# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

## Petition No. 26/RP/2015 <u>in</u> Petition No. 208/GT/2013 & 305/GT/2014

Coram:

Shri Gireesh B. Pradhan, Chairperson Shri A.K. Singhal, Member Shri A.S. Bakshi, Member

Date of Hearing: 12.04.2016 Date of Order: 20.06.2016

#### In the matter of

Review of Commission's order dated 31.8.2015 in Petition No.208/GT/2013 and 305/GT/2014 regarding approval of generation tariff of Korba Super Thermal Power Station Stage-III (500 MW) for the period from 21.3.2011 to 31.3.2014.

#### And

#### In the matter of

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

...Petitioner

Vs

- 1. Madhya Pradesh Power Management Company Ltd. Shakti Bhavan, Vidyut Nagar, Rampur, Jabalpur-482008
- 2. Maharashtra State Electricity Distribution Co. Ltd. Prakashgad, Bandra (East), Mumbai-400051
- 3. Gujarat Urja Vikas Nigam Ltd, Sardar Patel Vidyut Bhawan, Race Course, Vadodara-390007
- 4. Chhattisgarh State Power Transmission Co. Ltd. Danganiya, Raipur-492013
- 5. Goa Electricity Department Government of Goa, Vidyut Bhawan, 3rd Floor, Panaji, Goa-403001
- 6. Electricity Department Administration of Daman & Diu, Daman-396210
- 7. Electricity Department Administration of Dadra Nagar Haveli, Silvassa-396230

...Respondents



## Parties present:

Shri Ajay Dua, NTPC
Ms. Suchitra Maggon, NTPC
Shri Parimal Piyush, NTPC
Shri Manish Jain, NTPC
Shri Nishant Gupta, NTPC
Shri Rishabh Singh, Advocate, MPPMCL

#### **ORDER**

This application has been filed by the petitioner, NTPC for review of order dated 31.8.2015 in Petition Nos. 208/GT/2013 and 305/GT/2014 whereby the Commission by order dated 31.8.2015 had determined the tariff of Korba Super Thermal Power Station, Stage- III (500 MW) (hereinafter referred to as "the generating station") for the period from 21.3.2011 to 31.3.2014 in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 ("the 2009 Tariff Regulations"). The annual fixed charges determined by the said order dated 31.8.2015 is as under:

				(₹ in lakh)
	2010-11 (21.3.2011 to 31.3.2011)	2011-12	2012-13	2013-14
Return on Equity	14693.14	15004.72	15698.20	16710.48
Interest on Loan	14181.50	14675.66	14220.61	13804.74
Depreciation	11450.32	11825.76	12176.98	12675.75
Interest on Working Capital	2085.02	2129.69	2158.93	2201.57
O&M Expenses	6870.00	7265.00	7680.00	8120.00
Cost of secondary fuel oil	1448.75	1452.72	1448.75	1448.75
Total	50728.72	52353.55	53383.47	54961.30

- 2. Aggrieved by the said order dated 31.8.2015, the petitioner has sought review on error apparent on the face of the record limited to the issue of "Calculation of the amount allowed for capitalization of initial spares as per the ceiling limit of 2.5% of original project cost."
- 3. The matter was heard on 12.1.2016 and the Commission by its order dated 15.1.2016 admitted the petition and ordered notice on the respondents. Reply to the petition has been filed by the respondent, MPPMCL and the petitioner has filed its rejoinder to the said reply. The matter was finally heard on 12.4.2016 and the Commission after hearing the parties reserved its order in the petition. Based on the submissions of the parties and the documents available on record, we proceed to examine the issues raised in the petition as stated in the subsequent paragraphs.



#### Computation of ceiling limit allowable for capitalization of capital spares

- 4. The petitioner in the petition has submitted that the Commission had admitted an amount of ₹5918.60 lakh only as total allowable initial spares @2.5% of capital cost as on cut-off date (31.3.2014) of the generating station. It has submitted that the allowable ceiling limit for capitalization of capital spares works out to ₹6250. 28 lakh based on the admitted cost of Rs 249679.71 lakh plus capital spares of ₹331.67 lakh claimed as on cut-off date of the generating station. The petitioner has stated that the balance amount of capitalization allowable under the ceiling limit would be ₹4450.28 lakh in place of ₹4118.61 lakh. Accordingly, the petitioner has stated that there is a calculation error in the amount allowable as initial spares and has prayed that the order may be rectified on this count. The representative of the petitioner reiterated the above submissions during the hearing of the review petition.
- 5. The respondent, MPPMCL in its reply has stated that the capital cost of ₹249679.71 lakh allowed in order dated 31.8.2015 is inclusive of the admissible capital spares for ₹59183.60 lakh. It has also submitted that in terms of Regulation 8 of the 2009 Tariff Regulations, the ceiling limit for capitalization of initial spares is 2.5% of original project cost and hence while allowing the capitalization of initial pares, admitted capital cost minus the allowed initial spares amount has to be considered for computation of ceiling limit of 2.5%. Accordingly, it has prayed that the submissions of the petitioner may be rejected.
- 6. We have examined the matter. The Commission in order dated 31.8.2015 had considered the claim of the petitioner for initial spares and has observed as under:
  - "33. It is observed that the capitalization of spares claimed by the petitioner constitutes 3.19% of the capital cost up to the cut-off date including the initial spares of ₹1800.00 lakh allowed up to COD of the generating station. As initial spares up to cut-off date is more than specified limit of 2.5% allowed as per the 2009 Tariff Regulations, initial spares has been worked out @2.5% of the capital cost, on cash basis, which works out to ₹5918.60 lakh. Out of ₹5918.60 lakh permitted to be capitalized up to 31.3.2014 as per the 2009 Tariff Regulations, the petitioner has capitalized initial spares amounting to ₹1800 lakh as on date of COD and only the remaining initial spares amounting to ₹4118.61 (5918.60-1800.00) is to be considered for the purpose of tariff. Accordingly, in consideration of the submissions of the petitioner, spares amounting ₹1147.66 lakh in 2010-11, ₹2369.70 lakh in 2012-13 and ₹601.25 lakh in 2013-14 has been permitted to be capitalized."
- 7. It is observed that the petitioner had claimed initial spares amounting to ₹7564.86 lakh till the cut of date of the generating station including initial spares for ₹1800.00 lakh allowed as on



COD of the generating station (21.3.2011). The capitalization of the spares claimed by the petitioner constitute 3.19% of the capital cost upto the cut of date including initial spares of ₹1800 lakh allowed upto the COD of the generating station. As initial spares upto the cut of date was more than the ceiling limit of 2.5% of the capital cost as per Regulation 8 of the 2009 Tariff Regulations, initial spares was worked out at 2.5% of the capital cost and initial spares amounting to ₹5918.60 lakh as on the cut of date (upto 31.3.2014) was allowed in the order dated 31.8.2015. It is noticed that the initial spares upto the cut of date was calculated on the basis of 2.5% of the capital cost of ₹236744.90 lakh, which works out to ₹5918.60 lakh, which did not include any notional or normative IDC. Though the capital cost of the generating station was revised to ₹249679.71 lakh as on 31.3.2014 on account of normative IDC and revision of IDC and FC etc in order dated 31.8.2015, the amount of initial spares upto the cut of date was inadvertently not revised. This according to us is an error apparent on the face of the record and the same is required to be rectified. Accordingly, the prayer of the petitioner for review of order on this account is allowed. In view of this, para 33 of the order dated 31.8.2015 shall stand modified as under:

- "33. The petitioner has claimed initial spares of ₹7564.86 till Cut-off date. It is observed that the capitalization of spares claimed by the petitioner constitutes 3.01% of the capital cost up to the cut-off date including the initial spares of ₹7564.86 lakh. As initial spares up to cut-off date is more than specified limit of 2.5% allowed as per the 2009 Tariff Regulations, initial spares has been worked out @2.5% of the capital cost, on cash basis, which works out to ₹6250.28 lakh. Out of ₹6250.28 lakh permitted to be capitalized up to 31.3.2014 as per the 2009 Tariff Regulations, the petitioner has capitalized initial spares amounting to ₹1800.00 lakh as on date of COD and only the remaining initial spares amounting to ₹4450.28 (6250.28-1800.00) is to be considered for the purpose of tariff. Accordingly, in consideration of the submissions of the petitioner, spares amounting ₹1147.66 lakh in 2010-11, ₹2369.70 lakh in 2012-13 and ₹932.92 lakh in 2013-14 has been permitted to be capitalized."
- 8. It is observed that the respondent MPPMCL in its reply (filed on 18.1.2016) has submitted that there is error apparent on the face of the order dated 31.8.2015 to the effect that while allowing O&M expenses, the provisions of Regulations 19 has not been considered. It has also submitted that the O&M expenses have to be allowed on normative basis as per provisions of Regulation 19 of the 2009 Tariff Regulations. It has further submitted that the 4 unit of the generating station to COD has occurred after 1.4.2009 and hence the norms specified under



Regulation 19 (a) of the 2009 Tariff Regulations (multiplied by a factor of 0.9) have to be applied and O&M expenses may be revised in the order dated 31.8.2015.

- 9. In response, the petitioner in its rejoinder dated 5.2.2016 has submitted as under:
  - (a) The generating station has been conceived and envisaged as a separate station declared for commercial operation during the period 2009-14 much later than the existing Korba STPS Stage I & II.
  - (b) The petitioner had to develop separate independent facilities for this generating station by way of separate investment approval and all facilities have been created separately.
  - (c) The equipment design is also different from the existing station due to technological obsolescence in normal course of time and hence no benefit in terms of reduced R&M/spares requirement is derived from Korba STPS Stage I & II.
  - (d) Since this generating station is not an extension of the existing generating station for all commercial purposes like scheduling, energy accounting, tariff determination etc. they are being considered as separate generating stations and treated accordingly.
- 10. The petitioner has submitted that the issues raised by the respondent, MPPMCL is beyond the scope of the review petition and is liable to be rejected. In response to the directions of the commission vide record of proceedings of the hearing dated 25.2.2016, the petitioner vide affidavit dated 2.3.2016 has submitted that the tariff of the generating station had earlier been approved by the Commission in Petition No. 247/2010 and Review Petition No. 16/RP/2012 with the same normative O&M expenses which has not been objected to by any respondent including MPPMCL. The petitioner has stated that in all these petitions, the Commission had treated this Korba STPS-III as a new generating station and accordingly, normative O&M expenses had been granted in tariff. It has further submitted that the respondent MPPMCL had never raised any issue on the grant of normative O&M expenses to this generating station during the process of tariff determination for the period 2009-14. The petitioner has argued that the issue raised by the respondent MPPMCL is an afterthought and reopening of the matter for normative expenses as



prayed for by the respondent may be rejected. The petitioner has also reiterated the submissions made in its rejoinder affidavit dated 5.2.2016.

- We have examined the matter. The tariff of the generating station was determined by the 11. Commission for the period from 21.3.2011 to 31.3.2014 by order dated 3.5.2012 in Petition No. 247/2010. Again the said order, the petitioner has filed review petition (16/RP/2012) on certain issues and the Commission disposed of the same by order dated 9.4.2013. Subsequently, these petitions (Petition Nos. 208/GT/2014 and 305/GT/2015) were filed by the petitioner for revision of tariff of generating station for the said period after truing up exercise in terms of Regulation 6 (1) of the 2009 Tariff Regulations. In all the proceedings in respect of the above said tariff petitions including the review petition as aforesaid, the respondent MPPMCL had never raised any issue regarding the treatment of this generating station as an expansion unit for grant of O&M expenses. This issue, which has been raised by the respondent in reply to the review petition filed by the petitioner is also not supported by any document evidencing the fact that this generating station in an extension project. The respondent having accepted the tariff determined by this Commission in the previous orders without any objection on this count, cannot now raise this issue in this petition, since these orders have attained finality. In our view, the submissions of the respondent is an afterthought and an attempt has been made by the respondent, MPPMCL to reopen the settled issue in all earlier tariff orders in respect of the generating station. This is not permissible. The submissions of the respondent therefore deserve no merit and consideration. In this background, we are not inclined to consider the prayer of the respondent in the review proceedings. Accordingly, review of order dated 31.5.2015 on this ground raised by the respondent, MPPMCL is rejected.
- 12. Based on the discussions in para 7 above, the tariff of the generating station is revised as stated below.

### Actual Additional Capital Expenditure allowed for the period 2010-14

13. The additional capital expenditure allowed in serial No. (C) in the table under para 45 of the order dated 31.8.2015 shall stand revised stand as under:



| 2010-11 | 2011-12 | 2012-13 | 2013-14 | (21.3.2010 to 31.3.2011) | Additional capital expenditure (excluding discharges) | 59.80 | 5603.27 | 5982.81 | 7619.32

14. In view of revision in the additional capitalization, the table under para 46 of the order dated 31.8.2015 shall stand modified as under:

				(₹ in lakh)
	2010-11 (21.3.2010 to 31.3.2011)	2011-12	2012-13	2013-14
Additional capital expenditure (excluding discharges)	59.80	5603.27	5982.81	7619.32
Add: Discharges	2229.75	6371.88	2321.70	2716.91
Total ACE	2289.55	11975.14	8304.51	10336.23

15. Based on the above, the capital cost considered for the purpose of tariff for the period 2010-14 stands revised as under:-

				(₹in lakh)
	2010-11	2011-12	2012-13	2013-14
	(21.3.2011 to			
	31.3.2011)			
Opening capital cost	217105.95	219395.50	231370.65	239675.16
Add: Additional capital expenditure	2289.55	11975.14	8304.51	10336.23
Closing capital cost	219395.50	231370.65	239675.16	250011.40
Average capital cost	218250.73	225383.07	235522.90	244843.28

16. The other components of tariff of the generating station shall stand revised as under:-

### **Return on Equity**

(₹in lakh) 2010-11 2011-12 2012-13 2013-14 (21.3.2011 to 31.3.2011) Normative Equity - Opening 62990.08 63620.34 67173.94 69665.29 Add: Addition to equity on account 630.26 3553.60 2491.35 3100.87 of additional capital expenditure Normative Equity - Closing 63620.34 67173.94 69665.29 72766.16 Normative Equity - Average 63305.21 65397.14 68419.61 71215.73 Base Rate for return on equity 15.50% 15.50% 15.50% 15.50% Applicable Tax Rate 33.218% 32.445% 32.445% 33.990% Rate of Return on Equity (Pre-tax) 23.210% 22.944% 22.944% 23.481% 14693.14 16722.16 Return on Equity 15004.72 15698.20



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# **Interest on Loan**

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	2010-11	2011-12	2012-13	2013-14
	(21.3.2011 to			
	31.3.2011)			
Gross Opening Loan	154115.87	155775.16	164196.71	170009.87
Cumulative Repayment of Loan	0.00	345.08	12170.84	24242.90
Net Loan Opening	154115.87	155430.09	152025.87	145766.97
Addition of loan due to additional capital	1659.30	8421.55	5813.16	7235.36
expenditure				
Repayment of loan (Normative)	345.08	11825.76	12176.98	12684.34
Repayment adjustment on account of de-	0.00	0.00	104.91	95.76
cap considered for the purpose of tariff				
Net Repayment	345.08	11825.76	12072.07	12588.58
Net Loan Closing	155430.09	152025.87	145766.97	140413.75
Average Loan	154772.98	153727.98	148896.42	143090.36
Weighted Average Rate of Interest on	9.1628%	9.5465%	9.5507%	9.6551%
Loan				
Interest on Loan	14181.50	14675.66	14220.61	13815.54

# **Depreciation**

(₹in lakh)

	2010-11 (21.3.2011 to 31.3.2011)	2011-12	2012-13	2013-14
Average Capital Cost	218250.73	225383.07	235522.90	244843.28
Value of land included above	735.54	1523.99	2477.74	2792.52
Rate of Depreciation	5.25%	5.25%	5.17%	5.18%
Depreciable Value	195763.67	201473.18	209740.64	217845.68
Remaining Depreciable value	195763.67	201128.10	197569.81	193509.84
Depreciation (for the period)	345.08	11825.76	12176.98	12684.34
Depreciation (Annualized)	11450.32	11825.76	12176.98	12684.34
Cumulative Depreciation (at the end of the period)	345.08	12170.84	24347.82	37020.19
Cumulative Depreciation reduction due to De-capitalization	0.00	0.00	11.98	18.01
Cumulative Depreciation after adjustment due to De-capitalization (at the end of the period)	345.08	12170.84	24335.84	37002.18

# **Receivables**

(₹in lakh)

	2010-11 (21.3.2011 to 31.3.2011)	2011-12	2012-13	2013-14
Variable Charges -2 months	4749.683	4762.696	4749.683	4749.683
Fixed Charges - 2 months	8454.786	8725.591	8897.245	9165.491
Total	13204.47	13488.29	13646.93	13915.17



#### **Interest on Working Capital**

(₹in lakh) 2010-11 2011-12 2012-13 2013-14 (21.3.2011 to 31.3.2011) 3562.26 Cost of coal for 1.1/2 months 3572.02 3562.26 3562.26 Cost of secondary fuel oil for 2 241.46 242.12 241.46 241.46 months **O&M** Expenses 572.50 605.42 640.00 676.67 1374.00 1453.00 1536.00 1624.00 Maintenance Expenses Receivables 13204.47 13488.29 13646.93 13915.17 Total working capital 18954.69 19626.65 20019.56 19360.85 Rate of interest 11.00% 11.00% 11.00% 11.00% Interest on working capital 2085.02 2129.69 2158.93 2202.15

## **Annual Fixed Charges**

17. The annual fixed charges determined by order dated 31.8.2015 shall stand revised as under:

				(₹in lakh)
	2010-11	2011-12	2012-13	2013-14
	(21.3.2011 to			
	31.3.2011)			
Return on Equity	14693.14	15004.72	15698.20	16722.16
Interest on Loan	14181.50	14675.66	14220.61	13815.54
Depreciation	11450.32	11825.76	12176.98	12684.34
Interest on Working Capital	2085.02	2129.69	2158.93	2202.15
O&M Expenses	6870.00	7265.00	7680.00	8120.00
Cost of secondary fuel oil	1448.75	1452.72	1448.75	1448.75
Total	50728.72	52353.55	53383.47	54992.95

- 17. The order dated 31.8.2015 shall stand modified to the extent indicated above. All other terms shall remain unchanged.
- 18. Petition No. 26/RP/2015 is disposed of in terms of the above.

-Sd/- -Sd/- -Sd/(A.S. Bakshi) (A.K. Singhal) (Gireesh B. Pradhan)
Member Member Chairperson

