

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 239/GT/2020

Coram:

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

Date of Order: 11.5.2023

In the matter of:

Corrigendum to the order dated 5.4.2023 in Petition No. 239/GT/2020

And

In the matter of:

Petition for truing-up of tariff of Vindhyachal Super Thermal Power Station Stage-V (500 MW) for the period 2014-19.

And

In the matter of:

NTPC Ltd.,
NTPC Bhawan,
Core-7, Institutional Area, Lodhi Road,
New Delhi-110003

.... Petitioner

Vs

1. Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Vidyut Nagar,
Jabalpur 482008
2. Maharashtra Electricity Distribution Company Limited,
Prakashgad, Bandra (East),
Mumbai 400051
3. Gujarat Urja Vikas Nigam Limited,
Vidyut Bhawan, Racecourse,
Vadodara- 390007
4. Chhattisgarh State Power Distribution Company Limited,
P.O Sundar Nagar, Dangania, Raipur- 492013



5. Electricity Department of Goa,
Vidyut Bhawan, Panaji, Goa
6. DNH Power Distribution Company Limited,
UT of DNH, Silvassa- 396230
7. Electricity Department,
Administration of Daman & Diu,
Daman- 396210

.....Respondents

ORDER

The Commission vide its order dated 5.4.2023 in Petition No. 239/GT/2020 had trued-up the tariff of Vindhyachal Super Thermal Power Station Stage-V (500 MW) (“the generating station”) for the period 2014-19.

2. It is however noticed that certain inadvertent typographical/arithmetical errors (linkage errors) have crept in our order dated 5.4.2023, while considering the values for depreciation, repayment of loan and calculation of interest on working capital. Therefore, in terms of the Regulation 111 read with Regulation 103A of the CERC (Conduct of Business) Regulations 1999, these inadvertent errors are being rectified, as stated in the subsequent paragraphs.

3. For computation of interest on loan, the repayment of loan considered during the year 2015-16 (in the table under paragraph 44) is corrected as Rs. 4427.82 lakh. Further, for computation of ECR, the Cost of Limestone, which was inadvertently considered as Rs. 0.000028 /KWh, is corrected as Rs. 0.028 / KWh. Based on this, the order dated 5.4.2023 stands revised, as stated in the subsequent paragraphs:

Interest on Loan

4. Accordingly, the table under paragraph 44 of the order stands modified, as under:



(Rs. in lakh)

| | 2015-16 (30.10.2015 to 31.3.2016) | 2016-17 | 2017-18 | 2018-19 |
|--|---|-----------------|-----------------|-----------------|
| Gross opening loan | 137292.18 | 145004.55 | 177165.74 | 203952.75 |
| Cumulative repayment of loan upto previous year | - | 4422.52 | 16468.29 | 30728.61 |
| Net Loan Opening | 137292.18 | 140582.02 | 160697.46 | 173224.14 |
| Addition due to additional capital expenditure | 7712.37 | 32161.20 | 26787.01 | 5029.50 |
| Repayment of loan during the year | 4427.82 | 12049.55 | 14276.90 | 15459.23 |
| Less: Repayment adjustment on account of de-capitalization | 5.30 | 3.78 | 16.57 | 130.34 |
| Net Repayment of loan during the year | 4422.52 | 12045.76 | 14260.32 | 15328.89 |
| Net Loan Closing | 140582.02 | 160697.46 | 173224.14 | 162924.74 |
| Average Loan | 138937.10 | 150639.74 | 166960.80 | 168074.44 |
| Weighted Average Rate of Interest of loan | 7.9359% | 7.7710% | 7.1894% | 7.5288% |
| Interest on Loan | 11025.84 | 11706.15 | 12003.46 | 12653.98 |

Depreciation

5. Also, the table under paragraph 46 of the order stands modified, as under:

(Rs. in lakh)

| | 2015-16 (30.10.2015 to 31.3.2016) | 2016-17 | 2017-18 | 2018-19 |
|--|---|-----------------|-----------------|-----------------|
| Average capital cost (A) | 201640.21 | 230121.33 | 272227.19 | 294953.26 |
| Value of freehold land included above (B) | 714.20 | 714.20 | 714.20 | 714.20 |
| Aggregated depreciable Value [C = (A-B) x 90%] | 180833.41 | 206466.42 | 244361.69 | 264815.16 |
| Remaining Aggregate Depreciable value at the beginning of the year (D = C – 'J' of previous year) | 180833.41 | 202068.77 | 226661.99 | 234180.07 |
| Balance useful life at the beginning of the year (E) | 25.00 | 24.50 | 23.50 | 22.50 |
| Weighted average rate of depreciation (F) | 5.2188% | 5.2362% | 5.2445% | 5.2412% |
| Depreciation Annualized (G = A x F) | 10523.27 | 12049.55 | 14276.90 | 15459.23 |
| Depreciation for the period (H) | 4427.82* | 12049.55 | 14276.90 | 15459.23 |
| Cumulative depreciation at the end of the year, before adjustment of de-capitalisation adjustment (I = H + 'K' of previous year) | 4427.82 | 16477.37 | 30754.27 | 46213.50 |
| Cumulative depreciation adjustment on account of de-capitalisation (J) | 5.30 | 3.78 | 16.57 | 130.34 |
| Cumulative depreciation, at the end of the year (K = I-J) | 4422.52 | 16473.59 | 30737.69 | 46083.16 |

*Pro-rata for 154 days



Energy Charge Rate (ECR) for computation of working capital

6. Further, the table under paragraph 92 of the order stands modified, as under:

| | Unit | 2015-16 (30.10.2015 to 31.3.2016) | 2016-19 |
|-------------------------------------|-------------|--|----------------|
| Capacity | MW | 500 | 500 |
| Gross Station Heat Rate | kCal/kWh | 2351.25 | 2351.25 |
| Aux. Energy Consumption | % | 5.75 | 6.86 |
| Weighted average GCV of oil | kCal/lit | 9712.49 | 9712.49 |
| Weighted average GCV of Coal | Kcal/kg | 3573.91 | 3573.91 |
| Specific Limestone Consumption | Kg/kWh | 0 | 0.0162 |
| Weighted average price of oil | Rs./KL | 52378.04 | 52378.04 |
| Weighted average price of Coal | Rs./MT | 2818.30 | 2818.39 |
| Weighted Average Price of Limestone | Rs./MT | - | 1600 |
| Rate of Energy Charge ex-bus | Rs./kWh | 1.991 | 2.043 |

7. The Energy Charges for two months for computation of working capital based on ECR of above table (as in paragraph 93 of the order) is also revised as under:

(Rs. in lakh)

| 2015-16 (31.10.2015 to 31.3.2016) | 2016-17 | 2017-18 | 2018-19 |
|--|----------------|----------------|----------------|
| 11400.97 | 11529.37 | 11807.19 | 11807.19 |

Working Capital for Receivables

8. Receivables equivalent to two months of capacity charges and energy charges as worked out and allowed under paragraph 47 of the order is modified as under:

(Rs. in lakh)

| | 2015-16 (30.10.2015 to 31.3.2016) | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------------|--|-----------------|-----------------|-----------------|
| Variable Charges - for two months | 11400.97 | 11529.37 | 11807.19 | 11807.19 |
| Fixed Charges - for two months | 7730.54 | 8641.19 | 9609.53 | 10273.13 |
| Total | 19131.51 | 20170.56 | 21416.72 | 22080.32 |

Interest on working capital

9. Accordingly, Interest on working capital as computed and allowed in paragraph 100 of the order is modified as under:



(Rs. in lakh)

| | 2015-16 (30.10.2015 to 31.3.2016) | 2016-17 | 2017-18 | 2018-19 |
|--|---|-----------------|-----------------|-----------------|
| Cost of Coal towards Stock (15 days) | 5528.89 | 5528.89 | 5662.12 | 5662.12 |
| Cost of Coal towards Generation (30 days) | 5528.89 | 5528.89 | 5662.12 | 5662.12 |
| Cost of Limestone towards Stock (30 days) | - | 77.45 | 79.32 | 79.32 |
| Cost of Limestone towards generation (30 days) | - | 77.45 | 79.32 | 79.32 |
| Cost of Secondary fuel oil (2 months) | 159.11 | 158.68 | 162.50 | 162.50 |
| Maintenance Spares @ 20% of O&M expenses | 1624.34 | 1885.97 | 1984.36 | 2104.67 |
| Receivables – 2 months | 19131.51 | 20170.56 | 21416.72 | 22080.32 |
| O&M expenses – 1 month | 676.81 | 785.82 | 826.82 | 876.95 |
| Total Working Capital | 32649.56 | 34213.72 | 35873.27 | 36707.30 |
| Rate of Interest | 13.5000% | 13.5000% | 13.5000% | 13.5000% |
| Interest on Working Capital | 4407.69 | 4618.85 | 4842.89 | 4955.49 |

Annual Fixed Charges for the period 2015-19

10. Based on the above, the annual fixed charges approved in the table under paragraph 101 of the order stands modified as under:

(Rs. in lakh)

| | 2015-16 (30.10.2015 to 31.3.2016) | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|---|-----------------|-----------------|-----------------|
| Depreciation | 10523.27 | 12049.55 | 14276.90 | 15459.23 |
| Interest on Loan | 11025.84 | 11706.15 | 12003.46 | 12653.98 |
| Return on Equity | 12304.71 | 14042.71 | 16612.14 | 18046.73 |
| Interest on Working Capital | 4407.69 | 4618.85 | 4842.89 | 4955.49 |
| O&M Expenses | 8121.71 | 9429.87 | 9921.81 | 10523.36 |
| Total | 46383.22 | 51847.13 | 57657.20 | 61638.79 |

Note: (1) All figures are on annualized basis. (2) All figures under each head have been rounded. The figure in total column in each year is also rounded. As such the sum of individual items may not be equal to the arithmetic total of the column

11. Except for the above, all other terms in order dated 5.4.2023 remain unaltered.

Sd/-
(Pravas Kumar Singh)
Member

Sd/-
(Arun Goyal)
Member

Sd/-
(I.S Jha)
Member

