

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 88/TT/2020

Coram:

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

Date of order: 20.09.2023

In the matter of:

Revision of order dated 22.4.2022 in Petition No. 88/TT/2020 consequent to order dated 31.8.2023 in Petition No. 25/RP/2022.

And in the matter of:

Power Grid Corporation of India Limited,
"Saudamini", Plot No. 2,
Sector 29, Gurgaon-122001,
Haryana.

.... Petitioner

Vs.

1. Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Rampur,
Jabalpur-482008.
2. Madhya Pradesh Power Transmission Company Limited,
Shakti Bhawan, Rampur,
Jabalpur-482008.
3. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Limited,
3/54, Press Complex, Agra-Bombay Road,
Indore-452008.
4. Maharashtra State Electricity Distribution Company Limited,
Hongkong Bank Building, 3rd Floor,
M. G. Road, Fort, Mumbai-400001.
5. Maharashtra State Electricity Transmission Company Limited,
Prakashganga, 6th Floor, Plot No. C-19, E-Block,
Bandra Kurla Complex, Bandra (East),
Mumbai-400051.



6. Gujarat Urja Vikas Nigam Limited,
Sardar Patel Vidyut Bhawan,
Race Course Road, Vadodara-390007.
7. Electricity Department,
Government of Goa, Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa-403001.
8. Electricity Department,
Administration of Daman & Diu,
Daman-396210.
9. DNH Power Distribution Corporation Limited,
Vidyut Bhawan, 66 kV Road,
Near Secretariat, Amli,
Silvassa-396230.
10. Chhattisgarh State Power Transmission Company Limited,
State Load Despatch Building, Dangania,
Raipur-492013.
11. Chhattisgarh State Power Distribution Company Limited,
P. O. Sunder Nagar, Dangania,
Raipur, Chhattisgarh-492013.

...Respondent(s)

ORDER

The Commission vide order dated 22.4.2022 in Petition No. 88/TT/2022 had tried up the transmission tariff of 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as the “the 2014 Tariff Regulations”) and determined the transmission tariff for 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) of Asset A: Combined Asset for Part of 400 kV Double Circuit (D/C) Vapi-Navi Mumbai Transmission Line (T/L) (from Vapi Gantry till 1st M/C point at Loc. AP-18) along with bay at Vapi and 220 kV Double Circuit (D/C) Vapi-Khadoli Transmission line along with associated bays; Asset B: 400 kV D/C Vapi-Navi Mumbai Transmission Line, WR1 portion from AP 18 to AP 38 (Part of 400 kV D/C Vapi-Navi Mumbai Transmission Line); Asset C1: Part of 400 kV D/C



Navsari-Boisar T/L from AP 18 to AP 38/0 through LILO point of 400 kV D/C Navsari-Boisar at Magarwada GIS (23 B/0) (D/C portion strung on M/C Twin-Twin portion comprising of 400 kV D/C Navsari-Boisar and 400 kV D/C Vapi-Kudus) & Part of 400 kV D/C Vapi-Kudus T/L from AP 38/0 to AP 44; and Asset-C2: Part of 400 kV D/C Vapi-Kudus T/L from 104/0 to Kudus (MSETCL) Sub-station and associated bays at Kudus (MSETCL) Sub-station covered under Western Region System Strengthening Scheme-V in Western Region (hereinafter referred to as “the transmission project”).

Background

2. In order dated 22.4.2022 in Petition No. 88/TT/2020, the Commission restricted the completion cost of Asset-C2 to RCE-II. The relevant portion of the order dated 22.4.2022 in Petition No. 88/TT/2020 is as follows:

“17. We have considered the submissions of the Petitioner. The Petitioner has estimated the transmission project cost based on RCE-II as ₹73848 lakh including IDC of ₹15287 lakh. Based on this arrangement, the Petitioner has reapportioned the cost of Asset-C2 as ₹18948 lakh and the Petitioner has submitted that the estimated completion cost of Asset-C2 is ₹18912.38 lakh. The Petitioner in the instant true up petition has submitted that the estimated completion cost of Asset-C2 as on 31.3.2019 is ₹20921.07 lakh and the estimated completion cost of Asset-C2 as on 31.3.2024 is ₹21703.74 lakh. On comparison of apportioned approved cost of Asset-C2 in RCE-II as ₹18948 lakh and apportioned cost of Asset-C2 as submitted by the Petitioner in RCE-III is ₹22200.66 lakh, there is variation in cost of Asset-C2 of ₹3252.66 lakh (i.e. ₹22200.66 lakh - ₹18948 lakh = ₹3252.66 lakh). The Petitioner has not submitted any justification for increase of about ₹3252.66 lakh in case of AssetC2. It is further observed that the RCE-III submitted by the Petitioner has been approved by its Board of Directors on 12.3.2020 which is almost three years after the COD of Asset-C2. The Petitioner is henceforward directed to ensure that in all future petitions wherever the cost of asset increases beyond the FR cost, in that event, Revised Cost Estimate shall be required to be submitted prior to COD of the asset and not after the COD of the asset. Further, after COD of the asset, the Petitioner shall invariably furnish actual cost incurred duly approved by the competent authority. In such cases, the Petitioner is directed to place on record valid justification and documentary evidence with reference to cost variation along with the petition. Further, after COD of the asset, the Petitioner shall invariably furnish actual cost incurred duly approved by the competent authority. In such cases, the Petitioner is directed to place on record valid justification and documentary evidence with reference to cost variation along with the petition.

18. As the Petitioner has not given detailed justification of cost over-run in case of Asset-C2, the completion cost of Asset-C2 is restricted to the RCE-II apportioned approved cost.”

3. Aggrieved with the Commission's decision in order dated 22.4.2022 in Petition No. 88/TT/2020 to restrict the completion cost of Asset-C2 to RCE-II, PGCIL filed Petition No. 25/RP/2022 for review and modification of the said order. The Commission vide order dated 31.8.2023 in Petition No. 25/RP/2022 allowed the capital cost of Asset-C2 as per the RCE-III and observed that the consequential order revising the capital cost and transmission charges of Asset-C2 will be issued separately. The relevant portion of the order dated 31.8.2023 in Petition No. 25/RP/2022 is as follows:

“17. We are satisfied with the clarification given by the Review Petitioner that the difference between RCE-II and RCE-III was on account of the additional capitalization in 2017-18 and 2018-19, which was indicated in Liability Flow Statement. However, inadvertently this aspect could not be considered while issuing the impugned order. Therefore, we allow the present review petition on this count and allow the estimated completion cost of Asset-C2 as per RCE-III as furnished in Petition No. 88/TT/2020.

18. Consequent upon the findings above, the tariff of Asset-C2 shall be revised through a separate order shortly.”

4. In accordance with order dated 31.8.2023 in Petition No. 25/RP/2022, the capital cost and the consequential tariff of Asset-C2 is revised on the basis of RCE-III. Accordingly, the following modifications are made to the order dated 22.4.2022.

5. The table under paragraph 39 of the order dated 22.4.2022 in Petition No. 88/TT/2020 in respect of Asset-C2 is revised as follows:

Assets	Apportioned approved cost as per RCE-II	Apportioned approved cost as per RCE-III	Capital cost as on COD on cash basis	ACE		Total capital cost as on 31.3.2019
				2017-18	2018-19	
Asset-C2	18948.00	22200.00	17708.38	1904.47	1308.22	20921.07

6. The table under paragraph 41 of the order dated 22.4.2022 in Petition No. 88/TT/2020 in respect of Asset-C2 is revised as follows:



Asset-C2				
Particulars	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	12395.87	70.00	14644.75	70.00
Equity	5312.51	30.00	6276.32	30.00
Total	17708.38	100.00	20921.07	100.00

7. The table under paragraph 42 of the order dated 22.4.2022 in Petition No. 88/TT/2020 in respect of Asset-C2 is revised as follows:

(₹ in lakh)

Asset-C2			
Particulars		2017-18 (Pro-rata for 91 days)	2018-19
A	Opening Gross Block	17708.38	19612.85
B	Addition during the year 2014-19	1904.47	1308.22
C	Closing Gross Block (A+B)	19612.85	20921.07
D	Average Gross Block [(A+C)/2]	18660.62	20266.96
E	Depreciable value(D*90%)	16794.55	18240.26
F	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28
G	Lapsed useful life at the beginning of the year (Year)	0	0
H	Balance useful life at the beginning of the year (Year)	34	34
I	Cumulative Depreciation at the beginning of the year	0.00	245.65
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	16794.55	17994.62
K	Depreciation during the year	245.65	1070.10
L	Cumulative Depreciation at the end of the year (I+K)	245.65	1315.74
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	16548.91	16924.52

8. The table under paragraph 45 of the order dated 22.4.2022 in Petition No. 88/TT/2020 in respect of Asset-C2 is revised as follows:

(₹ in lakh)

Asset-C2		
Particulars	2017-18 (Pro-rata for 91 days)	2018-19
Gross Normative Loan	12395.87	13729.00
Cumulative Repayments up to Previous Year	0.00	245.65
Net Loan-Opening	12395.87	13483.35



Addition due to ACE	1333.13	915.75
Repayment during the year	245.65	1070.10
Net Loan-Closing	13483.35	13329.01
Average Loan	12939.61	13406.18
Weighted Average Rate of Interest on Loan (in %)	8.3726	8.3872
Interest on Loan	270.10	1124.40

9. The table under paragraph 51 of the order dated 22.4.2022 in Petition No. 88/TT/2020 in respect of Asset-C2 is revised as follows:

(₹ in lakh)

Asset- C2		
Particulars	2017-18 (Pro-rata for 91 days)	2018-19
Opening Equity	5312.51	5883.86
Addition due to Additional Capitalization	571.34	392.47
Closing Equity	5883.86	6276.32
Average Equity	5598.18	6080.09
Return on Equity (Base Rate) (in %)	15.500	15.500
Tax Rate applicable (in %)	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.758
Return on Equity (Pre-tax)	275.03	1201.30

10. The table under paragraph 57 of the order dated 22.4.2022 in Petition No. 88/TT/2020 in respect of Asset-C2 is revised as follows:

(₹ in lakh)

Asset-C2		
Particulars	2017-18 (Pro-rata for 91 days)	2018-19
Working Capital for O&M Expenses (O&M Expenses for one month)	12.71	13.13
Working Capital for Maintenance Spares (15% of O&M Expenses)	22.88	23.64
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost/ annual transmission charges)	566.70	605.72
Total Working Capital	602.29	642.49
Rate of Interest on Working Capital (in %)	12.60	12.60
Interest of Working Capital	18.92	80.95

11. The table under paragraph 59 of the order dated 22.4.2022 in Petition No. 88/TT/2020 in respect of Asset-C2 is revised as follows:



(₹ in lakh)

Asset-C2		
Particulars	2017-18 (Pro-rata for 91 days)	2018-19
Depreciation	245.65	1070.10
Interest on Loan	270.10	1124.40
Return on Equity	275.03	1201.30
O&M Expenses	38.03	157.57
Interest on Working Capital	18.92	80.95
Total	847.72	3634.33

Determination of Annual Fixed Charges for 2019-24 Tariff Period

12. Capital cost as on 1.4.2019 for Combined Asset-A, Asset-B, Asset-C1 and Asset-C2 has been considered as ₹39462.31 lakh for 2019-24 tariff period.

13. The table under paragraph 64 of the order dated 22.4.2022 in Petition No. 88/TT/2020 is revised as follows:

Assets	Actual COD	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Weightage of cost (in %)	Number of days from last COD	Weighted days	E-COD (Latest COD-Total Weighted Days)
Asset-A	30.11.2011	6109.75	15.48%	2223.00	344.18	9.12.2015
Asset-B	1.4.2014	9627.02	24.40%	1370.00	334.22	
Asset-C1	1.3.2015	2804.47	7.11%	1036.00	73.63	
Asset-C2	31.12.2017	20921.07	53.02%	0.00	0.00	
Total		39462.31	100%		752.02	

14. The table under paragraph 68 of the order dated 22.4.2022 in Petition No. 88/TT/2020 is revised as follows:

Particulars	Capital Cost (as on 31.3.2019) (₹ in lakh) (1)	Life (in years) (2)	Weighted Cost (₹ in lakh) (3) = [(1)x(2)]	WAL (in years) (4) = [(3)/(1)]
Transmission Line	35071.04	35	1227486.53	
Sub-station Equipment	4183.18	25	104579.51	
PLCC	208.08	15	3121.22	
Total	39462.31		1335187.26	33.83 (rounded off to 34 years)



15. The table under paragraph 77 of the order dated 22.4.2022 in Petition No. 88/TT/2020 is revised as follows:

(₹ in lakh)

Capital Cost (as on 1.4.2019)	ACE (2019-24)	2020-21	2021-22	Total Estimated Completion Cost (as on 31.3.2024)
39462.31	782.67	0.00	0.00	40244.98

16. The table under paragraph 79 of the order dated 22.4.2022 in Petition No. 88/TT/2020 is revised as follows:

(₹ in lakh)

Particulars	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	27623.63	70.00	28171.50	70.00
Equity	11838.68	30.00	12073.48	30.00
Total	39462.31	100.00	40244.98	100.00

17. The table under paragraph 81 of the order dated 22.4.2022 in Petition No. 88/TT/2020 is revised as follows:

(₹ in lakh)

Particulars		2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	39462.31	40244.98	40244.98	40244.98	40244.98
B	Addition during the year 2014-19	782.67	0.00	0.00	0.00	0.00
C	Closing Gross Block (A+B)	40244.98	40244.98	40244.98	40244.98	40244.98
D	Average Gross Block [(A+C)/2]	39853.64	40244.98	40244.98	40244.98	40244.98
E	Depreciable value (D*90%)	35868.28	36220.48	36220.48	36220.48	36220.48
F	Weighted average rate of Depreciation (WAROD) (in %)	5.2855	5.2854	5.2854	5.2854	5.2854
G	Lapsed useful life at the beginning of the year (Year)	3	4	5	6	7
H	Balance useful life at the beginning of the year (Year)	31	30	29	28	27
I	Cumulative Depreciation at the beginning of the year	6720.92	8827.38	10954.50	13081.62	15208.74
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	29147.36	27393.10	25265.98	23138.86	21011.74
K	Depreciation during the year	2106.46	2127.12	2127.12	2127.12	2127.12
L	Cumulative Depreciation at the end of the year (I+K)	8827.38	10954.50	13081.62	15208.74	17335.86
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	27040.90	25265.98	23138.86	21011.74	18884.62



18. The table under paragraph 83 of the order dated 22.4.2022 in Petition No. 88/TT/2020 is revised as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Gross Normative Loan	27623.63	28171.50	28171.50	28171.50	28171.50
Cumulative Repayments upto Previous Year	6720.92	8827.38	10954.50	13081.62	15208.74
Net Loan-Opening	20902.71	19344.12	17217.00	15089.88	12962.76
Addition due to Additional Capitalization	547.87	0.00	0.00	0.00	0.00
Repayment during the year	2106.46	2127.12	2127.12	2127.12	2127.12
Net Loan-Closing	19344.12	17217.00	15089.88	12962.76	10835.64
Average Loan	20123.42	18280.56	16153.44	14026.32	11899.20
Weighted Average Rate of Interest on Loan (in %)	8.562	8.534	8.503	8.459	8.397
Interest on Loan	1722.97	1560.14	1373.46	1186.54	999.18

19. The table under paragraph 85 of the order dated 22.4.2022 in Petition No. 88/TT/2020 is revised as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	11838.68	12073.48	12073.48	12073.48	12073.48
Addition due to Additional Capitalization	234.80	0.00	0.00	0.00	0.00
Closing Equity	12073.48	12073.48	12073.48	12073.48	12073.48
Average Equity	11956.08	12073.48	12073.48	12073.48	12073.48
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	2245.59	2267.64	2267.64	2267.64	2267.64

20. The table under paragraph 92 of the order dated 22.4.2022 in Petition No. 88/TT/2020 is revised as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	25.38	26.27	27.19	28.14	29.13
Working Capital for Maintenance Spares (15% of O&M Expenses)	45.68	47.28	48.94	50.66	52.43
Working Capital for Receivables (Equivalent to 45 days of annual	797.23	784.94	762.23	740.35	716.47



fixed cost / annual transmission charges)					
Total Working Capital	868.28	858.49	838.37	819.15	798.03
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest of Working Capital	104.63	96.58	88.03	86.01	83.79

21. The table under paragraph 93 of the order dated 22.4.2022 in Petition No. 88/TT/2020 is revised as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	2106.46	2127.12	2127.12	2127.12	2127.12
Interest on Loan	1722.97	1560.14	1373.46	1186.54	999.18
Return on Equity	2245.59	2267.64	2267.64	2267.64	2267.64
O&M Expenses	304.50	315.23	326.29	337.73	349.54
Interest on Working Capital	104.63	96.58	88.03	86.01	83.79
Total	6484.14	6366.71	6182.54	6005.04	5827.27

22. The table under paragraph 102 (a) of the order dated 22.4.2022 in Petition No. 88/TT/2020 in respect of Asset-C2 is revised as follows:

(₹ in lakh)	
Asset-C2	
2017-18 (Pro-rata for 91 days)	2018-19
847.72	3634.33

23. The table under paragraph 102(b) of the order dated 22.4.2022 in Petition No. 88/TT/2020 is revised as follows:

(₹ in lakh)				
2019-20	2020-21	2021-22	2022-23	2023-24
6484.15	6366.71	6182.54	6005.04	5827.27

24. All other terms of the order dated 22.4.2022 in Petition No. 88/TT/2020 remain unchanged.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member

