## CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Subject : Petitions under Section 79 of the Electricity Act, 2003 read

with Regulation 29 of the Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2019 for approval of additional expenditure on account of installation of various Emission Control Systems in compliance with the Ministry of Environment and Forests and Climate Change,

Government of India notification dated 7.12.2015.

**Western Region** 

**Petition No.** : 526/MP/2020

**Station Name**: Mauda Super Thermal Power Station Stage-I (2X500 MW)

**Petition No.** : 521/MP/2020

**Station Name**: Korba Super Thermal Power Station Stage-III (1X500 MW)

Respondents: Madhya Pradesh Power Management Company Ltd.

(MPPMCL) and others

**Southern Region** 

**Petition No.** : 612/MP/2020

Station Name : Ramagundam Super Thermal Power Station Stage-III (1X500

MW)

**Petition No.** : 613/MP/2020

Station Name : Kudgi Super Thermal Power Station Stage-I (3X800 MW)

**Petition No.** : 730/MP/2020

Station Name : Ramagundam Super Thermal Power Station Stage-I & II

(3X200 + 3X500 MW)

**Respondents**: A.P. Eastern Power Distribution Company Limited and others

Date of Hearing : 12.3.2020

**Coram** : Shri P.K. Pujari, Chairperson

Shri I. S. Jha, Member Shri Arun Goyal, Member

Shri Pravas Kumar Singh, Member

Shri Prakash S. Mhaske, Member, Ex-Officio

Petitioner : NTPC



Parties present : Shri B. Vinodh Kanna, Advocate, TANGEDCO

Shri Rohit Chhabra, NTPC
Shri Parimal Piyush, NTPC
Shri V. V. Sivakumar, NTPC
Shri A.S. Pandey, NTPC
Shri V. K. Garg, NTPC
Shri Anjum Jargar, NTPC
Shri Anurag Naik, MPPMCL
Shri Arvind Banerjee, CSPDCL
Shri R. Ramalakshmi, TANGEDCO
Dr. R. Kathiravan, TANGEDCO

## Record of Proceedings

The matters were called out for virtual hearing.

- 2. The representative of NTPC submitted that the Ministry of Environment, Forest and Climate Change, Government of India (MoEFCC), vide Notification No. S.O. 3305(E) dated 7.12.2015 (in short, "the MoEFCC Notification") amended the Environment (Protection) Rules, 1986 introducing/ amending the emission standards for environmental pollutants to be followed by all existing and new thermal power plants. As per the MoEFCC Notification, all thermal power plants are required to comply with the revised emission standards within a stipulated period. The instant Petitions are filed by NTPC for approval of additional capital expenditure (ACE) towards installation of various Emission Control Systems (ECS) at its thermal generating stations to comply with the revised emission standards as per the MoEFCC Notification dated 7.12.2015. NTPC has proposed to install Wet Lime Based Flue Gas Desulphurisation (WFGD) for reduction in SO<sub>2</sub> and Selective Non-Catalytic Reduction (SNCR) technology for reduction in NO2. However, with relaxation of the emission standards for NO2 vide subsequent notification of MoEFCC dated 19.10.2020, there may not be requirement for installation of ECS for NO<sub>2</sub> control in case of the thermal power plants (TPPs) covered in the instant petitions. Accordingly, NTPC has submitted the revised indicative tariff and has shared the proposal with the beneficiaries.
- 3. In response to a query of the Commission, the representative of NTPC submitted that two separate bids were called for installation of ECS for reduction in  $SO_2$  and  $NO_2$  emissions. With relaxation in the norms for  $NO_2$  from 300 mg/Nm³ to 450 mg/Nm3 for plants installed between 1.1.2004 and 31.12.2016 vide MoEFCC notification dated 19.10.2020, installation of SNCR technology for  $NO_2$  control is not required at present and the Petitioner sought liberty to approach the Commission in future, if required.
- 4. In response to another query regarding status of installation of ECS, the representative of NTPC submitted that owing to strict timeline for complying with the revised emission standards (i.e. by December 2022), NTPC floated the tender, work



was awarded and civil work has already commenced in many of its generating stations. It is further submitted that the proposal in terms of provisions of Regulations 29(2) and 29(3) of the 2019 Tariff Regulations has been shared with the beneficiaries in terms of the Commission's directions vide ROP (record of proceedings) vide hearing dated 21.7.2020.

- 5. In response to another query of the Commission regarding re-phasing of implementation of ECS, the representative of NTPC submitted that re-phasing proposed by CEA is being considered by MoEFCC and it has not yet been notified.
- 6. The representative of CSPDCL submitted that it does not have any objection to the admissibility of these petitions. However, the installation of ECS to meet the revised emission standards involves huge capital investment and, therefore, all details of the proposed installation of FGD should be shared with the beneficiaries. In response, the representative of NTPC submitted that the expenditure towards installation has been/would be incurred in compliance with all the relevant statues and regulations. In response to the Commission's query, the representative of NTPC submitted that the DPR (detailed project report), the details of bidding and Investment Approval were not shared with the beneficiaries.
- 7. In response to another query of the Commission regarding bidding process, the representative of NTPC explained the bidding process and submitted that it was carried out in fair and transparent manner. It is submitted that its Board of Directors have approved the expenditure towards installation of ECS to comply with the revised emission standards specified in the MoEFCC Notification dated 7.12.2015.
- 8. The representative of MPPMCL submitted that NTPC has not complied with the provisions of the Regulation 29 of the 2019 Tariff Regulations regarding sharing of the proposal with the beneficiaries and the claims for installation of FGD made by NTPC are very high and exorbitant in comparison to the CEA benchmark cost. He has requested the Commission to devise/ notify a benchmark capital cost to implement these environmental norms in the interest of the ultimate consumers. Learned counsel for MPPMCL requested the Commission to direct NTPC to file revised petition as per the norms specified in the 1<sup>st</sup> amendment to the 2019 Tariff Regulations that was notified in 2020. In response, the representative of NTPC submitted that the revised indicative tariff has been filed in the petitions and shared with the beneficiaries in the proposal. It is further submitted that NTPC would file separate Petitions for supplementary tariff after implementation of the emission control systems as provided in Regulation 29(4) of the 2019 Tariff Regulations.
- 9. Learned counsel for TANGEDCO submitted that there was variation in the cost estimated by NTPC and the cost suggested by CEA and further that he was adopting the arguments advanced by the other beneficiaries. In response, the representative of NTPC submitted that the cost discovered in the bids by NTPC is in line of with the CEA benchmark cost. It was further pointed out by the learned counsel that vide order dated 20.7.2018 in Petition No.98/MP/2017, it has already been held that the MoEFCC



Notification dated 7.12.2015 constitutes Change in Law and the additional capital expenditure incurred by NTPC towards implementation of ECS for meeting the revised emission standards shall be admissible under Change in Law after prudence check by the Commission.

- 10. The Commission observed that CEA has recommended various technologies to meet the revised norms and NTPC is required to select the most appropriate technology for its generating stations as per the CEA's guidelines/ recommendations. CEA has also specified benchmark/ estimated hard cost which does not include taxes, duties, cess, etc. and NTPC's claim will be examined against such benchmark/ estimated cost. In case of any deviation in the cost, NTPC will have to explain the same and it will be allowed only after a prudence check. The Commission observed that NTPC being a PSU is expected to choose the technology best suited from the technologies suggested by CEA and to follow a fair and transparent bidding process and further to discover the most competitive price. It remains the endeavour of the Commission to balance the interest of the generators and consumers. The Commission also observed that as NTPC is bound to comply with revised emission standards as stipulated in the MoEFCC Notification dated 7.12.2015 and to complete the installation of ECS latest by December 2022, the beneficiaries should extend their cooperation for a fair and just consideration of NTPC's claims and timely disposal of the petitions.
- 11. The Commission after hearing the parties admitted the instant petitions and based on request of the Respondents, directed NTPC to submit the following information on affidavit, by 25.3.2021 with an advance copy to the Respondents/ beneficiaries:
  - a) Certificate from the competent authority to the effect that the ECS technology selected is as per the recommendations made by CEA and is the best suited cost-effective technology in terms of CEA's advisory dated 7.2.2020, that would meet the ECS norms as specified in the MoEFCC Notification.
  - b) Copy of the decision by NTPC with resolution and date to issue NIT to procure FGD installation.
  - c) Copy of NIT along with bid opening/closing dates.
  - d) Copy of the recommendations of the Bid Evaluation Committee, if any and approval of the competent authority to award the work.
  - e) Certificate from the competent authority that bidding and award of the work has been carried out in a fair and transparent manner as per the applicable GOI/ NTPC guidelines.
  - f) A note on the process of bidding for award of different packages of ECS, with names of the bidders who participated in the bid and name of the successful bidder, with a copy of the Letter of Award/Letter of Intent issued to the successful bidder.



g) Station-wise/unit-wise break-up of the capital cost claimed for FGD as per the following table:

Unit	Capacity	CEA's	Hard cost	Total	Total	Total	Total	Total of	Total
No.	(MW)	indicative	claimed	IDC	IEDC	FERV	taxes	Other	cost
		hard cost	(Rs, lakh	claimed	claimed	claimed	&	costs	claimed
		(Rs. lakh	per MW)	(Rs. lakh)	(Rs. lakh)	(Rs. lakh)	duties	claimed	(Rs. lakh)
		per MW)					claimed	(Rs. lakh)	
							(Rs. lakh)		
1									
2									
3									
4									
5									
6									

- h) Reasons for deviation from CEA's indicative hard cost, if applicable.
- i) If any contract for NOx reduction at the generating station has also been awarded, the cost of the same is to segregated and the capital cost for FGD is to be provided separately and distinctly.
- j) Present status of implementation of FGD.
- 12. The Commission further directed the beneficiaries to submit their response, if any, by 29.3.2021 with a copy to NTPC.
- 13. The petitions will be listed for final hearing on 31.3.2021.

By order of the Commission

sd/-(V. Sreenivas) Deputy Chief (Law)

