

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

- 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.** : 526/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 Mauda Super Thermal Power Station Stage-I (2X500 MW) in compliance with the Ministry of Environment and Forests and Climate Change, Government of India notification dated 7.12.2015.
- 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.** : 521/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-III (1X500 MW) in compliance with the 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.** : 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.
- Date of Hearing** : 31.3.2021
- 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 Venkatesh, Advocate, NTPC  
Shri Anant Singh, Advocate, NTPC  
Shri Ravi Sharma, Advocate, MPPMCL  
Shri Abhinav Singh, Advocate, NTPC  
Shri Parimal Piyush, NTPC  
Shri V. V. Sivakumar, NTPC  
Shri A.S. Pandey, NTPC  
Shri V. K. Garg, NTPC  
Shri Ishpaul Uppal, NTPC  
Shri Anjum Jargar, NTPC  
Shri Anurag Naik, MPPMCL  
Shri Ravin Dubey, MPPMCL  
Shri Arvind Banerjee, CSPDCL

### **Record of Proceedings**

The matters were called out for virtual hearing.



2. The learned counsel for the Petitioner submitted that the Petitioner has submitted the information as directed by the Commission vide Record of Proceeding (ROP) dated 12.3.2021, vide affidavit dated 24.3.2021 and has also provided the same to the beneficiaries. He narrated the following circumstances which led to the commencing of the process of tendering and awarding FGD systems:

- a) 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 (TPPs) were required to comply with the revised emission standards within a stipulated period of two years from the date of notification.
- b) The amended norms has categorized the TPPs into three categories i.e. a) TPP’s Units installed before 31.12.2003, b) TPP’s units installed between 1.1.2004 to 31.12.2016, and c) TPPs which are commissioned after 1.1.2017. The details of the technology opted for the TPPs are given in each petition.
- c) The 2014 Tariff Regulations do not provide for any specific regulation to deal with capital expenditure to be incurred for complying with the new environmental norms. As per the Resolution of the Board of Directors of the Petitioner dated 22.3.2017 and the minutes of the 444<sup>th</sup> meeting, the proposal for interim environmental action plan for implementation of new emission norms was adopted. Thereafter, Petition No. 98/MP/2017 was filed for in-principle approval of the capital cost required for installation of ECS. On 30.5.2018, the Ministry of Power also issued a direction under Section 107 of the Electricity Act, 2003 to the Commission to consider the MOEFCC Notification as change in law.
- d) Prior to the passing of the order in Petition No. 98/MP/2017 and during 2014-19 Tariff period, the process of inviting bids was commenced. He submitted in detail the dates on which bids were invited for the projects like Mauda, Kudgi, Vindyachal, Simadhari, Sipat etc. The process of inviting bids was commenced during the 2014-19 tariff period in order to meet stringent timeline of 2 years for implementation of ECS.
- e) In the order dated 20.7.2018 in Petition No. 98/MP/2017, the Commission held that the MoEFCC Notification dated 7.12.2015 constitutes Change in Law and that ACE incurred 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 further directed CEA to prepare guidelines to meet the revised emission norms stipulated under the MoEFCC Notification. There is no direction to the CEA to recommend technology for each/ specific plant of the Petitioner. Prior to the 2019 Tariff Regulations or the order dated 20.7.2018 in Petition No. 98/MP/2017, there was no express or implied



direction for NTPC that for its various individual projects, it has to seek approval for its technology selected. The Commission only observed that on the basis of the guidelines/recommendation by CEA and operational parameters determined by CEA, the Commission will approve expenditure after the prudence check as per Regulation 14(3) of the 2014 Tariff Regulations. There was no direction that for each plant of the Petitioner for undertaking the implementation of ECS, it is required to approach CEA for getting the selected technology ratified.

- f) All the 47 beneficiaries of NTPC were made Respondents in the Petition No. 98/MP/2017. Tata Power Delhi Distribution Limited (TPDDL) has contended in Petition No. 98/MP/2017 that the Petitioner had to comply and incur expenditure as per prudent commercial discretion and practices and the Commission is only required to carry out prudence check once the expenditure has actually been incurred by the generating company. Now the Respondents cannot change their stand and contend that prior approval of the beneficiaries was required before incurring expenditure.
- g) In addition to compliance with the MoEFCC Notification dated 7.12.2015 within a period of 2 years, the progress of the work was also being monitored by the Hon'ble Supreme Court. The non-compliance of new revised emission norms would have resulted in revocation of environment clearance, which in turn would have affected the beneficiaries and consumers.
- h) The Board of Directors of the Petitioner approved the proposal to award the contracts for the FGD package. The investment approval for the each project has also been accorded by the Board of Directors.
- i) In most of the cases, the tenders were floated as early as possible owing to strict timeline for complying with the revised emission standards. Regulation 29 of the 2019 Tariff Regulations does not prohibit any generator for tendering before the approval granted under Regulation 29(3).
- j) The Supreme Court on the basis of affidavits of CEA and Ministry of Power in the case of MC Mehta Vs. Union of India, prescribed the timeline of December, 2021 for implementation of revised emission norms for generating stations of NTPC and for this reason, the tenders were floated/awarded before the 2019 Tariff Regulations. He submitted that a fair and transparent bidding process has been followed to discover the most competitive price.
- k) Irrespective of the useful life of the plant, the mandate of the MoEFCC Notification dated 7.12.2015 had to be implemented.

3. The learned counsel for the Petitioner submitted that CEA *vide* its letter dated 24.2.2021 has itself acknowledged that the earlier cost estimation is approximately three years old and the cost of FGD installation has increased due to efflux of time. Accordingly, CEA is likely to come up with new cost norms. The Commission also in



various orders like order dated 11.11.2019 in Petition No. 152/MP/2019, order dated 23.4.2020 in Petition No. 446/MP/2019 has recognized that the cost provided by CEA was indicative in nature and the cost of FGD has increased due to various factors.

4. As regards the selection of the WFGD (Wet limestone based FGD) technology, the learned counsel for the Petitioner submitted that as per CEA advisory dated 7.2.2020, WFGD technology is suitable for any unit size. He submitted that neither the MoEFCC Notification nor the Regulations provided for selection of a particular technology. He submitted that the WFGD technology has been selected over other technologies due to its various advantages like 98% efficiency in SO<sub>2</sub> removal, lower cost for reagent consumption, suitability for high PLF units, abundance of suppliers, etc. On comparison with other technologies, WFGD technology has been regarded as the most versatile and prominent technology to meet the revised emission norms. He further submitted that the Petitioner has invited bids on the basis of region instead of plant/station-wise bids with the purpose to reap the benefits of economies of scale and discover the lowest possible price through domestic competitive bidding. As regards the reasons for not selecting the sea based FGD for coastal power stations like Simhadri-I and Simhadri-II, he submitted that these stations have closed cycle water system and that the Sea Water FGD system is suitable for Open Cycle Water System. He further submitted that CEA has also ratified WFGD technology in its two guidelines dated 20.2.2019 and 7.2.2020.

5. On the issue of compliance of Regulation 29 of the 2019 Tariff Regulations, the learned counsel for the Petitioner submitted that Regulation 26 of the 2019 Tariff Regulations which provides for the additional expenditure incurred beyond the original scope does not contemplate any implied or express consent of the beneficiaries before incurring any additional capital expenditure. The contention of the Respondents that cost-benefit analysis has not been carried by the Petitioner is not tenable as Regulation 29(2) of the 2019 Tariff Regulation does not provide for carrying out cost-benefit analysis. It is for the Commission after the prudence check under Regulation 29(3) to grant approval for expenditure after due consideration of the reasonableness of the cost estimates, financing plan, cost-benefit analysis etc. As regards sharing of the proposal before initiating the process of bidding or filing of the instant petition, the learned counsel for the Petitioner placing reliance on Regulation 5 of the 2019 Tariff Regulations and submitted that this Regulation explicitly requires giving prior notice to the generating company or other transmission licensee while seeking approval of the date of commercial operation. He submitted that unlike Regulation 5 which categorically provides that prior notice is required to be given to the persons affected, Regulations 29(1) and 29(2) do not cast any obligation on the Petitioner to share the proposal prior to the filing of the petition. Regulation 29(1) merely provides sharing of the proposal and filing of the petition. He submitted that the Petitioner has discharged its obligations as provided in Regulation 29 of the 2019 Tariff Regulations.

6. As regards compliance with norms of NO<sub>x</sub>, the learned counsel for the Petitioner submitted that with relaxation in the norms for NO<sub>2</sub> from 300 mg/Nm<sup>3</sup> to 450 mg/Nm<sup>3</sup> for



plants installed between 1.1.2004 and 31.12.2016 vide MoEFCC notification dated 19.10.2020, installation of SCNR technology for NO<sub>2</sub> control is not required at present.

7. The learned counsel for the Petitioner submitted that the Petitioner has submitted the information as directed by the Commission vide Record of Proceeding (ROP) dated 12.3.2021, vide affidavit dated 24.3.2021 and has also provided the same to the beneficiaries.

9. The representative of MPPMCL sought two weeks' time to submit their reply to the information filed by the Petitioner. The Commission directed the beneficiaries, including MPPMCL, to submit their reply by 15.4.2021 and the Petitioner to file rejoinder, if any, by 22.4.2021 and observed that no further time will be granted.

10. Subject to the above, the Commission reserved the order in the matters.

**By order of the Commission**

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

