

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 582/GT/2020**

**Coram:**

**Shri Jishnu Barua, Chairperson  
Shri Arun Goyal, Member**

**Date of Order: 5<sup>th</sup> July, 2024**

**In the matter of:**

Corrigendum to order dated 19.5.2024 in Petition No. 582/GT/2020.

**In the matter of:**

Petition for determination of tariff of Solapur Super Thermal Power Station (1320 MW) for the period from COD of the Unit-I, i.e., from 25.9.2017 to 31.3.2019, after truing up exercise.

**And**

**In the matter of:**

NTPC Limited,  
NTPC Bhawan, Core-7, Scope Complex  
7, Institutional Area, Lodhi Road,  
New Delhi-110 003

**....Petitioner**

**Vs**

1. Madhya Pradesh Power Management Company Limited,  
Shakti Bhawan, Vidyut Nagar, Jabalpur 482 008.
2. Maharashtra State Electricity Distribution Company Limited,  
Prakashgad, Bandra (East), Mumbai 400 051.
3. Chhattisgarh State Power Distribution Company Limited,  
P.O. Sundar Nagar, Danganiya, Raipur – 492013.
4. Electricity Department of Goa,  
Vidyut Bhawan, Panaji, Goa-403001.
5. DNH Power Distribution Corporation Limited,  
UT of DNH, Silvassa-396230.
6. Electricity Department,  
Administration of Daman & Diu, Daman-396210

**.... Respondents**



## CORRIGENDUM ORDER

The Commission vide its order dated 19.5.2024 in Petition No. 582/GT/2020 had trued-up the tariff of Solapur Super Thermal Power Station (1320 MW) for the period from COD of Unit-I to 31.3.2019 as under:

### **Capital cost allowed**

*(Rs. in lakh)*

	2017-18	2018-19	
	25.9.2017 (COD of Unit-I) to 31.3.2018	1.4.2018 to 29.3.2019	30.3.2019 (COD of Unit-II) to 31.3.2019
Opening capital cost	517436.84	534176.85	881610.42
Add: Additional capital expenditure	16740.02	32076.40	0.00
<b>Closing capital cost</b>	<b>534176.85</b>	<b>566253.26</b>	<b>881610.42</b>
Average capital cost	525806.84	550215.06	881610.42

### **Annual Fixed Charges allowed**

*(Rs. in lakh)*

	2017-18	2018-19	
	25.9.2017 (COD of Unit-I) to 31.3.2018	1.4.2018 to 29.3.2019	30.3.2019 (COD of Unit-II) to 31.3.2019
Depreciation	24603.78	25766.19	43021.07
Interest on Loan	24656.44	25533.96	41736.93
Return on Equity	31083.07	32613.45	52256.58
Interest on Working Capital	7913.53	8042.44	19931.31
O&M Expenses	12664.99	13568.51	25699.31
<b>Total</b>	<b>100921.81</b>	<b>105524.55</b>	<b>182645.19</b>

3. It is observed that certain inadvertent linkage/ clerical errors had crept in the said order, pertaining to IDC calculations, the interest rate and the value of the freehold land considered while working out the tariff in an order dated 19.5.2024. Therefore, in terms of Regulation 54 of the CERC (Conduct of Business) Regulations 2023, the inadvertent clerical errors in the relevant paragraphs of the order dated 19.5.2024 are rectified as stated below:

### **Paragraph 34 (a) & (c)**

34 (a). IDC & FC- The Petitioner has claimed IDC & FC amounting to Rs.129445.21 lakh as on the COD of Unit-II. However, considering the details of draws, repayments, rate of interest applicable to each loan and disallowed IDC



& FC of Rs.10738.85 lakh as on COD of Unit-I vide order dated 6.1.2020, the allowable IDC and FC, as on the COD of Unit-II works out to Rs.118706.36 lakh.  
xxxxx

34(c). Notional / Normative IDC- The Petitioner has claimed Notional IDC amounting to Rs.5193.89 lakh as on COD of Unit-II. In accordance with Regulation 9(2)(b) of the 2014 Tariff Regulations, the allowable Normative IDC (over and above actual IDC) works out to Rs.3088.12 lakh as on COD of Unit-II.

**Paragraph 35**

35. Based on the above discussions, the capital cost allowed as on COD of Unit-II works out to Rs.883657.22 lakh (net of un-discharged liabilities of Rs.80897.87 lakh) as under:

<i>(Rs. in lakh)</i>	
Hard cost	744440.85
Add: IDC &FC	118706.36
Add: FERV	20018.26
Add: Normative IDC	3088.12
Add: FERV charged to revenue	(-) 3248.00
Add: Unamortised finance cost	651.63
<b>Capital cost allowed as on COD of Unit-II</b>	<b>883657.22</b>

**Paragraph 39**

The table under Paragraph 39 of the order is as under:

			<i>(Rs. in lakh)</i>		
			Accrual	Liabilities	Cash
<b>As on COD of Unit-I</b>					
A	Cost of plant & machinery claimed		396613.77	65513.65	331100.12
B	Less: Value of land included in above		72359.63	31455.87	40903.76
C	Less: Value of land re-classified to plant & machinery		0.00	0.00	0.00
D	<b>Plant &amp; machinery as on COD of Unit-I (net of cost of land)</b>	<b>(A-B-C)</b>	<b>324254.14</b>	<b>34057.78</b>	<b>290196.36</b>
E	<b>Revised cost of land as on COD of Unit-I *</b>	<b>(B+C)</b>	<b>72359.63</b>	<b>31455.87</b>	<b>40903.76</b>
<b>As on COD of Unit-II</b>					
F	Cost of plant & machinery claimed		626694.28	73639.12	553055.16
G	Less: Value of land included in above		40371.35	3405.39	36965.96
H	Less: Value of land re-classified to plant & machinery		33197.00	0.00	33197.00
I	<b>Plant &amp; machinery as on COD of Unit-II (net of cost of land)</b>	<b>(F-G-H)</b>	<b>553125.93</b>	<b>70233.73</b>	<b>482892.20</b>
J	<b>Revised cost of land as on COD of Unit-II #</b>	<b>(G+H)</b>	<b>73568.34</b>	<b>3405.39</b>	<b>70162.96</b>

\* includes freehold land amounting to Rs.55106.62 lakh on accrual basis and Rs.24388.58 lakh on cash basis as on COD of Unit-I. # Includes freehold land amounting to Rs.55096.63 lakh on accrual



basis and Rs.52395.57 lakh on cash basis as on COD of Unit-II.

**Paragraph 40**

40. Considering the cost of initial spares claimed and the value of plant & machinery (net of the cost of land), the initial spares claimed as a percentage of plant & machinery works out to 1.93% on an accrual basis and 2.16% on a cash basis, as on COD of Unit-I. Similarly, the initial spares claimed as a percentage of plant & machinery work out to 1.88% on an accrual basis and 2.05% on a cash basis, as on COD of Unit-II/ Station. In view of the above, the initial spares claimed in the Petition are well within the ceiling norm of 4% of plant & machinery cost as specified in Regulation 13 of the 2014 Tariff Regulations. Accordingly, no adjustment needs to be made, for the purpose of tariff, towards initial spares from the capital cost as allowed above as on COD of Unit-I and Unit-II.

**Paragraph 43**

43. Based on the above, the capital cost allowed as on COD of Unit-I and Unit-II works out to Rs.517436.84 lakh and Rs.883657.22 lakh, respectively.

**Paragraph 66**

***Capital cost allowed for the period 2014-19***

*(Rs. in lakh)*

	2017-18	2018-19	
	25.9.2017 (COD of Unit-I) to 31.3.2018	1.4.2018 to 29.3.2019	30.3.2019 (COD of Unit-II) to 31.3.2019
Opening capital cost	517436.84	534176.85	883657.22
Add: Additional capital expenditure	16740.02	32076.40	0.00
<b>Closing capital cost</b>	<b>534176.85</b>	<b>566253.26</b>	<b>883657.22</b>
Average capital cost	525806.84	550215.06	883657.22

**Return on Equity**

**Paragraph 71**

*(Rs. in lakh)*

			2017-18	2018-19	
			25.9.2017 (COD of Unit-I) to 31.3.2018	1.4.2018 to 29.3.2019	30.3.2019 (COD of Unit-II) to 31.3.2019
A	Notional Equity- Opening		155231.05	160253.06	265097.17
B	Addition of Equity due to additional capital expenditure		5022.01	9622.92	0.00



			2017-18	2018-19	
			25.9.2017 (COD of Unit-I) to 31.3.2018	1.4.2018 to 29.3.2019	30.3.2019 (COD of Unit-II) to 31.3.2019
C	Normative Equity – Closing	A+B	160253.06	169875.98	265097.17
D	Average Normative Equity	(A+C)/2	157742.05	165064.52	265097.17
E	Return on Equity (Base Rate)		15.500%	15.500%	15.500%
F	Effective Tax Rate		21.3416%	21.5488%	21.5488%
G	Rate of Return on Equity (Pre-tax)	E/(1-F)	19.705%	19.758%	19.758%
H	<b>Return on Equity (Pre-tax) - (annualized)</b>	<b>D x G</b>	<b>31083.07</b>	<b>32613.45</b>	<b>52377.90</b>
I	<b>Return on Equity (Pre-tax) - (pro-rata)</b>		<b>16009.91</b>	<b>32434.74</b>	<b>287.00</b>

### Interest on loan

#### **Paragraph 73**

73. Interest on loan has been worked out as under:

- (i) The gross normative loan corresponding to admissible capital cost works out to Rs.362205.78 lakh as on COD of Unit-I and Rs.618560.05 lakh as on COD of Unit-II/ Station.
- (ii) The net normative opening loan as on COD of Unit-I is the same as the gross normative opening loan, the cumulative repayment of normative loan up to the previous year/ period being nil.
- (iii) Addition to normative loan on account of additional capital expenditure allowed above has been considered.
- (iv) Depreciation allowed has been considered a repayment of normative loan during the respective year of the period 2017-19. Further, repayments have been adjusted for the de-capitalisation of assets considered for the purpose of tariff.
- (v) The Petitioner has claimed interest on loan considering weighted average rate of interest (WAROI) of 6.8983% for the period COD of Unit-I to 31.3.2018, 7.1757% for the period 1.4.2018 to COD of Unit-II and 7.2915% for the period from COD of Unit-II to 31.3.2019. The same has been considered for the purpose of tariff.

#### **Paragraph 74**

74. The necessary calculation of interest of loan is as under:



(Rs. in lakh)

			2017-18	2018-19	
			25.9.2017 (COD of Unit-I) to 31.3.2018	1.4.2018 to 29.3.2019	30.3.2019 (COD of Unit-II) to 31.3.2019
A	Gross opening loan		362205.78	373923.80	618560.05
B	Cumulative repayment of loan upto previous year / period		0.00	12672.14	38296.12
C	Net Loan Opening	A-B	362205.78	361251.66	580263.93
D	Addition on account of additional capital expenditure		11718.01	22453.48	-
E	Repayment of loan during the year/period		12672.63	25625.00	236.28
F	Less: Repayment adjustment on account of de-capitalization		0.49	1.02	
G	Net Repayment	E-F	12672.14	25623.98	236.28
H	Net Loan Closing	C+D-G	361251.66	358081.16	580027.65
I	Average Loan	(C+H)/2	361728.72	359666.41	580145.79
J	WAROI		6.8983%	7.1757%	7.2915%
K	<b>Interest on Loan (annualised)</b>	<b>I x J</b>	<b>24953.13</b>	<b>25808.58</b>	<b>42301.33</b>
L	<b>Interest on Loan (pro-rata)</b>		<b>12852.57</b>	<b>25667.17</b>	<b>231.79</b>

### Depreciation

#### **Paragraph 76**

76. Depreciation has been calculated as under:

(Rs. in lakh)

			2017-18	2018-19	
			25.9.2017 (COD of Unit-I) to 31.3.2018	1.4.2018 to 29.3.2019	30.3.2019 (COD of Unit-II) to 31.3.2019
A	Average capital cost		525806.84	550215.06	883657.22
B	Value of freehold land included in 'A'		24388.58	24388.58	52395.57
C	Depreciable value	(A-B) x 90%	451,276.44	473,243.83	748,135.49
D	Remaining depreciable value at the beginning of the year	(C) - 'J' of preceding year/period	451,276.44	460,571.69	709,839.36
E	WAROD		4.6792%	4.6829%	4.8798%
F	<b>Depreciation during the period (pro-rata)</b>	<b>#</b>	<b>12672.63</b>	<b>25625.00</b>	<b>236.28</b>
G	Depreciation during the year (annualised)	(A x E)	24603.78	25766.19	43120.95
H	Cumulative depreciation before adjustment for de-capitalisation of assets, at the end of the year	(F) + 'J' of preceding year/period	12672.63	38297.14	38532.40
I	Depreciation adjustment on account of de-capitalization		0.49	1.02	0.00



			2017-18	2018-19	
			25.9.2017 (COD of Unit-I) to 31.3.2018	1.4.2018 to 29.3.2019	30.3.2019 (COD of Unit-II) to 31.3.2019
J	<b>Net cumulative depreciation at the end of the year/period</b>	<b>H - I</b>	<b>12672.14</b>	<b>38296.12</b>	<b>38532.40</b>

# (A x E x No. of days during the period)/Total No. of days during the year

### **Working Capital for Receivables**

#### **Paragraph 123**

(Rs. in lakh)

	2017-18	2018-19	
	25.9.2017 (COD of Unit-I) to 31.3.2018	1.4.2018 to 29.3.2019	30.3.2019 (COD of Unit-II) to 31.3.2019
Variable Charges - for two months corresponding to NAPAF	21344.81	21344.81	63254.73
Fixed Charges - for two months corresponding to NAPAF	16870.81	17634.18	30574.52
<b>Total</b>	<b>38215.62</b>	<b>38978.98</b>	<b>93829.25</b>

#### **Paragraph 126**

126. Accordingly, Interest on working capital has been computed as under:

(Rs. in lakh)

		2017-18	2018-19	
		25.9.2017 (COD of Unit-I) to 31.3.2018	1.4.2018 to 29.3.2019	30.3.2019 (COD of Unit-II) to 31.3.2019
A	Working Capital for Cost of Coal towards Stock (30 days per annum) corresponding to NAPAF	10465.30	10465.30	31013.18
B	Working Capital for Cost of Coal towards Generation (30 days per annum) corresponding to NAPAF	10465.30	10465.30	31013.18
C	Working Capital for Cost of Secondary fuel oil (2 months per annum) corresponding to NAPAF	121.68	121.68	367.98
D	Working Capital for Maintenance Spares @ 20% of O&M expenses	2533.00	2713.70	5139.86
E	Working Capital for Receivables – 2 months per annum corresponding to NAPAF	38215.62	38978.98	93829.25
F	Working Capital for O&M expenses – 1 month	1055.42	1130.71	2141.61
G	<b>Total Working Capital (A+B+C+D+E+F)</b>	<b>62856.31</b>	<b>63875.67</b>	<b>163505.06</b>
H	Rate of Interest	12.60%	12.60%	12.20%
I	Interest on Working Capital (GxH) - annualised	7919.89	8048.33	19947.62
J	<b>Interest on Working Capital (pro-rata)</b>	<b>4079.29</b>	<b>8004.23</b>	<b>109.30</b>



**Annual Fixed Charges approved for the period 2014-19**

**Paragraph 127**

127. Accordingly, the annual fixed charges approved for the generating station for the period 2014-19 are summarized as under:

*(Rs. in lakh)*

	2017-18	2018-19	
	25.9.2017 (COD of Unit-I) to 31.3.2018	1.4.2018 to 29.3.2019	30.3.2019 (COD of Unit-II) to 31.3.2019
Depreciation	24603.78	25766.19	43120.95
Interest on loan	24953.13	25808.58	42301.33
Return on Equity	31083.07	32613.45	52377.90
Interest on Working Capital	7919.89	8048.33	19947.62
O&M Expenses	12664.99	13568.51	25699.31
<b>Total</b>	<b>101224.87</b>	<b>105805.06</b>	<b>183447.10</b>

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

**Paragraph 129**

129. The summary of annual fixed charges approved in order dated 6.1.2020 in Petition No. 178/GT/2017 and those claimed and approved is as under:

*(Rs. in lakh)*

Annual Fixed Charges	2017-18	2018-19	
	25.9.2017 (COD of Unit-I) to 31.3.2018	1.4.2018 to 29.3.2019	30.3.2019 (COD of Unit-II) to 31.3.2019
Approved in order dated 6.1.2020 in Petition No. 178/GT/2017	99822.03	100539.23	100475.33
Claimed in this Petition	102171.70	106770.62	186675.58
Allowed in this Petition	101224.87	105805.06	183447.10

4. Except for the above, all other terms/findings contained in the order dated 19.5.2024 in Petitioner No. 582/GT/2020 remain unchanged.

5. To summarise, the annual fixed charges approved in this corrigendum order and the annual fixed charges approved in order dated 19.5.2024 in Petition No. 582/ GT/ 2020 are summarised below:





(Rs. in lakh)

Annual Fixed Charges	2017-18	2018-19	
	25.9.2017 (COD of Unit-I) to 31.3.2018	1.4.2018 to 29.3.2019	30.3.2019 (COD of Unit-II) to 31.3.2019
Approved in order dated 19.5.2024 in Petition No. 582/GT/2020	100921.81	105524.55	182645.19
Allowed in this corrigendum order	<b>101224.87</b>	<b>105805.06</b>	<b>183447.10</b>

**Sd/-**  
**(Arun Goyal)**  
**Member**

**Sd/-**  
**(Jishnu Barua)**  
**Chairperson**

