCC meetings i.e. 491, 492, 493, 494, 495, 497, 499, 500, 501, 502, 503, 504, 505, 506 etc. depicting the status of shutdown deferred for 765 kV Jabalpur-Bina -I, 765 kV Jabalpur-Bina PG, 765 kV Indore PG-Bina S/c etc. Taking into consideration various OCC minutes, the time delay from 14.02.2017 to 07.05.2018, i.e. 447 days for the delay in receiving approval of the shutdown, is hereby condoned.



Asset-5: OPGW Link for 400 kV Bhachau - Vasrana (9.251 Kms) under Central Sector

60. The Petitioner has submitted that the addition of Asset-5 required re-planning, affecting the schedule. Calculating the date from when the link was added, the SCOD comes to 19.6.2020. The drum schedule for additional materials was issued in January 2018, with procurement completed by January 2019. Further, the execution faced delays due to severe RoW issues and a lack of shutdowns from the WRLDC. The Respondents MPPMCL and MSEDCL, have submitted that even after considering the issue of re-planning due to the late addition of the asset on 1.3.2018, the permissible project timeline of 30 months was exceeded.

61. The respondents MPPMCL & MSEDCL have submitted that the time overrun is due to RoW problems, and police protection is squarely the responsibility of the Petitioner. The Petitioner is expected to anticipate such challenges and take necessary steps to mitigate them. The onus to address and resolve these issues rests with the Petitioner, and they cannot form the basis for seeking condonation of delay.

62. The Petitioner in its rejoinder has submitted that the delay due to RoW issues is beyond the control of the petitioner and all efforts were made to minimise the impact and to obtain the necessary RoW clearance with the help of the local administration to complete the work as promptly as possible.

63. We have considered the submission of the Petitioner and the respondents. The Contention of that Petitioner that the Asset-5 has been added in the current scheme as per the 35th WRPC meeting held on 19.12.2017, and consideration of revised SCOD w.e.f. 22.4.2020. As discussed above, we are of the view that the 35th WRPC minutes



do not mention the modification of the SCOD of the OPGE link. As discussed above, the SCOD of the set is considered as 17.10.2017.

64. The petitioner is directed to submit the relevant minutes of the WRPC wherein the instant communication was newly included in the existing scope of work. The petitioner shall also clarify the relevance of the RoW issues with respect to the existing transmission line, particularly given that the work was carried out under live-line conditions. In the absence of sufficient justification, the delay of 1078 days in the commissioning of the instant transmission asset is not condoned.

Asset-6: OPGW Link for 765 kV Bina-Indore (311 Kms) under Central Sector and

Asset-7 : OPGW Link for 400 kV Nagda-Dehgam (331 Kms) under Central Sector

65. With regard to Asset-6, the Petitioner has detailed several factors contributing to project delays. Primarily, the WRLDC frequently deferred work permits due to grid constraints. Two lines under the instant scheme, the 765 kV Bina-Jabalpur and 765 kV Bina-Indore, both originating from the same Sub-station, could not be worked on simultaneously due to these constraints. These issues were extensively discussed in numerous CEA Operation and Coordination Committee meetings.

66. The Petitioner also highlighted that the installation of OPGW under the live line conditions, especially on 765 kV lines, is restricted by the seasonal limitations and frequent permit deferrals by WRLDC/NLDC. This led to a delay in starting work on the Bina-Indore transmission line, as work on Bina-Jabalpur had to be completed first. Similarly, the deferral of work permits caused additional delay for the 400 kV Nagda-Dehgam link.



67. Furthermore, the erection of repeaters required a 15 kVA LTE connection from GETCO for the under-construction Bina-Indore and Nagda-Degham links. The delays from GETCO's end in installing this connection, finalised only in 2021, which contributed to the additional delays. Specifically, the extension of LT supply at the Nagda-Dehgam repeater by Madhya Gujarat Vij Company Limited (MGVCL) was delayed by nearly six months, despite multiple reminders and requests, with the connection finally completed on 12.3.2021. The Respondents MPPMCL and MSEDCL have submitted that the justification for the time overrun is trivial and lacks merit.

68. We have considered the Petitioner's, MPPMCL's and MSEDCL's submissions and have gone through the documents placed on record. The Petitioner has claimed time overrun due to approval of shutdown from WRLDC between 4.3.2017 to 14.12.2017 (285 days), time overrun due to WRLDC not permitting simultaneous work on Bina-Indore and Bina-Jabalpur line between 1.3.2017 and 27.1.2019 (697 days) and deferral of work permits from WRLDC due to grid constraints from 5.2.2017 to 14.12.2017 (312 days).

69. We have considered the submission of the Petitioner and the respondents and have perused the submitted documents. The petitioner has submitted Form-12, and the same is extracted as under:

Asset-6:



Details of Time Over Run

Name of the Petitioner : POWERGRID Corporation Of India Limited.

Name of the Region : Western Region-II

Name of the Project / Element : Establishment of Fibre Optic Communication System in Western Region under Master Communication Plan (Additional Requirement)

Name of Asset : OPGW Link for Bina-Indore

Sl. No.	Description of Activity / Works / Service	Original Schedule (As per Planning)		Actual/Anticipated Schedule (As per Actual)		Time Over Run Months	Agency responsible and whether such time over run was beyond the control of the Transmission Licensee	Reason for Delay
		Start date	Completion Date	Start date	Completion Date			
A	BINA Indore	31-Oct-2017		19-Jan-2021		39.2		
		As per Master Network		As per Actual				
1	Land Acquisition	-	-	-	-	-		
2	Award of supply & erection package	30-Sep-2015		13-May-2019		44.0		
3	Supply	30-Sep-2015	29-Mar-2017	21-Apr-2017	13-Sep-2019	29.5		
4	Foundation							
5	Erection	25-Jan-2017	25-Aug-2017	1-May-2017	10-Jan-2021	40.5		
6	Testing & Commissioning	10-Jan-2017	25-Aug-2017	11-Jan-2021	19-Jan-2021	40.8		
1. Delay on account of each reason in case of time overrun should be quantified and substantiated with necessary documents and supporting workings.								

Asset-7

Details of Time Over Run

Name of the Petitioner : POWERGRID Corporation Of India Limited.

Name of the Region : Western Region-II

Name of the Project / Element : Establishment of Fibre Optic Communication System in Western Region under Master Communication Plan (Additional Requirement)

Name of Asset : OPGW Link for Nagda-Dehgam

Sl. No.	Description of Activity / Works / Service	Original Schedule (As per Planning)		Actual/Anticipated Schedule (As per Actual)		Time Over Run Months	Agency responsible and whether such time over run was beyond the control of the Transmission Licensee	Reason for Delay
		Start date	Completion Date	Start date	Completion Date			
A	Nagda-Dehgam	31-Oct-2017		4-Jul-2021		44.7		
		As per Master Network		As per Actual				
1	Land Acquisition	-	-	-	-	-		
2	Award of supply & erection package	30-Sep-2015		13-May-2019		44.0		
3	Supply	30-Sep-2015	29-Mar-2017	31-Dec-2016	13-Sep-2019	29.5		
4	Foundation							
5	Erection	28-Jul-2016	28-Jan-2017	10-Jan-2017	20-Dec-2020	46.7		
6	Testing & Commissioning	10-Jan-2017	28-Jan-2017	21-Dec-2020	4-Jul-2021	53.2		
1. Delay on account of each reason in case of time overrun should be quantified and substantiated with necessary documents and supporting workings.								

70. As per the above, the petitioner has submitted that the time overrun in the instant transmission asset was on account of the delay in the supply of HDPE duct, the delay in the supply of repeater shelter and extending the LT connection to the repeater. The petitioner in the main petition has submitted that the asset is delayed on account of the shutdown rejected by WRLDC due to grid constraints and the extension of the LT connection to the repeater. It is observed that there are discrepancies in Form-12 and the submission of the petitioner in the main petition. The Petitioner is directed to clarify the same at the time of truing-up. It is further noted as per form-12, the schedule for



award of supply and erection is 30.09.2015, whereas it was actually awarded on 13.05.2019 with a delay of about 3 years 8 months, which has a cascading effect on the execution of the instant transmission asset. The Petitioner is directed to clarify the delay in the award of the supply at the time of turning-up.

71. The petitioner has submitted that WRLDC has not given permission for the petitioner from 4.03.2017 to 14.12.2017, 1.03.2017 to 27.01.2019, 5.02.2017 to 14.12.2017 due to grid constraints. The Petitioner is directed to submit the documentary evidence in support of the same at the time of truing-up, and the same will be reviewed at the time of truing-up.

72. The Petitioner has submitted that the 15 kVA LTE connection from GETCO for under construction Nagda-Dehgam is extended on 12.03.2021. The Petitioner has submitted that the time period from 18.09.2020 to 4.07.2021 is impacted on account of extending the LT connection to the repeater. The petitioner has mentioned letters dated 18.09.2020, 6.01.2021, 19.01.2021, 22.02.2021, 12.03.2021 and 4.07.2021, but the same are not submitted in the instant petition. The Petitioner is directed to submit the letters dated mentioned in the main petition and the time overrun on account of extending LT connection to repeater will be reviewed at the time of truing-up in case of Asset-6 and Asset-7 at the time of truing-up.

73. Therefore, in view of the above, we are not inclined to condone the time delay of 1190 days in the case of Asset-6 and 1356 days in the commissioning of Asset-7. The liberty is granted to submit documentary evidence in respect of the time delay in commissioning of the instant transmission asset at the time of truing up to review the same.



Asset-8 : Asset 8A- OPGW link for 220kV Indore-Indore (SZ) (7 Kms) under state sector, Asset 8B- OPGW link for 132kV Waidhan-Singrauli (10 Kms) under state sector, Asset 8C- OPGW link for 220kV Malanpur-Gwalior (40 Kms) under state sector, Asset 8D- OPGW link for 220kV Neemuch-Gandhisagar (78 Kms) under state sector, Asset 8E- OPGW link for 220kV Shivpuri-Bina (170 Kms) under state sector)

74. The Petitioner has submitted that the project timeline was adversely affected by MPPTCL's delayed provision of line parameters, with initial requests made in February 2016 and necessary details only provided in May 2016, followed by a four-month period of type testing. Further, the delay in commissioning was caused by the late signing of survey reports by MPPTCL officials and modifications required during the advanced stages of the project. Specific link delays included the Bina-Shivpuri link, which was delayed due to realignment for NHAI communicated in July 2018, and the Vapi-Kharadapada-Amli link, which faced challenges due to the absence of pre-approved cables for the voltage level, delayed line parameters, and shutdown permissions from DNH granted only in June 2018. The 132 kV Waidhan-Singrauli Line's OPGW stringing experienced delays because the sections lacked an earth wire, and accordingly, MPPTCL postponed the shutdowns. Furthermore, while most links were commissioned by August 2018, the confirmation and issuance of Trial-run Certificates by WRLDC were delayed, necessitating repeated follow-ups with MPPTCL.

75. The Respondents MPPMCL and MSEDCL have submitted that such general activities constitute routine functions that any prudent transmission licensee is expected to undertake while developing transmission assets. Further, the Petitioner has not provided any documentary evidence to substantiate the claims of shutdown.



We have considered the Petitioner's, MPPMCL's and MSEDCL's submissions and have gone through the documents placed on record. The Petitioner has submitted the documentary evidence of various correspondences between 19.2.2016 and 25.6.2018 (354 days) therefore, the aforesaid delay of 354 days is hereby condoned.

76. We have considered the submission of the Petitioner and have gone through the documents placed on record. In respect of petitioner contention regarding delay in parameters provided by MPPTCL, it is observed that the matter for supply of requisite transmission line design parameters for the MPPTCL line under the Master Communication Plan (Additional Requirement) project was taken up by the Petitioner vide letter dated 19.2.2016 & email dated 5.4.2016 and the same was made available by the concerned authority of MPPTCL on 24.5.2016. However, the petitioner has not provided any justification for how much the period of execution of the link gets delayed on account of providing the design parameters by MPPTCL in May 2016.

77. Further, in respect of the delay in signing of site survey reports, it is observed that the Petitioner had requested the concerned authority of MPPTCL to signed the survey report in r/o 220 kV Neemuch -Gandhi Sagar line vide letter dated 16.11.2016. However, the petitioner has not submitted any documentary evidence on when the said report was signed by the concerned authority of MPPTCL and how much the period of execution of the link was affected due to the delay in signing the said survey report.

78. Also, it is observed that MPPTCL had requested that the modification at Location 480 & 481 to Location 480R & 4801 R and at location 518 R of 220 kV Bina-Shivpuri line be carried out due to modification in Mumbai-Agra national highway NH-03, vide letter dated 2.7.2018. However, the petitioner has not submitted any documentary evidence on when the said modification work was completed on the 220 kV Shivpuri-



Bina transmission line and how the period of execution of the link was affected due to said modification work.

79. The Petitioner has also not submitted any documentary evidence supporting the delay in 132kV Waidhan-Singrauli Line's OPGW stringing on account of the postponement of shutdowns by MPPTCL.

80. Also, it is observed that the Petitioner vide emails dated 8.8.2018 and 4.10.2018 to WRLDC, requested COD of the communication assets, including the 220 kV Shivpuri-Bina link. WRLDC sought confirmation of the communication assets from MPPTCL regarding the working of telemetry and voice. In response, MPPTCL vide email dated 6.10.2018 communicated that a few assets, including the 220 kV Shivpuri-Bina link, are working, and a few assets are not working. It is observed that the Petitioner has not provided any information regarding the action taken, including the communication exchanged with WRLDC.

81. Accordingly, in view of above facts and discussion, we are unable to accept the Petitioner's contention that the commission of Asset-8 get delayed on account of delay in requisite design parameters from MPPTCL, postponed of shutdown by MPPTCL, due to modification at different locations, and delay in issuance of trail run certificate from WRLDC and thus time delay of 620 days is hereby not condoned. However, the liberty is granted to submit documentary evidence in respect of the time delay in commissioning of the instant transmission asset at the time of truing up to review the same.

Analysis of the Delay in the Commissioning of Asset-9

82. With respect to Asset-9, the Petitioner has submitted that the Xeldem-Ambewadi-Narendra Link was initially not a part of the GED links. It was included after obtaining permission from WRPC/SRPC for the Reliable Network for GED SLDC Links. The link



was approved by SRPC on 25.2.2017, with KPTCL granting permission for tower scheduling and coordination on 25.10.2017. During the survey, it was identified that about 30 km of the line lacked earth wire, necessitating a line shutdown.

83. During execution, the agency encountered challenges due to the poor condition of the earth wire, difficult approach roads in dense forest and hilly terrain, and incessant rainfall in southern Goa, which made it unsafe to work. The stringing work was completed where earth wire was available, but the agency faced delays in obtaining confirmation for the line shutdown required for stringing where the earth wire was absent. After persistent follow-up, the shutdown was granted on 13.1.2019.

84. Additionally, 1 km of stringing was delayed due to severe RoW issues. Although the link was completed on 24.5.2019, WRLDC did not issue the Trial Operation Certificate due to D/C supply issues at KPTCL's Ambewadi location. KPTCL addressed the station's D/C supply issue, but the equipment remained faulty. Eventually, the Petitioner redirected the D/C supply, commissioned the link, and received the Trial Operation Certificate on 3.10.2019. The Respondents MPPMCL and MSEDCL have submitted that the lack of critical information cannot be accepted as a valid justification for the delay in implementation of the project, as it reflects inadequate diligence on the part of the Petitioner.

85. We have considered the Petitioner's, MPPMCL's and MSEDCL's submissions and have gone through the documents placed on record. The Petitioner has furnished various documentary evidence for various correspondence, , between the Petitioner, GED and Sterlite during the period from 11.4.2018 to 1.7.2019 (446 days), show due diligence on the part of the Petitioner. Therefore, the delay of 446 days for the period from 11.4.2018 to 1.7.2020 is hereby condoned.



86. Therefore, the summary of the time over-run claimed by the Petitioner and time over-run condoned/not condoned for the different communication assets are as under:

Assets	SCOD	COD	Total Time Over-run	Time Over-run Condoned	Time Over-run Not Condoned
Asset-1	17.10.2017	21.6.2019	612 days	447 days	165 days
Asset-2		29.6.2019	620 days	103 days	517 days
Asset-3		24.1.2020	829 days	447 days	382 days
Asset-4		17.9.2020	1066 days	447 days	619 days
Asset-5	19.6.2020	29.9.2020	102 days	0 days	102 days
Asset-6	17.10.2017	19.1.2021	1190 days	0 days	1190 days
Asset-7		4.7.2021	1356 days	0 days	1356 days
Asset-8		29.6.2019	620 days	0 days	620 days
Asset-9		4.10.2019	717 days	446 days	271 days

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

87. The Petitioner vide Auditor's Certificate has claimed the IDC for the communication assets and has also submitted the statement showing the IDC claim, discharge of the IDC liability as on the COD, and thereafter, as under:

(₹ in lakh)					
Assets	IDC as per Auditor's Certificate	IDC discharged upto COD	IDC Discharged (after COD) during 2019-20	IDC discharged during 2020-21	IDC discharged during 2021-22
Asset-1	47.32	34.73	12.58	0.01	0.00
Asset-2	11.89	8.53	3.35	0.010	0.00
Asset-3	12.43	10.13	0.55	1.73	0.00
Asset-4	0.25	0.00	0.00	0.00	0.25
Asset-5	1.06	0.00		0.00	1.06
Asset-6	104.51	99.59		1.21	3.71
Asset-7	77.61	77.31	0.00	0.00	0.30
Asset-8	66.82	57.18	9.62	0.040	0.00
Asset-9	43.28	32.97	6.45	3.87	0.00



88. Respondent No. 1, MPPMCL and Respondent No. 3, MSEDCL have submitted that the IDC and IEDC, etc., should be allowed only up to the SCOD and the burden of the same beyond the SCOD should not be passed on to the beneficiaries, including MPPMCL and MSEDCL. The Petitioner may be held liable to bear the IDC and IEDC, etc., beyond the SCOD, for the exorbitant delayed periods. MSEDCL has also submitted that the 2019 Tariff Regulations are specific in nature and do not provide for the capitalisation of IDC in case of existing projects. The methodology for adjusting IDC while working out WAROI has been consistently adopted by the Commission in its other orders.

89. We have considered the Petitioner's, MPPMCL's and MSEDCL's submissions. As discussed above, the time overrun in the commissioning of the communication assets has been partially condoned. Accordingly, the IDC on a cash basis up to the COD has been worked out based on the loan details given in the statement showing the discharge of IDC and Form-9C for the communication assets. The IDC claimed and considered as on the COD and summary of discharge of IDC liability up to COD and, thereafter, for the purpose of tariff determination, subject to revision at the time of truing up, are as under:

(₹ in lakh)

Assets	IDC as per Auditor's Certificate	IDC Disallowed due to Time Overrun not condoned	IDC allowed	IDC Discharged upto COD	IDC discharged			
					2019-20	2020-21	2021-22	2022-23
Asset-1	47.32	9.58	37.74	34.73	3.01	0.00	0.00	0.00
Asset-2	11.89	8.19	3.70	3.70	0.00	0.00	0.00	0.00
Asset-3	12.43	4.49	7.94	7.94	0.00	0.00	0.00	0.00
Asset-4	0.25	0.15	0.10	0.00	0.00	0.00	0.10	0.00
Asset-5	1.06	0.66	0.40	0.00	0.00	0.00	0.40	0.00
Asset-6	104.51	99.68	4.83	4.83	0.00	0.00	0.00	0.00
Asset-7	77.61	77.61	0.00	0.00	0.00	0.00	0.00	0.00
Asset-8	66.82	53.99	12.83	12.83	0.00	0.00	0.00	0.00
Asset-9	43.28	13.68	29.60	29.60	0.00	0.00	0.00	0.00



90. Further, the Petitioner has claimed the IEDC for the communication assets as per the Auditor's Certificate. The Petitioner has further submitted that the entire amount of IEDC for the communication assets has been discharged up to the COD. As the time overrun for the communication assets has been partially condoned, there is partial disallowance of IEDC. The IEDC claimed, as per the Auditor's Certificate, IEDC considered and discharged up to the COD are as under:

(₹ in lakh)

Assets	IEDC claimed as per Auditor's Certificate (A)	IEDC disallowed due to time overrun not condoned (B)	IEDC Allowed (A-B)
Asset-1	4.85	0.52	4.33
Asset-2	2.18	0.73	1.45
Asset-3	7.01	1.54	5.47
Asset-4	1.40	0.44	0.96
Asset-5	9.50	0.95	8.55
Asset-6	70.12	39.66	30.46
Asset-7	74.17	44.31	29.86
Asset-8	12.96	5.24	7.72
Asset-9	368.87	61.29	307.58

Initial Spares

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

“(d) Transmission System

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



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

(₹ in lakh)

Assets	Fibre Optic Cable and Accessories/Communication Equipment				
	Cost (for calculation of Initial Spares)	Initial Spares (Entitled)	Initial Spares (Claimed)	Initial Spares as % of plant and machinery cost as per regulation (in %)	Excess Spares
1	433.09	15.16	9.66	3.50	NIL
2	135.76	4.75	4.38	3.50	NIL
3	56.58	1.98	1.33	3.50	NIL
4	9.49	0.34	0.34	3.50	NIL
5	51.48	1.80	1.41	3.50	NIL
6	894.25	31.30	18.48	3.50	NIL
7	739.31	26.81	26.81	3.50	NIL
8	752.70	27.30	27.30	3.50	NIL
9	446.07	16.18	0.00	3.50	NIL
10	998.73	36.22	36.22	3.50	NIL

93. The Initial Spares have been allowed after minor disallowance to the value claimed by the Petitioner. The capital cost allowed as on the COD are as under:

(₹ in lakh)

Assets	Particulars	Plant and Machinery cost (excluding IDC/IED C, Land cost and Cost of Civil Works) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2019 Tariff Regulations (in %)	Initial Spares allowable (₹ in lakh)	Initial Spares disallowed (₹ in lakh)	Initial Spares Allowed (₹ in lakh)
		A	B	C	$D=(A-B)*C/(100-C)$	E=B-D	
Asset 1	Communication System	433.09	9.66	3.50	15.16	0.00	9.66
Asset 2	Communication System	135.76	4.38	3.50	4.75	0.00	4.38
Asset 3	Communication System	56.58	1.33	3.50	1.98	0.00	1.33
Asset 4	Communication System	9.49	0.34	3.50	0.34	0.00	0.34
Asset 5	Communication System	51.48	1.41	3.50	1.80	0.00	1.41



Assets	Particulars	Plant and Machinery cost (excluding IDC/IED C, Land cost and Cost of Civil Works) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2019 Tariff Regulations (in %)	Initial Spares allowable (₹ in lakh)	Initial Spares disallowed (₹ in lakh)	Initial Spares Allowed (₹ in lakh)
		A	B	C	$D=(A-B)*C/(100-C)$	E=B-D	
Asset 6	Communication System	894.25	18.48	3.50	31.30	0.00	18.48
Asset 7	Communication System	739.31	26.81	3.50	26.81	0.00	26.81
Asset 8	Communication System	752.70	27.30	3.50	27.30	0.00	27.30
Asset 9	Communication System	446.07	0.00	3.50	16.18	0.00	0.00

Capital Cost as on COD

94. The details of capital cost approved as on the COD in respect of the communication assets in the instant Petition are as follows:

(₹ in lakh)					
Assets	Capital Cost claimed as on COD (Auditor's Certificate) (A)	IDC disallowed due to time over-run not condoned (B)	Undischarged IDC as on COD (C)	IEDC Disallowed (D)	Capital Cost as on COD (E) = (A-B-C-D)
Asset-1	397.10	9.58	3.01	0.52	383.99
Asset-2	119.28	8.19	0.00	0.73	110.35
Asset-3	77.35	4.49	0.00	1.54	71.32
Asset-4	12.10	0.15	0.10	0.44	11.41
Asset-5	48.36	0.66	0.40	0.95	46.35
Asset-6	874.12	99.68	0.00	39.66	734.78
Asset-7	789.45	77.61	0.00	44.31	667.53
Asset-8	655.73	53.99	0.00	5.24	596.50
Asset-9	729.13	13.68	0.00	61.29	654.16

Additional Capital Expenditure (ACE)

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

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



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

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

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

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

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."*



96. The Petitioner has claimed that since the ACE incurred/ projected to be incurred is mainly on account of the balance/ retention payments, the same has been claimed under the Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations. The Petitioner has claimed the following ACE vide the Auditor's Certificate:

(₹ in lakh)						
Assets	Exp. For FY 2019-20	Exp. For FY 2020-21	Projected Exp. For FY 2021-22	Projected Exp. For FY 2022-23	Projected Exp. For FY 2023-24	Projected Exp. For FY 2024-25
1	-190.82	280.15	8.50	-	-	-
2	-48.59	83.52	-	-	-	-
3	-24.55	24.55	-	-	-	-
4	0.00	-0.62	-	-	-	-
5	0.00	15.09	-	-	-	-
6	-	3.46	30.46	0	31.97	147.35
7	-	-	91.16	37.29	-	-
8	25.07	142.04	36.94	-	-	-
9	5.23	123.86	-	-	-	-
10	-	-	-	-	-	437.87

97. We have considered the Petitioner's submissions. It has been observed that the ACE claimed by the Petitioner has been incurred/ projected to be incurred mainly on account of balance/retention payments. Further, the Petitioner has claimed projected ACE for the year 2024-25, which falls under the 2024-29 tariff period. Therefore, as per Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations, the ACE claimed in respect of communication assets up to the year 2023-24 has been considered and allowed subject to truing up. The details of the same are as under:

Asset-1

(₹ in lakh)			
Particulars	2019-20	2020-21	2021-22
ACE as per the Auditor's Certificate allowed under Regulation 24(1)(a) towards undischarged liabilities recognised to be payable at a future date	-190.82	280.15	8.50
Add: IDC Discharged	3.01	0.00	0.00
ACE allowed in the instant order	-187.81	280.15	8.50



Asset-2

(₹ in lakh)		
Particulars	2019-20	2020-21
ACE as per the Auditor's Certificate allowed under Regulation 24(1)(a) towards undischarged liabilities recognised to be payable at a future date	-48.59	83.52
ACE allowed in the instant order	-48.59	83.52

Asset-3

(₹ in lakh)		
Particulars	2019-20	2020-21
ACE as per the Auditor's Certificate allowed under Regulation 24(1)(a) towards undischarged liabilities recognised to be payable at a future date	-24.55	24.55
ACE allowed in the instant order	-24.55	24.55

Asset-4

(₹ in lakh)		
Particulars	2020-21	2021-22
ACE as per the Auditor's Certificate allowed under Regulation 24(1)(a) towards undischarged liabilities recognised to be payable at a future date	-0.62	0.00
Add: IDC Discharged	0.00	0.10
ACE allowed in the instant order	-0.62	0.10

Asset-5

(₹ in lakh)		
Particulars	2020-21	2021-22
ACE as per the Auditor's Certificate allowed under Regulation 24(1)(a) towards undischarged liabilities recognised to be payable at a future date	15.09	0.00
Add: IDC Discharged	0.00	0.40
ACE allowed in the instant order	15.09	0.40

Asset-6

(₹ in lakh)				
Particulars	2020-21	2021-22	2022-23	2023-24
ACE as per the Auditor's Certificate allowed under Regulation 24(1)(a) towards undischarged liabilities recognised to be payable at a future date	3.46	30.46	0.00	31.97
ACE allowed in the instant order	3.46	30.46	0.00	31.97

Asset-7

(₹ in lakh)		
Particulars	2021-22	2022-23
ACE as per the Auditor's Certificate allowed under Regulation 24(1)(a) towards undischarged liabilities recognised to be payable at a future date	91.16	37.29
ACE allowed in the instant order	91.16	37.29



Asset-8

(₹ in lakh)			
Particulars	2019-20	2020-21	2021-22
ACE as per the Auditor's Certificate allowed under Regulation 24 (1) (a) towards undischarged liabilities recognised to be payable at a future date	25.07	142.04	36.94
ACE allowed in the instant order	25.07	142.04	36.94

Asset-9

(₹ in lakh)		
Particulars	2019-20	2020-21
ACE as per Auditor's Certificate allowed under Regulation 24(1)(a) towards undischarged liabilities recognised to be payable at a future date	5.23	123.86
ACE allowed in the instant order	5.23	123.86

98. The capital cost considered for the communication assets for the 2019-24 tariff period are as under:

(₹ in lakh)							
Assets	Expenditure Up to COD	Projected ACE					Estimated completion Cost
		2019-20	2020-21	2021-22	2022-23	2023-24	
Asset-1	383.99	-187.81	280.15	8.5	0.00	0.00	484.83
Asset-2	110.35	-48.59	83.52	0.00	0.00	0.00	145.28
Asset-3	71.32	-24.55	24.55	0.00	0.00	0.00	71.32
Asset-4	11.41		-0.62	0.10	0.00	0.00	10.89
Asset-5	46.35		15.09	0.40	0.00	0.00	61.84
Asset-6	734.78		3.46	30.46	0.00	31.97	800.67
Asset-7	667.53			91.16	37.29	0.00	795.98
Asset-8	596.50	25.07	142.04	36.94	0	0.00	800.55
Asset-9	654.16	5.23	123.86	0.00	0.00	0.00	783.25

Debt-Equity ratio

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

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

Provided that:

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

100. The debt-equity ratios for each asset considered for the purpose of computation of tariff for the 2019-24 tariff period for the communication assets are as under:



Asset-1

Funding	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	268.79	70.00	70.59	70.00	339.38	70.00
Equity	115.20	30.00	30.25	30.00	145.45	30.00
Total	383.99	100.00	100.84	100.00	484.83	100.00

Asset-2

Funding	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	77.24	70.00	24.45	70.00	101.70	70.00
Equity	33.11	30.00	10.48	30.00	43.58	30.00
Total	110.35	100.00	34.93	100.00	145.28	100.00

Asset-3

Funding	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	49.92	70.00	0.00	70.00	49.92	70.00
Equity	21.40	30.00	0.00	30.00	21.40	30.00
Total	71.32	100.00	0.00	100.00	71.32	100.00

Asset-4

Funding	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	7.99	70.00	-0.36	70.00	7.62	70.00
Equity	3.42	30.00	-0.16	30.00	3.27	30.00
Total	11.41	100.00	-0.52	100.00	10.89	100.00

Asset-5

Funding	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	32.45	70.00	10.85	70.00	43.29	70.00
Equity	13.90	30.00	4.65	30.00	18.55	30.00
Total	46.35	100.00	15.49	100.00	61.84	100.00



Asset-6

Funding	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	514.35	70.00	46.12	70.00	560.47	70.00
Equity	220.43	30.00	19.77	30.00	240.20	30.00
Total	734.78	100.00	65.89	100.00	800.67	100.00

Asset-7

Funding	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	467.27	70.00	89.92	70.00	557.18	70.00
Equity	200.26	30.00	38.54	30.00	238.80	30.00
Total	667.53	100.00	128.45	100.00	795.98	100.00

Asset-8

Funding	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	417.55	70.00	142.84	70.00	560.39	70.00
Equity	178.95	30.00	61.22	30.00	240.16	30.00
Total	596.50	100.00	204.05	100.00	800.55	100.00

Asset-9

Funding	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	457.91	70.00	90.36	70.00	548.27	70.00
Equity	196.25	30.00	38.73	30.00	234.98	30.00
Total	654.16	100.00	129.09	100.00	783.25	100.00

Depreciation

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

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



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

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

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

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

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

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

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

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

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

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

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 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.”

102. We have considered the Petitioner’s submissions. The depreciation has been worked out considering the admitted capital expenditure as on the COD and, thereafter, up to 31.3.2024. The Weighted Average Rate of Depreciation (WAROD) at Annexure-I has been worked out for the communication assets, as per the rates of depreciation specified in the 2019 Tariff Regulations. The depreciation allowed in respect of the communication assets for the 2019-24 tariff period are as under:

Asset-1

(₹ in lakh)						
	Particulars	2019-20 (pro-rata 285 days)	2020-21	2021-22	2022-23	2023-24
	Depreciation					
A	Opening Gross Block	383.99	196.18	476.33	484.83	484.83
B	ACE	-187.81	280.15	8.50	0.00	0.00
C	Closing Gross Block (A+B)	196.18	476.33	484.83	484.83	484.83
D	Average Gross Block (A+C)/2	290.08	336.25	480.58	484.83	484.83
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33	6.33
F	Balance useful life of the asset (Year)	15	15	14	13	12
G	Aggregate Depreciable Value	261.07	302.63	432.52	436.34	436.34



	Particulars	2019-20 (pro-rata 285 days)	2020-21	2021-22	2022-23	2023-24
H	Combined Depreciation during the year	14.30	21.28	30.42	30.69	30.69
I	Aggregate Cumulative Depreciation	14.30	35.58	66.00	96.69	127.38
J	Remaining Aggregate Depreciable Value	246.78	267.04	366.52	339.65	308.96

Asset-2

(₹ in lakh)

	Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
	Depreciation					
A	Opening Gross Block	110.35	61.76	145.28	145.28	145.28
B	ACE	-48.59	83.52	0.00	0.00	0.00
C	Closing Gross Block (A+B)	61.76	145.28	145.28	145.28	145.28
D	Average Gross Block (A+C)/2	86.06	103.52	145.28	145.28	145.28
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33	6.33
F	Balance useful life of the asset (Year)	15	15	14	13	12
G	Aggregate Depreciable Value	77.45	93.17	130.75	130.75	130.75
H	Combined Depreciation during the year	4.12	6.55	9.20	9.20	9.20
I	Aggregate Cumulative Depreciation	4.12	10.68	19.87	29.07	38.27
J	Remaining Aggregate Depreciable Value	73.33	82.50	110.88	101.69	92.49

Asset-3

(₹ in lakh)

	Particulars	2019-20 (pro-rata 68 days)	2020-21	2021-22	2022-23	2023-24
	Depreciation					
A	Opening Gross Block	71.32	46.77	71.32	71.32	71.32
B	ACE	-24.55	24.55	0.00	0.00	0.00
C	Closing Gross Block (A+B)	46.77	71.32	71.32	71.32	71.32
D	Average Gross Block (A+C)/2	59.05	59.05	71.32	71.32	71.32
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33	6.33
F	Balance useful life of the asset (Year)	15	15	14	13	12
G	Aggregate Depreciable Value	53.14	53.14	64.19	64.19	64.19
H	Combined Depreciation during the year	0.69	3.74	4.51	4.51	4.51



	Particulars	2019-20 (pro-rata 68 days)	2020-21	2021-22	2022-23	2023-24
I	Aggregate Cumulative Depreciation	0.69	3.74	8.25	4.51	9.03
J	Remaining Aggregate Depreciable Value	52.45	49.40	55.94	59.67	55.16

Asset-4

(₹ in lakh)

	Particulars	2020-21 (pro-rata 196 days)	2021-22	2022-23	2023-24
	Depreciation				
A	Opening Gross Block	11.41	10.79	10.89	10.89
B	ACE	-0.62	0.10	0.00	0.00
C	Closing Gross Block (A+B)	10.79	10.89	10.89	10.89
D	Average Gross Block (A+C)/2	11.10	10.84	10.89	10.89
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33
F	Balance useful life of the asset (Year)	15	15	14	13
G	Aggregate Depreciable Value	9.99	9.76	9.80	9.80
H	Combined Depreciation during the year	0.38	0.69	0.69	0.69
I	Aggregate Cumulative Depreciation	0.38	1.06	1.75	2.44
J	Remaining Aggregate Depreciable Value	9.61	8.69	8.05	7.36

Asset-5

(₹ in lakh)

	Particulars	2020-21 (pro-rata 184 days)	2021-22	2022-23	2023-24
	Depreciation				
A	Opening Gross Block	46.35	61.44	61.84	61.84
B	ACE	15.09	0.40	0.00	0.00
C	Closing Gross Block (A+B)	61.44	61.84	61.84	61.84
D	Average Gross Block (A+C)/2	53.89	61.64	61.84	61.84
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33
F	Balance useful life of the asset (Year)	15	15	14	13
G	Aggregate Depreciable Value	48.50	55.47	55.66	55.66
H	Combined Depreciation during the year	1.72	3.90	3.91	3.91
I	Aggregate Cumulative Depreciation	1.72	5.62	9.54	13.45
J	Remaining Aggregate Depreciable Value	46.78	49.85	46.12	42.21



Asset-6

(₹ in lakh)

	Particulars	2020-21 (pro-rata 72 days)	2021-22	2022-23	2023-24
	Depreciation				
A	Opening Gross Block	734.78	738.24	768.70	768.70
B	ACE	3.46	30.46	0.00	31.97
C	Closing Gross Block (A+B)	738.24	768.70	768.70	800.67
D	Average Gross Block (A+C)/2	736.51	753.47	768.70	784.68
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33
F	Balance useful life of the asset (Year)	15	15	14	13
G	Aggregate Depreciable Value	662.86	678.12	691.83	706.21
H	Combined Depreciation during the year	9.17	47.69	48.66	49.67
I	Aggregate Cumulative Depreciation	9.17	56.87	105.52	155.19
J	Remaining Aggregate Depreciable Value	653.68	621.25	586.30	551.02

Asset-7

(₹ in lakh)

	Particulars	2021-22 (pro-rata 271 day)	2022-23	2023-24
	Depreciation			
A	Opening Gross Block	667.53	758.69	795.98
B	ACE	91.16	37.29	0.00
C	Closing Gross Block (A+B)	758.69	795.98	795.98
D	Average Gross Block (A+C)/2	713.11	777.34	795.98
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33
F	Balance useful life of the asset (Year)	15	15	14
G	Elapsed Life at the beginning of the year	0	0	1
H	Aggregate Depreciable Value	641.80	699.61	716.39
I	Combined Depreciation during the year	33.51	49.21	50.39
J	Aggregate Cumulative Depreciation	33.51	82.72	133.11
k	Remaining Aggregate Depreciable Value	608.29	616.88	583.28

Asset-8

(₹ in lakh)

	Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
	Depreciation					
A	Opening Gross Block	596.50	621.57	763.61	800.55	800.55
B	ACE	25.07	142.04	36.94	0.00	0.00
C	Closing Gross Block (A+B)	621.57	763.61	800.55	800.55	800.55



	Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
D	Average Gross Block (A+C)/2	609.03	692.59	782.08	800.55	800.55
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33	6.33
F	Balance useful life of the asset (Year)	15	15	14	13	12
G	Aggregate Depreciable Value	548.13	623.33	703.87	720.49	720.49
H	Combined Depreciation during the year	29.18	43.84	49.51	50.67	50.67
I	Aggregate Cumulative Depreciation	29.18	73.02	122.52	50.67	101.35
J	Remaining Aggregate Depreciable Value	518.95	550.31	581.35	669.82	619.14

Asset-9

(₹ in lakh)

	Particulars	2019-20 (pro-rata 180 days)	2020-21	2021-22	2022-23	2023-24
	Depreciation					
A	Opening Gross Block	654.16	659.39	783.25	783.25	783.25
B	ACE	5.23	123.86	0.00	0.00	0.00
C	Closing Gross Block (A+B)	659.39	783.25	783.25	783.25	783.25
D	Average Gross Block (A+C)/2	656.78	721.32	783.25	783.25	783.25
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33	6.33
F	Balance useful life of the asset (Year)	15	15	14	13	12
G		0	0	1	2	3
H	Aggregate Depreciable Value	591.10	649.19	704.93	704.93	704.93
I	Combined Depreciation during the year	20.45	45.66	49.58	49.58	49.58
J	Aggregate Cumulative Depreciation	20.45	66.11	115.69	165.27	214.85
K	Remaining Aggregate Depreciable Value	570.65	583.08	589.24	539.66	490.08

Interest on Loan (IoL)

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

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



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

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

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

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

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

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

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

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

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

104. The Weighted Average Rate of IoL (WAROI) has been considered on the basis of rate prevailing as on the COD. The Petitioner has prayed that the change in the interest rate due to the floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, the IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. The IoL allowed for the communication assets are as under:



Asset-1

(₹ in lakh)

	Particulars	2019-20 (pro-rata 285 days)	2020-21	2021-22	2022-23	2023-24
A	Gross Normative Loan	268.79	137.33	333.43	339.38	339.38
B	Cumulative Repayments up to the Previous Year	0.00	14.30	35.58	66.00	96.69
C	Net Loan-Opening (A-B)	268.79	123.03	297.85	273.38	242.69
D	Additions due to ACE	-131.47	196.11	5.95	0.00	0.00
E	Repayment during the year	14.30	21.28	30.42	30.69	30.69
F	Net Loan-Closing (C+D-E)	123.03	297.85	273.38	242.69	212.00
G	Average Loan (C+F)/2	195.91	210.44	285.62	258.04	227.35
H	Weighted Average Rate of Interest on Loan (in %)	7.6388	7.6432	7.6583	7.6772	7.6673
I	Interest on Loan	11.65	16.08	21.87	19.81	17.43

Asset-2

(₹ in lakh)

	Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
A	Gross Normative Loan	77.24	43.23	101.70	101.70	101.70
B	Cumulative Repayments up to the Previous Year	0.00	4.12	10.68	19.87	29.07
C	Net Loan-Opening (A-B)	77.24	39.11	91.02	81.82	72.63
D	Additions due to ACE	-34.01	58.46	0.00	0.00	0.00
E	Repayment during the year	4.12	6.55	9.20	9.20	9.20
F	Net Loan-Closing (C+D-E)	39.11	91.02	81.82	72.63	63.43
G	Average Loan (C+F)/2	58.18	65.06	86.42	77.22	68.03
H	Weighted Average Rate of Interest on Loan (in %)	7.6630	7.6729	7.6764	7.6798	7.6725
I	Interest on Loan	3.37	4.99	6.63	5.93	5.22

Asset-3

(₹ in lakh)

	Particulars	2019-20 (pro-rata 68 days)	2020-21	2021-22	2022-23	2023-24
A	Gross Normative Loan	49.92	32.74	49.92	49.92	49.92
B	Cumulative Repayments up to the Previous Year	0.00	0.69	4.43	8.95	13.46
C	Net Loan-Opening (A-B)	49.92	32.04	45.49	40.98	36.46
D	Additions due to ACE	-17.19	17.19	0.00	0.00	0.00
E	Repayment during the year	0.69	3.74	4.51	4.51	4.51



	Particulars	2019-20 (pro-rata 68 days)	2020-21	2021-22	2022-23	2023-24
F	Net Loan-Closing (C+D-E)	32.04	45.49	40.98	36.46	31.95
G	Average Loan (C+F)/2	40.98	38.77	43.23	38.72	34.20
H	Weighted Average Rate of Interest on Loan (in %)	7.6486	7.6406	7.6087	7.5783	7.5783
I	Interest on Loan	0.58	2.96	3.29	2.93	2.59

Asset-4

(₹ in lakh)

	Particulars	2020-21 (pro-rata 196 days)	2021-22	2022-23	2023-24
A	Gross Normative Loan	7.99	7.55	7.62	7.62
B	Cumulative Repayments up to the Previous Year	0.00	0.38	1.06	1.75
C	Net Loan-Opening (A-B)	7.99	7.17	6.56	5.87
D	Additions due to ACE	-0.43	0.07	0.00	0.00
E	Repayment during the year	0.38	0.69	0.69	0.69
F	Net Loan-Closing (C+D-E)	7.17	6.56	5.87	5.18
G	Average Loan (C+F)/2	7.58	6.87	6.21	5.53
H	Weighted Average Rate of Interest on Loan (in %)	6.8500	6.8500	6.8500	6.8500
I	Interest on Loan	0.28	0.47	0.43	0.38

Asset-5

(₹ in lakh)

	Particulars	2020-21 (pro-rata 184 days)	2021-22	2022-23	2023-24
A	Gross Normative Loan	32.45	43.01	43.29	43.29
B	Cumulative Repayments up to the Previous Year	0.00	1.72	5.62	9.54
C	Net Loan-Opening (A-B)	32.45	41.29	37.67	33.76
D	Additions due to ACE	10.56	0.28	0.00	0.00
E	Repayment during the year	1.72	3.90	3.91	3.91
F	Net Loan-Closing (C+D-E)	41.29	37.67	33.76	29.84
G	Average Loan (C+F)/2	36.87	39.48	35.71	31.80
H	Weighted Average Rate of Interest on Loan (in %)	6.8500	6.8500	6.8500	6.8500
I	Interest on Loan	1.27	2.70	2.45	2.18



Asset-6

(₹ in lakh)

	Particulars	2020-21 (pro-rata 72 days)	2021-22	2022-23	2023-24
A	Gross Normative Loan	514.35	516.77	538.09	538.09
B	Cumulative Repayments up to the Previous Year	0.00	9.17	56.87	105.52
C	Net Loan-Opening (A-B)	514.35	507.60	481.23	432.57
D	Additions due to ACE	2.42	21.32	0.00	22.38
E	Repayment during the year	9.17	47.69	48.66	49.67
F	Net Loan-Closing (C+D-E)	507.60	481.23	432.57	405.28
G	Average Loan (C+F)/2	510.97	494.41	456.90	418.92
H	Weighted Average Rate of Interest on Loan (in %)	6.8469	6.8841	6.9278	6.9387
I	Interest on Loan	6.88	34.04	31.65	29.07

Asset-7

(₹ in lakh)

	Particulars	2021-22 (pro-rata 271 day)	2022-23	2023-24
A	Gross Normative Loan	467.27	531.08	557.18
B	Cumulative Repayments up to the Previous Year	0.00	33.51	82.72
C	Net Loan-Opening (A-B)	467.27	497.57	474.46
D	Additions due to ACE	63.81	26.10	0.00
E	Repayment during the year	33.51	49.21	50.39
F	Net Loan-Closing (C+D-E)	497.57	474.46	424.08
G	Average Loan (C+F)/2	482.42	486.02	449.27
H	Weighted Average Rate of Interest on Loan (in %)	6.5516	6.5815	6.5779
I	Interest on Loan	23.47	31.99	29.55

Asset-8

(₹ in lakh)

	Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
A	Gross Normative Loan	417.55	435.10	534.53	560.39	560.39
B	Cumulative Repayments up to the Previous Year	0.00	29.18	73.02	122.52	173.20
C	Net Loan-Opening (A-B)	417.55	405.92	461.51	437.86	387.19
D	Additions due to ACE	17.55	99.43	25.86	0.00	0.00
E	Repayment during the year	29.18	43.84	49.51	50.67	50.67



	Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
F	Net Loan-Closing (C+D-E)	405.92	461.51	437.86	387.19	336.51
G	Average Loan (C+F)/2	411.74	433.72	449.69	412.52	361.85
H	Weighted Average Rate of Interest on Loan (in %)	7.9432	7.9372	7.9356	7.9327	7.9124
I	Interest on Loan	24.75	34.42	35.69	32.72	28.63

Asset-9

(₹ in lakh)

	Particulars	2019-20 (pro-rata 180 days)	2020-21	2021-22	2022-23	2023-24
A	Gross Normative Loan	457.91	461.57	548.27	548.27	548.27
B	Cumulative Repayments up to the Previous Year	0.00	20.45	66.11	115.69	165.27
C	Net Loan-Opening (A-B)	457.91	441.13	482.17	432.59	383.01
D	Additions due to ACE	3.66	86.70	0.00	0.00	0.00
E	Repayment during the year	20.45	45.66	49.58	49.58	49.58
F	Net Loan-Closing (C+D-E)	441.13	482.17	432.59	383.01	333.43
G	Average Loan (C+F)/2	449.52	461.65	457.38	407.80	358.22
H	Weighted Average Rate of Interest on Loan (in %)	7.6919	7.6882	7.6815	7.6758	7.6713
I	Interest on Loan	17.00	35.49	35.13	31.30	27.48

Return on Equity (RoE)

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

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

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

Provided that return on equity in respect of additional capitalization after cutoff date beyond the original scope, excluding additional capitalization on 7 account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.



Provided further that:

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

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

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

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

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

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

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



Illustration-

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

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

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

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

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

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

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

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

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

Asset-1

(₹ in lakh)						
	Particulars	2019-20 (pro-rata 285 days)	2020-21	2021-22	2022-23	2023-24
A	Opening Equity (A)	115.20	58.85	142.90	145.45	145.45
B	Additions (B)	-56.34	84.05	2.55	0.00	0.00
C	Closing Equity (C) = (A+B)	58.85	142.90	145.45	145.45	145.45
D	Average Equity (D) = (A+C)/2	87.02	100.88	144.17	145.45	145.45



	Particulars	2019-20 (pro-rata 285 days)	2020-21	2021-22	2022-23	2023-24
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity	12.73	18.95	27.08	27.32	27.32

Asset-2

(₹ in lakh)

	Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
A	Opening Equity (A)	33.11	18.53	43.58	43.58	43.58
B	Additions (B)	-14.58	25.06	0.00	0.00	0.00
C	Closing Equity (C) = (A+B)	18.53	43.58	43.58	43.58	43.58
D	Average Equity (D) = (A+C)/2	25.82	31.06	43.58	43.58	43.58
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity	3.67	5.83	8.19	8.19	8.19

Asset-3

(₹ in lakh)

	Particulars	2019-20 (pro-rata 68 days)	2020-21	2021-22	2022-23	2023-24
A	Opening Equity (A)	21.40	14.03	21.40	21.40	21.40
B	Additions (B)	-7.37	7.37	0.00	0.00	0.00
C	Closing Equity (C) = (A+B)	14.03	21.40	21.40	21.40	21.40
D	Average Equity (D) = (A+C)/2	17.71	17.71	21.40	21.40	21.40
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782



	Particulars	2019-20 (pro-rata 68 days)	2020-21	2021-22	2022-23	2023-24
H	Return on Equity	0.62	3.33	4.02	4.02	4.02

Asset-4

(₹ in lakh)

	Particulars	2020-21 (pro-rata 196 days)	2021-22	2022-23	2023-24
A	Opening Equity (A)	3.42	3.24	3.27	3.27
B	Additions (B)	-0.19	0.03	0.00	0.00
C	Closing Equity (C) = (A+B)	3.24	3.27	3.27	3.27
D	Average Equity (D) = (A+C)/2	3.33	3.25	3.27	3.27
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782
H	Return on Equity	0.34	0.61	0.61	0.61

Asset-5

(₹ in lakh)

	Particulars	2020-21 (pro-rata 184 days)	2021-22	2022-23	2023-24
A	Opening Equity (A)	13.90	18.43	18.55	18.55
B	Additions (B)	4.53	0.12	0.00	0.00
C	Closing Equity (C) = (A+B)	18.43	18.55	18.55	18.55
D	Average Equity (D) = (A+C)/2	16.17	18.49	18.55	18.55
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782
H	Return on Equity	1.53	3.47	3.48	3.48

Asset-6

(₹ in lakh)

	Particulars	2020-21 (pro-rata 72 days)	2021-22	2022-23	2023-24
A	Opening Equity (A)	220.43	221.47	230.61	230.61
B	Additions (B)	1.04	9.14	0.00	9.59
C	Closing Equity (C) = (A+B)	221.47	230.61	230.61	240.20
D	Average Equity (D) = (A+C)/2	220.95	226.04	230.61	235.40
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500



	Particulars	2020-21 (pro-rata 72 days)	2021-22	2022-23	2023-24
F	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782
H	Return on Equity	8.16	42.45	43.31	44.21

Asset-7

(₹ in lakh)

	Particulars	2021-22 (pro-rata 271 days)	2022-23	2023-24
A	Opening Equity (A)	200.26	227.61	238.80
B	Additions (B)	27.35	11.19	0.00
C	Closing Equity (C) = (A+B)	227.61	238.80	238.80
D	Average Equity (D) = (A+C)/2	213.93	233.20	238.80
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782
H	Return on Equity	29.83	43.80	44.85

Asset-8

(₹ in lakh)

	Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
A	Opening Equity (A)	178.95	186.47	229.08	240.16	240.16
B	Additions (B)	7.52	42.61	11.08	0.00	0.00
C	Closing Equity (C) = (A+B)	186.47	229.08	240.16	240.16	240.16
D	Average Equity (D) = (A+C)/2	182.71	207.78	234.62	240.16	240.16
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity	25.97	39.02	44.07	45.11	45.11



Asset-9

(₹ in lakh)

	Particulars	2019-20 (pro-rata 180 days)	2020-21	2021-22	2022-23	2023-24
A	Opening Equity (A)	196.25	197.82	234.98	234.98	234.98
B	Additions (B)	1.57	37.16	0.00	0.00	0.00
C	Closing Equity (C) = (A+B)	197.82	234.98	234.98	234.98	234.98
D	Average Equity (D) = (A+C)/2	197.03	216.40	234.98	234.98	234.98
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity	18.20	40.64	44.13	44.13	44.13

Operation & Maintenance Expenses (O&M Expenses)

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

Asset-1

(₹ in lakh)

Particulars	2019-20 (pro-rata 285 days)	2020-21	2021-22	2022-23	2023-24
Original Project Cost	494.93	494.93	494.93	494.93	494.93
Norms (in %)	2.00	2.00	2.00	2.00	2.00
Total O&M Expenses	7.71	9.90	9.90	9.90	9.90

Asset-2

(₹ in lakh)

Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
Original Project Cost	154.21	154.21	154.21	154.21	154.21
Norms (in %)	2.00	2.00	2.00	2.00	2.00
Total O&M Expenses	2.33	3.08	3.08	3.08	3.08



Asset-3

(₹ in lakh)

Particulars	2019-20 (pro-rata 68 days)	2020-21	2021-22	2022-23	2023-24
Original Project Cost	77.34	77.34	77.34	77.34	77.34
Norms (in %)	2.00	2.00	2.00	2.00	2.00
Total O&M Expenses	0.27	1.43	1.43	1.43	1.43

Asset-4

(₹ in lakh)

Particulars	2020-21 (pro-rata 196 days)	2021-22	2022-23	2023-24
Original Project Cost	11.48	11.48	11.48	11.48
Norms (in %)	2.00	2.00	2.00	2.00
Total O&M Expenses	0.12	0.23	0.23	0.23

Asset-5

(₹ in lakh)

Particulars	2020-21 (pro-rata 184 days)	2021-22	2022-23	2023-24
Original Project Cost	63.45	63.45	63.45	63.45
Norms (in %)	2.00	2.00	2.00	2.00
Total O&M Expenses	0.64	1.27	1.27	1.27

Asset-6

(₹ in lakh)

Particulars	2020-21 (pro-rata 78 days)	2021-22	2022-23	2023-24
Original Project Cost	1087.36	1087.36	1087.36	1087.36
Norms (in %)	2.00	2.00	2.00	2.00
Total O&M Expenses	4.29	21.75	21.75	21.75

Asset-7

(₹ in lakh)

Particulars	2021-22 (pro-rata 271 day)	2022-23	2023-24
Original Project Cost	917.90	917.90	917.90
Norms (in %)	2.00	2.00	2.00
Total O&M Expenses	13.63	18.36	18.36



Asset-8

(₹ in lakh)

Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
Original Project Cost	859.79	859.79	859.79	859.79	859.79
Norms (in %)	2.00	2.00	2.00	2.00	2.00
Total O&M Expenses	13.01	17.20	17.20	17.20	17.20

Asset-9

(₹ in lakh)

Particulars	2019-20 (pro-rata 180 days)	2020-21	2021-22	2022-23	2023-24
Original Project Cost	858.22	858.22	858.22	858.22	858.22
Norms (in %)	2.00	2.00	2.00	2.00	2.00
Total O&M Expenses	8.44	17.16	17.16	17.16	17.16

108. The norms specified under Regulation 35(4) of the 2019 Tariff Regulations provide as under:

“35. Operation and Maintenance Expenses:

*(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.”*

109. We have considered the Petitioner’s submissions. The O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations, and the same are as under:

Asset-1

(₹ in lakh)

Particulars	2019-20 (pro-rata 285 days)	2020-21	2021-22	2022-23	2023-24
Original Project Cost	494.93	494.93	494.93	494.93	494.93
Norms (in %)	2.00	2.00	2.00	2.00	2.00
Total O&M Expenses	7.71	9.90	9.90	9.90	9.90



Asset-2

(₹ in lakh)

Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
Original Project Cost	154.21	154.21	154.21	154.21	154.21
Norms (in %)	2.00	2.00	2.00	2.00	2.00
Total O&M Expenses	2.33	3.08	3.08	3.08	3.08

Asset-3

(₹ in lakh)

Particulars	2019-20 (pro-rata 68 days)	2020-21	2021-22	2022-23	2023-24
Original Project Cost	77.34	77.34	77.34	77.34	77.34
Norms (in %)	2.00	2.00	2.00	2.00	2.00
Total O&M Expenses	0.29	1.55	1.55	1.55	1.55

Asset-4

(₹ in lakh)

Particulars	2020-21 (pro-rata 196 days)	2021-22	2022-23	2023-24
Original Project Cost	11.48	11.48	11.48	11.48
Norms (in %)	2.00	2.00	2.00	2.00
Total O&M Expenses	0.12	0.23	0.23	0.23

Asset-5

(₹ in lakh)

Particulars	2020-21 (pro-rata 184 days)	2021-22	2022-23	2023-24
Original Project Cost	63.45	63.45	63.45	63.45
Norms (in %)	2.00	2.00	2.00	2.00
Total O&M Expenses	0.64	1.27	1.27	1.27

Asset-6

(₹ in lakh)

Particulars	2020-21 (pro-rata 72 days)	2021-22	2022-23	2023-24
Original Project Cost	1087.36	1087.36	1087.36	1087.36
Norms (in %)	2.00	2.00	2.00	2.00
Total O&M Expenses	4.28	21.75	21.75	21.75



Asset-7

(₹ in lakh)

Particulars	2021-22 (pro-rata 271 day)	2022-23	2023-24
Original Project Cost	917.90	917.90	917.90
Norms (in %)	2.00	2.00	2.00
Total O&M Expenses	13.63	18.36	18.36

Asset-8

(₹ in lakh)

Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
Original Project Cost	859.79	859.79	859.79	859.79	859.79
Norms (in %)	2.00	2.00	2.00	2.00	2.00
Total O&M Expenses	13.01	17.20	17.20	17.20	17.20

Asset-9

(₹ in lakh)

Particulars	2019-20 (pro-rata 180 days)	2020-21	2021-22	2022-23	2023-24
Original Project Cost	858.22	858.22	858.22	858.22	858.22
Norms (in %)	2.00	2.00	2.00	2.00	2.00
Total O&M Expenses	8.44	17.16	17.16	17.16	17.16

Interest on Working Capital (IWC)

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

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

.....

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

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

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



year for which tariff is to be determined:

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

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

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

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

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

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

111. The Petitioner has submitted that it has computed the IWC for the 2019-24 period considering the SBI base rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the IWC rate to be 10.50%.

112. The IWC has been 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 the FY 2020-21, 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for the 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 the FY 2023-24. The components of the working capital and the interest allowed thereon are as under:



Asset-1

(₹ in lakh)

	Particulars	2019-20 (pro-rata 285 days)	2020-21	2021-22	2022-23	2023-24
A	Working Capital for O&M Expenses (O&M Expenses for one month)	0.82	0.82	0.82	0.82	0.82
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	1.48	1.48	1.48	1.48	1.48
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	7.47	8.31	11.18	10.99	10.68
D	Total Working Capital	9.78	10.62	13.49	13.30	12.99
E	Rate of Interest (in %)	12.05	11.25	10.50	10.50	12.00
F	Interest on Working Capital	0.92	1.19	1.42	1.40	1.56

Asset-2

(₹ in lakh)

	Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
A	Working Capital for O&M Expenses (O&M Expenses for one month)	0.26	0.26	0.26	0.26	0.26
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	0.46	0.46	0.46	0.46	0.46
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	2.24	2.57	3.39	3.31	3.22
D	Total Working Capital	2.96	3.29	4.11	4.03	3.94
E	Rate of Interest (in %)	12.05	11.25	10.50	10.50	12.00
F	Interest on Working Capital	0.27	0.37	0.43	0.42	0.47

Asset-3

(₹ in lakh)

	Particulars	2019-20 (pro-rata 68 days)	2020-21	2021-22	2022-23	2023-24
A	Working Capital for O&M Expenses (O&M Expenses for one month)	0.13	0.13	0.13	0.13	0.13



	Particulars	2019-20 (pro-rata 68 days)	2020-21	2021-22	2022-23	2023-24
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	0.23	0.23	0.23	0.23	0.23
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	1.47	1.45	1.67	1.63	1.59
D	Total Working Capital	1.83	1.81	2.04	1.99	1.95
E	Rate of Interest (in %)	12.05	11.25	10.50	10.50	12.00
F	Interest on Working Capital	0.04	0.20	0.21	0.21	0.23

Asset-4

(₹ in lakh)

	Particulars	2020-21 (pro-rata 196 days)	2021-22	2022-23	2023-24
A	Working Capital for O&M Expenses (O&M Expenses for one month)	0.02	0.02	0.02	0.02
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	0.03	0.03	0.03	0.03
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	0.14	0.25	0.25	0.24
D	Total Working Capital	0.19	0.30	0.30	0.29
E	Rate of Interest (in %)	11.25	10.50	10.50	12.00
F	Interest on Working Capital	0.02	0.03	0.03	0.04

Asset-5

(₹ in lakh)

	Particulars	2020-21 (pro-rata 184 days)	2021-22	2022-23	2023-24
A	Working Capital for O&M Expenses (O&M Expenses for one month)	0.11	0.11	0.11	0.11
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	0.19	0.19	0.19	0.19
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	1.28	1.42	1.39	1.36
D	Total Working Capital	1.58	1.72	1.69	1.65
E	Rate of Interest (in %)	11.25	10.50	10.50	12.00
F	Interest on Working Capital	0.09	0.18	0.18	0.20



Asset-6

(₹ in lakh)

	Particulars	2020-21 (pro-rata 72 days)	2021-22	2022-23	2023-24
A	Working Capital for O&M Expenses (O&M Expenses for one month)	1.81	1.81	1.81	1.81
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	3.26	3.26	3.26	3.26
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	18.18	18.29	18.22	18.13
D	Total Working Capital	23.26	23.37	23.30	23.21
E	Rate of Interest (in %)	11.25	10.50	10.50	12.00
F	Interest on Working Capital	0.51	2.45	2.45	2.78

Asset-7

(₹ in lakh)

	Particulars	2021-22 (pro-rata 271 days)	2022-23	2023-24
A	Working Capital for O&M Expenses (O&M Expenses for one month)	1.53	1.53	1.53
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	2.75	2.75	2.75
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	16.95	17.96	17.93
D	Total Working Capital	21.24	22.24	22.21
E	Rate of Interest (in %)	10.50	10.50	12.00
F	Interest on Working Capital	1.66	2.34	2.67

Asset-8

(₹ in lakh)

	Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
A	Working Capital for O&M Expenses (O&M Expenses for one month)	1.43	1.43	1.43	1.43	1.43
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	2.58	2.58	2.58	2.58	2.58
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	15.38	16.87	18.35	18.25	17.73
D	Total Working Capital	19.39	20.88	22.36	22.26	21.74
E	Rate of Interest (in %)	12.05	11.25	10.50	10.50	12.00
F	Interest on Working Capital	1.77	2.35	2.35	2.34	2.61



Asset-9

(₹ in lakh)

	Particulars	2019-20 (pro-rata 180 days)	2020-21	2021-22	2022-23	2023-24
A	Working Capital for O&M Expenses (O&M Expenses for one month)	1.43	1.43	1.43	1.43	1.43
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	2.57	2.57	2.57	2.57	2.57
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	16.32	17.43	18.29	17.81	17.33
D	Total Working Capital	20.33	21.43	22.29	21.82	21.33
E	Rate of Interest (in %)	12.05	11.25	10.50	10.50	12.00
F	Interest on Working Capital	1.20	2.41	2.34	2.29	2.56

Annual Fixed Charges for the 2019-24 Tariff Period

113. The transmission charges allowed for the communication assets for the 2019-24 tariff period are as under:

Asset-1

(₹ in lakh)

	Particulars	2019-20 (pro-rata 285 days)	2020-21	2021-22	2022-23	2023-24
A	Depreciation	14.30	21.28	30.42	30.69	30.69
B	Interest on Loan	11.65	16.08	21.87	19.81	17.43
C	Return on Equity	12.73	18.95	27.08	27.32	27.32
D	O&M Expenses	7.71	9.90	9.90	9.90	9.90
E	Interest on Working Capital	0.92	1.19	1.42	1.40	1.56
F	Total	47.30	67.41	90.69	89.11	86.90

Asset-2

(₹ in lakh)

	Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
A	Depreciation	4.12	6.55	9.20	9.20	9.20
B	Interest on Loan	3.37	4.99	6.63	5.93	5.22
C	Return on Equity	3.67	5.83	8.19	8.19	8.19
D	O&M Expenses	2.33	3.08	3.08	3.08	3.08
E	Interest on Working Capital	0.27	0.37	0.43	0.42	0.47



	Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
F	Total	13.77	20.83	27.53	26.82	26.16

Asset-3

(₹ in lakh)

	Particulars	2019-20 (pro-rata 68 days)	2020-21	2021-22	2022-23	2023-24
A	Depreciation	0.69	3.74	4.51	4.51	4.51
B	Interest on Loan	0.58	2.96	3.29	2.93	2.59
C	Return on Equity	0.62	3.33	4.02	4.02	4.02
D	O&M Expenses	0.29	1.55	1.55	1.55	1.55
E	Interest on Working Capital	0.04	0.20	0.21	0.21	0.23
F	Total	2.22	11.78	13.58	13.22	12.91

Asset-4

(₹ in lakh)

	Particulars	2020-21 (Pro-rata 196 days)	2021-22	2022-23	2023-24
A	Depreciation	0.38	0.69	0.69	0.69
B	Interest on Loan	0.28	0.47	0.43	0.38
C	Return on Equity	0.34	0.61	0.61	0.61
D	O&M Expenses	0.12	0.23	0.23	0.23
E	Interest on Working Capital	0.02	0.03	0.03	0.04
F	Total	1.14	2.03	1.99	1.95

Asset-5

(₹ in lakh)

	Particulars	2020-21 (Pro-rata 184 days)	2021-22	2022-23	2023-24
A	Depreciation	1.72	3.90	3.91	3.91
B	Interest on Loan	1.27	2.70	2.45	2.18
C	Return on Equity	1.53	3.47	3.48	3.48
D	O&M Expenses	0.64	1.27	1.27	1.27
E	Interest on Working Capital	0.09	0.18	0.18	0.20
F	Total	5.25	11.53	11.29	11.04



Asset-6

(₹ in lakh)

	Particulars	2020-21 (Pro-rata 72 days)	2021-22	2022-23	2023-24
A	Depreciation	9.17	47.69	48.66	49.67
B	Interest on Loan	6.88	34.04	31.65	29.07
C	Return on Equity	8.16	42.45	43.31	44.21
D	O&M Expenses	4.28	21.75	21.75	21.75
E	Interest on Working Capital	0.51	2.45	2.45	2.78
F	Total	29.01	148.39	147.82	147.48

Asset-7

(₹ in lakh)

	Particulars	2021-22 (Pro-rata 271 day)	2022-23	2023-24
A	Depreciation	33.51	49.21	50.39
B	Interest on Loan	23.47	31.99	29.55
C	Return on Equity	29.83	43.80	44.85
D	O&M Expenses	13.63	18.36	18.36
E	Interest on Working Capital	1.66	2.34	2.67
F	Total	102.10	145.69	145.81

Asset-8

(₹ in lakh)

	Particulars	2019-20 (pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
A	Depreciation	29.18	43.84	49.51	50.67	50.67
B	Interest on Loan	24.75	34.42	35.69	32.72	28.63
C	Return on Equity	25.97	39.02	44.07	45.11	45.11
D	O&M Expenses	13.01	17.20	17.20	17.20	17.20
E	Interest on Working Capital	1.77	2.35	2.35	2.34	2.61
F	Total	94.68	136.84	148.80	148.04	144.22

Asset-9

(₹ in lakh)

	Particulars	2019-20 (pro-rata 180 days)	2020-21	2021-22	2022-23	2023-24
A	Depreciation	20.45	45.66	49.58	49.58	49.58
B	Interest on Loan	17.00	35.49	35.13	31.30	27.48
C	Return on Equity	18.20	40.64	44.13	44.13	44.13
D	O&M Expenses	8.44	17.16	17.16	17.16	17.16



	Particulars	2019-20 (pro-rata 180 days)	2020-21	2021-22	2022-23	2023-24
E	Interest on Working Capital	1.20	2.41	2.34	2.29	2.56
F	Total	65.30	141.37	148.35	144.47	140.92

Filing Fee and the Publication Expenses

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

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

Licence Fee & RLDC Fees and Charges

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

Goods and Services Tax

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



118. The MPPMCL and the MSEDCL have submitted that the transmission lines are exempted from the implication of the GST and related taxes with effect from 1.7.2017. Therefore, the Petitioner's prayer is premature, and the same may not be allowed.

119. In response, the Petitioner has reiterated its submissions made in the pleadings.

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

Security Expenses

121. The Petitioner has submitted that security expenses in respect of communication assets are not claimed in the instant Petition, and it would file a separate petition for claiming the overall security expenses and the consequential IWC.

122. We have considered the Petitioner's submissions. The Petitioner has claimed consolidated security expenses on a projected basis for the 2019-24 tariff period based on actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The Commission, vide order dated 3.8.2021 in Petition No. 260/MP/2020, approved security expenses from 1.4.2019 to 31.3.2024. Therefore, the security expenses will be shared in terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. Therefore, the Petitioner's prayer in the instant Petition for allowing it to file a separate Petition for claiming the overall security expenses and consequential IWC has become infructuous.

Capital Spares

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



Interim Tariff

124. The Petitioner has prayed for an interim tariff in accordance with Regulation 10(3) of the 2019 Tariff Regulations for the purpose of inclusion in the point of connection charges.

125. We have considered the Petitioner's submissions. Since we have determined the transmission tariff in respect of the transmission assets in this order, the prayer for the allowance of the interim tariff becomes redundant. Therefore, we have not considered the same in this order.

Sharing of Transmission Charges

126. The Petitioner has prayed that the transmission charges for the 2019-24 period may be recovered on a monthly basis in accordance with Regulation 57 of the 2019 Tariff Regulations. With effect from 1.11.2020, sharing of the transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the liabilities of the DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of the 2020 Sharing Regulation and shall be recovered from the concerned DICs through a Bill under Regulation 15(2)(b) of the 2020 Sharing Regulations. For the subsequent period, the billing, collection and disbursement of the transmission charges approved in this order shall be governed by the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

127. To summarise:

- a. The AFC claimed and allowed from the COD to 31.3.2024 in respect of the communication assets are as under:



(₹ in lakh)

Particulars	Claimed / allowed	2019-20	2021-22	2021-22	2022-23	2023-24
Asset-1	Claimed	48.03	69.23	92.59	90.96	88.51
	Allowed	47.30	67.41	90.69	89.11	86.90
Asset-2	Claimed	14.72	22.38	29.07	28.32	27.55
	Allowed	13.77	20.83	27.53	26.82	26.16
Asset-3	Claimed	2.35	12.68	14.64	14.25	13.87
	Allowed	2.22	11.78	13.58	13.22	12.91
Asset-4	Claimed		1.17	2.11	2.08	2.03
	Allowed		1.14	2.03	1.99	1.95
Asset-5	Claimed		5.34	11.76	11.57	11.30
	Allowed		5.25	11.53	11.29	11.04
Asset-6	Claimed		33.61	171.54	170.71	169.42
	Allowed		29.01	148.39	147.82	147.48
Asset-7	Claimed			117.12	165.51	164.79
	Allowed			102.10	145.69	145.81
Asset-8	Claimed	101.94	147.18	159.03	157.95	153.49
	Allowed	94.68	136.84	148.80	148.04	144.22
Asset-9	Claimed	71.13	154.05	161.20	156.93	152.67
	Allowed	65.30	141.37	148.35	144.47	140.92

128. The Annexure to this order form part of the order.

129. This order disposes of Petition No. 159/TT/2024 in terms of the above findings and discussions.

sd/-
(Harish Dudani)
Member

sd/-
(Ramesh Babu V.)
Member

sd/-
(Jishnu Barua)
Chairperson



ANNEXURE-I**Asset-1**

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)						Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2019-20	2020-21	2021-22	2022-23	2023-24	Total			2019-20	2020-21	2021-22	2022-23	2023-24
PLCC	383.99	- 187.81	280.15	8.50	0.00	0.00	8.50	392.49	6.33%	18.36	21.28	30.42	30.69	30.69
Total	383.99	- 187.81	280.15	8.50	0.00	0.00	8.50	392.49		18.36	21.28	30.42	30.69	30.69
									Average Gross Block (₹ in lakh)	290.08	336.25	480.58	484.83	484.83
									Weighted Average Rate of Depreciation	6.33%	6.33%	6.33%	6.33%	6.33%



Asset-2**Annexure-III**

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)						Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2019-20	2020-21	2021-22	2022-23	2023-24	Total			2019-20	2020-21	2021-22	2022-23	2023-24
PLCC	110.35	- 48.59	83.52	0.00	0.00	0.00	34.93	145.28	6.33%	5.45	6.55	9.20	9.20	9.20
Total	110.35	- 48.59	83.52	0.00	0.00	0.00	34.93	145.28		5.45	6.55	9.20	9.20	9.20
									Average Gross Block (₹ in lakh)	86.06	103.52	145.28	145.28	145.28
									Weighted Average Rate of Depreciation	6.33%	6.33%	6.33%	6.33%	6.33%



Asset-3

2019-24	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)						Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
Capital Expenditure		2019-20	2020-21	2021-22	2022-23	2023-24	Total			2019-20	2020-21	2021-22	2022-23	2023-24
PLCC	71.32	- 24.55	24.55	0.00	0.00	0.00	0.00	71.32	6.33%	3.74	3.74	4.51	4.51	4.51
Total	71.32	- 24.55	24.55	0.00	0.00	0.00	0.00	71.32		3.74	3.74	4.51	4.51	4.51
									Average Gross Block (₹ in lakh)	59.05	59.05	71.32	71.32	71.32
									Weighted Average Rate of Depreciation	6.33 %	6.33 %	6.33%	6.33%	6.33%



Asset-4

2019-24	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)						Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
Capital Expenditure		2019-20	2020-21	2021-22	2022-23	2023-24	Total			2019-20	2020-21	2021-22	2022-23	2023-24
PLCC	11.41	0.00	- 0.62	0.10	0.00	0.00	-0.52	10.89	6.33%	0.72	0.70	0.69	0.69	0.69
Total	11.41	0.00	- 0.62	0.10	0.00	0.00	- 0.52	10.89		0.72	0.70	0.69	0.69	0.69
									Average Gross Block (₹ in lakh)	0.00	11.10	10.84	10.89	10.89
									Weighted Average Rate of Depreciation	6.33 %	6.33 %	6.33%	6.33%	6.33%



Asset-5

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)			
		2020-21	2021-22	2022-23	2023-24	Total			2020-2021	2021-22	2022-23	2023-24
PLCC	46.35	15.09	0.40	0.00	0.00	15.49	61.84	6.33%	3.41	3.90	3.91	3.91
Total	46.35	15.09	0.40	0.00	0.00	15.49	61.84		3.41	3.90	3.91	3.91
								Average Gross Block (₹ in lakh)	53.89	61.64	61.84	61.84
								Weighted Average Rate of Depreciation	6.33%	6.33%	6.33%	6.33%



Asset-6

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)			
		2020-21	2021-22	2022-23	2023-24	Total			2020-21	2021-22	2022-23	2023-24
PLCC	734.78	3.46	30.46	0.00	31.97	65.89	800.67	6.33%	46.62	47.69	48.66	49.67
Total	734.78	3.46	30.46	0.00	31.97	65.89	800.67		46.62	47.69	48.66	49.67
Average Gross Block (₹ in lakh)									736.51	753.47	768.70	784.68
Weighted Average Rate of Depreciation									6.33%	6.33%	6.33%	6.33%



Asset-7

2019-24	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)			
Capital Expenditure			2021-22	2022-23	2023-24	Total				2021-22	2022-23	2023-24
PLCC	667.53		91.16	37.29	0.00	128.45	795.98	6.33%		45.14	49.21	50.39
Total	667.53		91.16	37.29	0.00	128.45	795.98			45.14	49.21	50.39
							Average Gross Block (₹ in lakh)			713.11	777.34	795.98
							Weighted Average Rate of Depreciation			6.33%	6.33%	6.33%



Asset-8

2019-24 Capital Expendi ture	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)						Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Deprecia tion as per Regulati ons	Annual Depreciation as per Regulations (₹ in lakh)				
		2019- 20	2020- 21	2021- 22	2022-23	2023-24	Total			2019- 20	2020- 21	2021- 22	2022- 23	2023- 24
PLCC	596.50	25.07	142.04	36.94	0.00	0.00	204.05	800.55	6.33%	38.55	43.84	49.51	50.67	50.67
Total	596.50	25.07	142.04	36.94	0.00	0.00	204.05	800.55		38.55	43.84	49.51	50.67	50.67
									Average Gross Block (₹ in lakh)	609.0 3	692.5 9	782.08	800.55	800.55
									Weighted Average Rate of Depreciation	6.33%	6.33%	6.33%	6.33%	6.33%



Asset-9

2019-24	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)						Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
Capital Expenditure		2019-20	2020-21	2021-22	2022-23	2023-24	Total			2019-20	2020-21	2021-22	2022-23	2023-24
PLCC	654.16	5.23	123.86	0.00	0.00	0.00	129.09	783.25	6.33%	41.57	45.66	49.58	49.58	49.58
Total	654.16	5.23	123.86	0.00	0.00	0.00	129.09	783.25		41.57	45.66	49.58	49.58	49.58
									Average Gross Block (₹ in lakh)	656.78	721.32	783.25	783.25	783.25
									Weighted Average Rate of Depreciation	6.33%	6.33%	6.33%	6.33%	6.33%

