

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Docket No. 68/GT/2012

Coram: **Dr. Pramod Deo, Chairperson
Shri S.Jayaraman, Member
Shri V.S.Verma, Member
Shri M.Deena Dayalan, Member**

Date of Order: 24.12.2012

In the matter of:

Approval of tariff of Rihand Super Thermal Power Station, Stage-III (2 x 500 MW) for the period from the anticipated date of commercial operation to 31.3.2014

And

In the matter of:

Grant of provisional tariff from the anticipated date of commercial operation of Unit-I to 31.3.2014 in respect of Rihand Super Thermal Power Station, Stage-III (2 x 500 MW)

And

In the matter of:

NTPC Ltd, New Delhi
Vs

...Petitioner

1. Uttar Pradesh Power Corporation Ltd, Lucknow
2. Jaipur Vidyut Vitran Nigam Ltd., Jaipur
3. Ajmer Vidyut Vitran Nigam Ltd., Jaipur
4. Jodhpur Vidyut Vitran Nigam Ltd., Jaipur
5. North Delhi Power Ltd., Delhi
6. BSES Rajdhani Power Ltd., New Delhi
7. BSES Yamuna Power Ltd., Delhi
8. Haryana Power Purchase Centre, Haryana
9. Punjab State Power Corporation Ltd, Patiala
10. Himachal Pradesh State Electricity Board Ltd, Shimla
11. Power Development Department, Government of J& K, Jammu
12. Electricity Department, Union Territory of Chandigarh, Chandigarh
13. Uttarakhand Power Corporation Ltd, Dehradun

...Respondents

ORDER

The petitioner, NTPC Ltd, has filed this petition for approval of tariff of Rihnad Super Thermal Power Station, Stage-III (2x500 MW) ("the generating station") for the period from the anticipated date of commercial operation to 31.3.2014, in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations").

2. The investment approval of the project was accorded on 19.5.2009 by the board of the petitioner company on 24.1.2009 at an estimated project cost of ₹67368.97 million including IDC and FC of ₹7741.62 million and WCM of ₹1161.93 million at a price level of 4th quarter of 2008. The petitioner has entered into Power Purchase Agreement (PPA) with the respondents herein on 27.3.2009 and the power generated from the generating station shall be supplied to the respondents in terms of the allocation made by the Ministry of Power, Government of India vide letter dated 23.8.2010. The petitioner has accordingly filed the petition for determination of tariff of the generating station from the anticipated date of commercial operation of Unit-I (23.7.2012) to 31.3.2014.

3. While so, the petitioner by its letter dated 19.11.2012 has submitted that Unit-I of the generating station has been declared under commercial operation with effect from 19.11.2012 and has prayed for grant of provisional tariff in order to bill the respondents for the power supplied from the generating station, subject to adjustment after determination of final tariff by the Commission.

4. The petition is being considered in the present order for grant of provisional tariff in respect of Unit-I of the generating station. Clauses (1) and (2) of Regulation 5 of the 2009 regulations provides as under:

“5. Application for determination of tariff(1) The generating company or the transmission licensee, as the case may be, may make an application for determination of tariff in accordance with Central Electricity Regulatory Commission (Procedure for making of application for determination of tariff, publication of the application and other related matters) Regulations, 2004, as amended from time to time or any statutory re-enactment thereof, in respect of the units of the generating station or the transmission lines or sub-stations of the transmission system, completed or projected to be completed within six months from the date of application.

(2) The generating company or the transmission licensee, as the case may be, shall make an application as per **Appendix I** to these regulations, for determination of tariff based on capital expenditure incurred duly certified by the auditors or projected to be incurred up to the date of commercial operation and additional capital expenditure incurred duly certified by the auditors or projected to be incurred during the tariff period of the generating station or the transmission system:

Provided that in case of an existing project, the application shall be based on admitted capital cost including any additional capitalization already admitted up to 31.3.2009 and estimated additional capital expenditure for the respective years of the tariff period 2009-14:

Provided further that application shall contain details of underlying assumptions for projected capital cost and additional capital expenditure, where applicable.

5. Regulation 5 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (First Amendment) Regulations, 2011 provides as under:

“(4) Where application for determination of tariff of an existing or a new project has been filed before the Commission in accordance with clauses (1) and (2) of this regulation, the Commission may consider in its discretion to grant provisional tariff upto 95% of the annual fixed cost of the project claimed in the application subject to adjustment as per proviso to clause (3) of this regulation after the final tariff order has been issued:

Provided that recovery of capacity charge and energy charge or transmission charge, as the case may be, in respect of the existing or new project for which provisional tariff has been granted shall be made in accordance with the relevant provisions of these regulations.”

6. The petitioner has filed this petition in compliance with Clauses (1) and (2) of Regulation 5 of the 2009 Tariff Regulations. The petitioner has published notice in the

newspapers as regards filing of tariff petition and has also served copies of the petition on the respondent beneficiaries. None of the respondents have filed replies to the petition.

7. Since the petitioner has complied with the provisions of Clauses (1) and (2) of Regulation 5 of 2009 Tariff Regulations, we propose to grant provisional tariff from the date of commercial operation of Unit-I of the generating station i.e. from 19.11.2012 till 31.3.2014, in exercise of the power under Clause (4) of Regulation 5 of the 2009 Tariff Regulations, as discussed in the subsequent paragraphs.

8. The annual fixed charges claimed by the petitioner for 2012-13 (23.7.2012 to 31.3.2013) and from 1.4.2013 to 30.6.2013 for Unit-I of the generating station is as under:

<i>(₹ in lakh)</i>	
Annual Fixed Charges for 2012-13 for Unit-1 (23.7.2012 to 31.3.2013)	Annual Fixed Charges for 2013-14 for Unit-1(1.4.2013 to 30.6.2013)
63829.29	65591.49

Time and Cost overrun

9. The time period for completion of different units of a green field project with unit size of 500 MW, as specified by the Commission is 42 months for the first unit and thereafter, at an interval of six months for subsequent units. It is observed that in the present case that there is time over run in respect of Unit-I considered from the scheduled date of commercial operation as per investment approval of the petitioner's Board till the expected date of commercial operation as indicated by the petitioner. We are of the view that the question of delay in the commissioning of the project and its impact on time and cost overrun, including IDC, are required to be looked into in detail

after hearing all the parties on merits, at the time of determination of final tariff. However, keeping in view the fact that only Unit-I of the generating station is being considered for grant of provisional tariff by this order, we have decided to consider only 95% of the capital cost claimed by the petitioner as on 23.7.2012 for the purpose of grant of provisional tariff.

Capital Cost

10. The investment approval of the project was accorded by the board of the petitioner company on 24.1.2009 at an estimated project cost of ₹67368.97 million including IDC and FC of ₹7741.62 million and WCM of ₹1161.93 million at a price level of 4th quarter of 2008. The petitioner has claimed the capital cost as on the expected date of commercial operation (COD) of Units-I (23.7.2012) and Unit-II (1.7.2013) in Form 5D of the petition as under:

	<i>(₹ in lakh)</i>	
	Total estimated Capital expenditure as on expected COD of Unit-I (23.7.2012) including IDC and FC	Total estimated Capital expenditure as on expected COD of Unit-I (1.7.2013) including IDC and FC
Capital cost	267106.00	535628.00

11. The estimated capital cost in respect of Unit-I and the generating station (Units-I and II combined) works out to ₹5.35 crore/MW. The project cost (excluding IDC, FC, and FERV) as on the expected COD of Unit-I and the generating station is ₹4.85 crore/MW which is comparable to the bench mark cost as specified by the Commission. Since the actual expenditure as on the actual date of commercial operation (19.11.2012) of Unit-I of the generating station is not available, the capital cost claimed by the petitioner as on the expected date of commercial operation of Unit-I (23.7.2012) has been considered for the purpose of tariff. Accordingly, in terms of our observations in para 8 above, we have

considered 95% of the capital cost of ₹267106.00 lakh as on the actual date of commercial operation for the purpose of provisional tariff of Unit-I of the generating station. The capital cost considered for the purpose of provisional tariff is as under:

<i>(₹ in lakh)</i>	
	As on 19.11.2012
Capital Cost allowed @ 95% of ₹267106.00 lakh including IDC (A)	253751.00
Short Term ERV (B)	(-) 644.00
Capital cost allowed for the purpose of provisional tariff	253107.00

12. The projected additional capital expenditure claimed by the petitioner from the expected date of commercial operation of Unit-I (i.e from 23.7.2012 to 31.3.2013) and for the year 2013-14 is as under:

<i>(₹ in lakh)</i>		
	2012-13 (23.7.2012 to 31.3.2013)	2013-14
Additional capital expenditure	21320.00	43106.00

13. The projected capital expenditure from the expected date of commercial operation (23.7.2012) to 31.3.2013 is proposed to be considered keeping in view that some of the expenditure might have been capitalized by the petitioner as on the actual COD of Unit-I (i.e 19.11.2012) and also that the additional expenditure considered upto 31.3.2013 apart from providing a realistic capital cost, would minimize the burden on the beneficiaries at the time of adjustments based on determination of final tariff. However, the additional capitalization considered for 2012-13 (23.7.2012 to 31.3.2013) has been restricted to 95% of the projected additional capital expenditure claimed by the petitioner, which works out to ₹20254.00 lakh. The projected additional capital expenditure claimed by the petitioner for 2013-14 has not been considered for the purpose of provisional tariff.

14. Return on Equity has been considered as per the provisions of the 2009 Tariff Regulations. The interest rates on loans and working capital as claimed by the petitioner have been considered. All other components have been considered as per the provisions of the 2009 Tariff Regulations.

15. Based on the capital cost of ₹253107.00 lakh as on 19.11.2012 and the projected additional capital expenditure of ₹20254.00 lakh considered the provisional annual fixed charges allowed for Unit-I of the generating station for the period 2012-13 (19.11.2012 to 31.3.2013) and from 1.4.2013 to 30.6.2013 is as under:

<i>(₹ in lakh)</i>	
Annual Fixed Charges for 2012-13 for Unit-1 (23.7.2012 to 31.3.2013)	Annual Fixed Charges for 2013-14 for Unit-1(1.4.2013 to 30.6.2013)
60638.47	62311.92

16. The provisional annual fixed charges determined on annualized basis as above is applicable *pro rata* to the number of days the said unit has run during the period 2012-13 and 2013-14, till the date of commercial operation of Unit-II of the generating station.

17. The operational norms claimed by the petitioner and considered for determination of provisional tariff is as under:

Target Availability	85%
Heat Rate (kcal/kwh)	2423.94
Auxiliary power consumption (with induced draft cooling)	6.5%
Specific Oil Consumption (ml/kwh)	1.0

18. The cost of secondary fuel oil (annualized) claimed by the petitioner based on the landed cost of oil for the month of March, 2012 with the expected COD of Unit-I (23.7.2012) is ₹2130.69 lakh each for 2012-13 and 2013-14. This has been considered for the purpose of provisional tariff.

Fuel Component and Energy charges in working capital

19. The petitioner has claimed fuel component in working capital based on the weighted average GCV and price of fuels for the preceding three months i.e March, 2012 April, 2012 and May 2012 for primary fuel and for the month of March, 2012 for secondary fuel from the expected COD of Unit-I (23.7.2012) as under:

(₹ in lakh)

	2012-13 (31.8.2012 to 31.3.2013)	2013-14
Cost of coal for 1 ^{1/2} months	5899.91	5899.91
Cost of Secondary fuel oil for 2 months	355.12	355.12

20. The fuel component in working capital claimed by the petitioner as above is in order and has been considered for provisional tariff.

Energy Charge Rate

21. The petitioner has claimed the Energy Charge Rate (ECR) of **135.59** paisa/kwh based on the weighted average price and GCV of coal procured and burnt for the preceding three months i.e March, 2012 April, 2012 and May and operational norms based on the 2009 Tariff Regulations. Accordingly, ECR is worked out as under:

Description	Unit	2012-14
Capacity	MW	500
Gross Station Heat Rate	Kcal/kWh	2423.94
Auxiliary Energy Consumption	%	6.50
Weighted average GCV of oil	Kcal/lit	9870.0
Weighted average GCV of coal	Kcal/kg	3384.33
Weighted average price of oil	Rs/Kl	57230.40
Weighted average price of coal	Rs/MT	1777.32
Rate of energy charge from coal ex-bus	Paise/kWh	126.778
Rate of energy charge ex-bus prkWh sent	Paise/kWh	135.591

22. ECR from coal (126.778 paise/kWh) as computed above has been allowed for 2 months on the generation corresponding to normative annual plant availability factor in working capital.

23. Energy Charge Rate on month to month basis shall be calculated in terms of Clauses 6 (a) of Regulation 21 of the 2009 Tariff Regulations.

24. The petitioner shall revise the figures in the petition taking into consideration the date of commercial operation of Unit-II of the generating station, in terms of the provisions of the 2009 Tariff Regulations, which will be considered in accordance with law.

25. The provisional annual fixed charges allowed above is subject to adjustment as per proviso to Clause (3) of Regulation 5 of the 2009 Tariff Regulations.

Sd/-
[M.Deena Dayalan]
Member

Sd/-
[V.S.Verma]
Member

Sd/-
[S.Jayaraman]
Member

Sd/-
[Dr.Pramod Deo]
Chairperson