CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. : 512/MP/2020

Subject : Petition 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 at Mouda Super Thermal Power Station Stage-II (2X660 MW) in compliance with the Ministry of Environment and Forests and Climate Change,

Government of India notification dated 7.12.2015.

Petition No. : 338/MP/2020

Subject : Petition 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 at Korba Super Thermal Power Station Stage-I&II (3x200+3X500 MW) in compliance with the Ministry of Environment and Forests and Climate Change, Government of India notification dated 7.12.2015

Petition No. : 67/MP/2020

Subject : Petition 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 installation of various Emission Control Systems at Sipat Super Thermal Power Station Stage-I (3x660 MW) in compliance of Ministry of Environment and Forests and Climate Change, Government of

India notification dated 7.12.2015.

Petition No. : 339/MP/2020

Subject: Petition 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 at Sipat Super Thermal Power Station Stage-II (2X500 MW) in compliance with the Ministry of Environment and Forests and Climate Change,

Government of India notification dated 7.12.2015.



Petition No. : 335/MP/2020

Subject : Petition 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 at Vindhyachal Super Thermal Power Station Stage-I (6x210 MW) in compliance with the Ministry of Environment and Forests and Climate Change, Government of India notification dated 7.12.2015.

Petition No. : 519/MP/2020

Subject : Petition 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 at Vindhyachal Super Thermal Power Station Stage-II (2X500 MW) in compliance with the Ministry of Environment and Forests and Climate Change, Government of India notification dated 7.12.2015.

Petition No. : 509/MP/2020

Subject : Petition 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 at Vindhyachal Super Thermal Power Station Stage-III (2X500 MW) in compliance with the Ministry of Environment and Forests and Climate Change, Government of India notification dated 07.12.2015.

Petition No. : 516/MP/2020

Subject: Petition 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 at Vindhyachal Super Thermal Power Station Stage-IV (2X500 MW) in compliance with the Ministry of Environment and Forests and Climate Change, Government of India notification dated 07.12.2015.

Petition No. : 515/MP/2020



Subject : Petition 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 at Solapur Super Thermal Power Station (2X660 MW) in compliance with the Ministry of Environment and Forests and Climate Change,

Government of India notification dated 7.12.2015.

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 Ltd.

Respondents: Madhya Pradesh Power Management Company Ltd.

(MPPMCL) and others

Parties present: Shri Ravi Sharma, Advocate, MPPMCL (Petition No.515/MP/2020)

Shri Ravin Dubey, Advocate, MPPMCL (Petition No.67/MP/2020)

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

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 SO₂ 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, requirement for installation of ECS for NO₂ control in case of the thermal power plants (TPPs) covered in the instant petitions may need to be revisited. Accordingly, NTPC has submitted the revised indicative tariff and has shared the proposal with the beneficiaries.

- 3. In response to 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. He 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.
- 4. In response to another query of the Commission regarding re-phasing of implementation of the ECS, the representative of NTPC submitted that the re-phasing proposed by CEA is being considered by MoEFCC and it has not yet been notified.
- 5. The representative of CSPDCL submitted that it does not have any objection to the admissibility of these petitions. However, the installation of technology to meet the revised emission standards involves huge capital investment and, therefore, all the details of the proposed installation of ECS 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) and the details of the bidding and Investment Approval were not shared with the beneficiaries.
- 6. 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. He 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.
- 7. Learned counsel for MPPMCL, in Petition No.515/MP/2020, submitted that the NTPC's prayer for grant of in-principle approval of the capital cost and expenditure was rejected by the Commission in order dated 21.7.2018 in Petition No. 98/MP/2017 and NTPC was directed to consult CEA regarding the technology to be adopted and thereafter approach the Commission. He submitted that NTPC has filed the instant petitions without sharing the proposal for installation of FGD with the beneficiaries, which is required under Regulation 29 of the 2019 Tariff Regulations. He submitted that



in no case, can mistake of law constitute sufficient cause for not complying with the relevant provisions of the 2019 Tariff Regulations. He further submitted that the contention of NTPC that Regulation 29(1) of the 2019 Tariff Regulations does not specify the stage at which the proposal is required to be shared does not hold merit and NTPC cannot interpret the regulations in its favour. Certain information/ documents were sought by MPPMCL in its reply, but NTPC has not furnished the relevant information/ documents. He also submitted that it is adopting the arguments advanced by other Respondents. The Commission observed that the instant petitions having been filed for in-principle approval, it is confined to examine the proposal for installation of FGD technology, the procedure followed by NTPC and whether the hard cost arrived by NTPC is within the CEA benchmark cost. The issues relating to determination of tariff shall be dealt when NTPC files the Petition after implementation of the ECS as provided in Regulation 29(4) of the 2019 Tariff Regulations.

- 8. Learned counsel for MPPMCL, in Petition No.67/MP/2020, submitted that a separate petition for supplementary tariff can be filed only after the completion of the ECS and after complying with the provisions of Regulations 29(1), 29(2) and 29(3) of the 2019 Tariff Regulations. He submitted that these petitions are for approval of the indicative project cost and not for determination of tariff. He further submitted that there is a vast difference between the estimated cost of Wet Limestone FGD technology proposed by NTPC as against the cost given in CEA report dated 21.2.2019. The cost of Wet Limestone FGD technology appears to be inflated and accordingly there is a need for filing of DPR for each project/ unit of NTPC and sharing the same with the beneficiaries. He further submitted that it is relying on the submissions made by other beneficiaries. In response, the representative of NTPC submitted that Regulation 29(2) of the 2019 Tariff Regulations provides for submission of indicative tariff and that separate petitions for supplementary tariff after implementation of the ECS as provided in Regulation 29(4) of the 2019 Tariff Regulations will be filed later. He further clarified that the estimated cost of Sipat project is below the CEA benchmark cost.
- After hearing the parties, the Commission observed that in order dated 20.7.2018 9. 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. 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 the NTPC's claim will be examined against such benchmark/ estimated cost. In case of any deviation in the cost, NTPC should explain the same and it will be allowed only after prudence check. The Commission observed that NTPC being a PSU is expected to choose the technology best suited for it from the technology suggested by CEA, follow a fair and transparent bidding process and discover the most competitive price. It is 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 claim and timely disposal of the petitions.

- 10. The Commission after hearing the parties and based on the 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 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) The present status of implementation of FGD. If commissioned, the date of commissioning.
 - h) Studies, if any, conducted to show that the adopted FGD technology would meet the evaluation criteria indicated by CEA in its advisory dated 7.2.2020 and is the best suited cost-effective technology.
 - i) Station-wise/ unit-wise break-up of the capital cost claimed for FGD as per the following table:



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

- j) Reasons for deviation from CEA's indicative hard cost, if applicable.
- k) 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.
- I) Any other information considered appropriate by the Petitioner.
- 11. The Commission further directed the beneficiaries to submit their response, if any, by 29.3.2021 with a copy to NTPC.
- 12. The petitions will be listed for final hearing on 31.3.2021.

By order of the Commission

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

