## CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. Subject	:	183/MP/2020 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 <b>Barh Super Thermal Power Station Stage-II (2x660 MW)</b> in compliance of Ministry of Environment and Forests and Climate Change, Government of India notification dated 7.12.2015.
Petition No. Subject	:	333/MP/2020 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 <b>Talcher Super</b> <b>Thermal Power Station Stage-I (1000 MW)</b> in compliance with the Ministry of Environment and Forests and Climate Change, Government of India notification dated 7.12.2015.
Petition No. Subject	:	508/MP/2020 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 <b>Farakka Super</b> <b>Thermal Power Station, Stage-I &amp; II (1600 MW)</b> in compliance with the Ministry of Environment and Forests and Climate Change, Government of India notification dated 7.12.2015.
Petition No. Subject	:	342/MP/2020 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 <b>Farakka Super</b> <b>Thermal Power Station, Stage-III (1x500 MW)</b> in compliance with the Ministry of Environment and Forests and Climate Change, Government of India notification dated 7.12.2015.



Petition No. Subject	:	522/MP/2020 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 <b>Kahalgaon Super</b> <b>Thermal Power Station Stage-I (4x210 MW)</b> in compliance with the Ministry of Environment and Forests and Climate Change, Government of India notification dated 7.12.2015.
Petition No. Subject	:	517/MP/2020 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 <b>Kahalgaon Super</b> <b>Thermal Power Station, Stage-II (1500 MW)</b> in compliance with the Ministry of Environment and Forests and Climate Change, Government of India notification dated 7.12.2015.
Date of Hearing	:	29.4.2021
Coram	:	Shri P. K. Pujari, Chairperson Shri I. S. Jha, Member Shri Arun Goyal, Member Shri Pravas Kumar Singh, Member
Petitioner	:	NTPC Ltd.
Respondents	:	West Bengal State Electricity Distribution Co. Ltd and others
Parties present	:	Shri Venkatesh, Advocate, NTPC Shri Ashutosh K. Srivastava, Advocate, NTPC Shri Aditya Ajay, Advocate, NTPC Shri Abhiprav Singh, Advocate, NTPC Shri Abhishek Nangia, Advocate, NTPC Shri Neil Chatterjee, Advocate, NTPC Shri Siddharth Joshi, Advocate, NTPC Shri Shashwat Kumar, Advocate, BSPHCL Shri Rahul Chouhan, Advocate, BSPHCL Shri Rahul Chouhan, Advocate, TANGEDCO Shri Nitin Kala, Advocate, TPDDL Shri Kunal Singh, Advocate, TPDDL Shri Kunal Singh, Advocate, Respondent, GRIDCO Ms. Himanshi Andley, Advocate, GRIDCO Ms. Suparna Srivastava, Advocate, PSPCL

Shri Tushar Mathur, Advocate, PSPCL Shri A.S. Pandey, NTPC Shri V. K. Garg, NTPC Shri Ishpaul Uppal, NTPC Shri R. Alamelu, TANGEDCO Ms. R. Ramalakshmi, TANGEDCO Ms. Megha Bajpeyi, BRPL Shri S.E. SPA TC, UPPCL Shri Brijesh Kumar Saxena, UPPCL Shri Brijesh Kumar Saxena, UPPCL Shri Tarun Ahuja, RUVNL Shri Rajiv Arora, RUVNL Ms. Shefali Sobti, TPDDL Shri Madhusudan Sahoo, GRIDCO Shri Anurag Naik, MPPMCL Shri Ankit Bansal, PSPCL

## **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 sought by the Commission in Record of Proceeding (RoP) dated 12.3.2021, vide affidavit dated 24.3.2021, and has also provided the same to the beneficiaries. The learned counsel reiterated the submissions made on 12.3.2021 and explained the circumstances which led to commencing the process of tendering and awarding FGD systems. It is submitted that while examining the mandate for the Petitioner under Regulation 29 of the 2019 Tariff Regulations, the Commission should take into consideration the circumstances under which the Petitioner proceeded to award the contracts for installation ECS and the fact that the implementation of ECS was being monitored by Hon'ble Supreme Court of India, which had prescribed a strict timeline for implementation of revised emission norms.

3. On the aspect of selection of technology, the learned counsel for the Petitioner submitted that neither the MOEFCC Notification dated 7.12.2015 nor the 2014 and the 2019 Tariff Regulations provide for selection of particular type of technology for a power plant. He further submitted that the CEA has also not specified any particular type of technology for power plants. Regulation 29 of the 2019 Tariff Regulations does not mandate consulting CEA for selection of technology for installation of ECS. He submitted that the Petitioner has invited bids for installation of ECS in lots, instead of plant/station wise to avail the benefits of economies of scale and discover the lowest possible price through domestic competitive bidding. It is pointed out that owing to the space constraints at Tanda Power plant, the Petitioner selected Dry Sorbent Technology at Tanda. The contractual obligations arising between the Petitioner and the beneficiaries regarding the methodology to be adopted in case of "beyond the useful life of the plant" is to be adjudicated in independent proceedings. He submitted that the



Board of Directors approved the proposal to award the contracts for the FGD package. The investment approval for the each project has also been approved by the Board of Directors. He submitted that the Petitioner has now shared all the possible information in compliance of Regulation 29 of the 2019 Tariff Regulations with respect to installation of ECS at various stations/plants of the Petitioner. Accordingly, the obligation of the Petitioner under Regulation 29 of the 2019 Tariff Regulations stands discharged.

4. The learned counsel appearing for TANGEDCO in Petition No. 508/MP/2020 and 333/MP/2020 submitted that the reply in Petition No. 508/MP/2020 is ready and requested the Commission to permit it to upload the same. Referring to the MOEFCC notification dated 31.3.2021 wherein the Environment (Protection) Rules were amended, he submitted that the thermal power plants about to retire soon are not required to meet the specified norms and are only required to submit only an undertaking to Central Pollution Control Board and CEA for exemption on the ground of retirement of such plant. The learned counsel for TANGEDCO submitted that the Petitioner may be directed to furnish the retirement plan of the plant so as to avoid huge expenditure at the fag end of the life of the plant towards FGD. He further submitted that the existing beneficiaries have fully serviced the fixed cost of the plant and therefore, it is mandatory on the part of the Petitioner to furnish all relevant details to enable the beneficiaries to take an informed decision. He submitted that Unit I, II, III, IV and V of Farakka thermal Power plant were declared under commercial operation on 1.11.1986, 1.10.1987, 1.9.1988, 1.7.1996 and 1.4.1995 respectively. All the units except Unit IV have completed their useful life of 25 years. Therefore, the Petitioner be directed to spell out the retirement plan of the units. He submitted that the Petitioner has not stated whether a new stack has been considered or modification of the existing stack has been considered. On the issue of shutdown of unit to be treated as deemed availability, the learned counsel referring to the Commission's order dated 11.112019 in Petition No. 152/MP/2019, submitted that treating the period of shutdown as deemed available will result in unjust enrichment of the generator at the cost of beneficiaries. The Petitioner is required to plan the synchronization of the interconnection of FGD with the annual overhaul so to minimize the additional downtime required for FGD connection. He further submitted that the Petitioner has not furnished necessary information on the sustenance of all the units like details of Residual Life Assessment (RLA)/ Renovation and Modernization study conducted. The Petitioner proposes to run the plant for another 10 years, for which additional cost would be incurred for running the plant. As the cost will be passed on to the beneficiaries and in turn to the consumers, the reliability of the existing units for a period of another 10 years by the means of RLA study has not been justified by the Petitioner. He further submitted that NTPC, being a PSU, should take responsible decisions in the interest of the general public.

5. Learned counsel for UPPCL made common submission in all the petitions listed for hearing today. He submitted that as per the information provided by the Petitioner, after MOEF issued notification on 7.12.2015, the Board of Directors of the Petitioner Company took a decision to implement FGD on 22.3.2017 i.e. after a gap of 1 year and 4 months. He further submitted that NIT was issued after a further delay of about 2



years and 5 months from the date of the decision of the Board of Directors. Accordingly, the tenders have been issued after a cumulative delay of 3 years and 9 months from the date of the MOEF Notification. He submitted that the said delay of 3 years could have been avoided by the Petitioner by taking speedy Board decisions and timely issuance of NIT. He submitted that ECS could have been implemented well before the expiry of useful life of plants like in case of Kahalgaon-I. He further submitted that the decision of the Board of Directors, invitation of tenders and issuance of LOA could have well been completed within 9 months to 12 months from the date of MOEF Notification dated 7.12.2015 i.e., by 1<sup>st</sup> January, 2017 as in the case of FSTPS-IV and Dadri-II. But the Petitioner due to its inaction allowed the time to lapse and as consequence the useful life of the power plant/ station has expired. He further submitted that the information relating to the Technical part of NIT has not been submitted by the Petitioner. There is no information regarding the gestation period for setting up FGD and this information is not available in LOAs issued to successful bidders, which is essential to determine the useful life of FGD for the purpose of depreciation. In case of Rihand-I STPS, the extended life of the stations has also not been provided so that useful life of the FGD could be determined. The learned counsel for the UPPCL submitted that in the absence of information regarding the implementation time line quoted by the bidders, date of start of work, balance/extended life of the generating station, and scheduled COD of FGD, the useful life of FGD cannot be determined under Regulation 33 of the 2019 Tariff Regulation. As the CEA is in the process of reviewing the cost of FGD, he prayed to the Commission to consider approving the cost of FGD provisionally at existing CEA rate subject to adjustment after CEA cost estimates. He further sought time to file is written submissions.

Learned counsel appearing on behalf of GRIDCO submitted that the Commission 6. had directed the Petitioner in ROP dated 21.8.2020 to submit the cost benefit analysis regarding useful life of the plant. He submitted that this direction of the Commission has not been complied with by the Petitioner. It is submitted that as per Regulation 29(3) of the 2019 Tariff Regulations, cost benefit analysis is mandatory before seeking the approval for incurring expenditure for installation of ECS. Learned counsel pointed out that CEA guidelines dated 7.2.2020 also provide for conducting cost benefit analysis and to consider balance plant life before selecting of particular type of technology. Further without complying with the Commission's directions regarding cost benefit analysis and consultation with beneficiaries regarding the extension of useful life of the plant, the Petitioner cannot approach for in-principle approval for incurring capital expenditure for installation of ECS. He further submitted that the Petitioner has not provided any information /study 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 cost effective technology. It is submitted that the Commission may direct the Petitioner to furnish the present emission level of SO<sub>2</sub> of the TSTPS Units as certified by competent Authority so as to ascertain the requirement of FGD and cost estimate. Learned counsel submitted that the submissions of GRIDCO on other issues like variation in cost against the CEA estimate cost, process of bidding and tender etc. in its reply may also be considered.



The learned counsel appearing on behalf of BRPL in Petition No. 508/MP/2020, 7. 522/MP/2020 and 517/MP/2020 sought time to file its response to the rejoinder filed by the Petitioner and submitted that it is adopting the arguments of UPPCL and GRIDCO. He submitted that at the stage of contemplating expenditure for installation of ECS, the Petitioner has a statutory obligation to share its proposal as per the Regulation 29(1) of the 2019 Tariff Regulations. The Commission observed that in order dated 28.4.2021 in Petition No. 335/MP/2020 & Ors, in-principle approval was granted under Regulation 11 of the 2019 Tariff Regulations. The Commission further observed that the Petitioner's claim of total capital cost towards installation of FGD, apart from hard cost includes IDC, IEDC, FERV, taxes and duties and other costs. As regards Farakka Thermal Power Station, Stage I and II, the learned counsel for BRPL submitted that the Board of directors gave approval for the implementation of ECS on 22.3.2017, invitation for bids were initiated on 19.8.2019, the investment approval was accorded on 9.5.2020, the Petition was filed on 20.5.2020. The Petitioner did not share the information from date of approval from the Board of Directors till the filing of the petition as required under Regulation 29(1) of the 2019 Tariff Regulations. The mandate of Regulation 29(1) of the 2019 Tariff Regulations was not followed by NTPC. He further submitted that the Petitioner has not submitted the cost benefit analysis. It is pointed out that similar approach was adopted by the Petitioner in case of Kahalgaon I and II Thermal power Plant station and only at the directions of the Commission vide Record of Proceeding dated 12.3.2021 and 31.3.2021, the Petitioner has furnished the desired information. In all three projects, from the date of board approval till the date of invitation of bids, there was a gap of 2 years and 6 months, from the date of invitation of bids to date of investment approval there was gap of 8 months and there was further a gap of 11 months from date of filing of petition till today, the Petitioner could have easily complied with Regulation 29 of the 2019 Tariff Regulations. He further requested one week's time to submit short written submissions.

8. The learned counsel appearing for TANGEDCO in Petition 522/MP/2020, submitted that with relaxation in the norms for NO2 vide MoEFCC notification dated 19.10.2020, from 300 mg/Nm3 to 450 mg/Nm3 for the plants installed between 1.1.2004 and 31.12.2016, installation of SCNR technology for NO2 control is not required. Accordingly, the Petitioner may be directed to submit the details by way of affidavit regarding stations wherein it is proposing to install ECS for NOx reduction.

9. The learned counsel appearing for BSPHCL in Petition 183/MP/2020 submitted that it is adopting the arguments made by other learned counsels in Petition No. 515/MP/2020, 67/MP/2020, 508/MP/2020 and 520/MP/2020.

10. The learned counsel appearing on behalf PSPCL in Petition No. 517/MP/2020 submitted that it is adopting the arguments made by other learned counsels. She further submitted that the Petitioner has attributed the deviation from CEA benchmark cost to 'efflux of time' and 'uncontrollable factors'. Therefore, the Petitioner may be directed to give the details of the uncontrollable factors and reasons for delay in the bidding process. She further submitted if the delay is unjustified on part of the Petitioner and has resulted in escalation of the cost, the beneficiaries cannot be made liable to bear



such cost. She further submitted that if the Petitioner wishes to place on record any information /details with respect to invitation of tenders, details of uncontrollable factors, the same may be allowed to be furnished for the effective adjudication of the petitions.

11. The learned counsel appearing on behalf of TPDDL in Petition 501/MP/2019, 267/MP/2020, 522/MP/2020, 496/MP/2020 and 501/MP/2020 submitted that it is adopting the arguments made by other learned counsels. He submitted that if the cost claimed by the Petitioner is commercially unviable, it may not be prudent to extend the life of the plant based on FGD and the procurers/discoms should be free to exercise their right to exit from the PPA. He further submitted that TPDDL therefore reserves its statutory right to exit from the PPA if the cost of FGD allowed is commercially unreasonable. He further submitted that the Petitioner cannot bypass procedure laid down in Regulation 29 of the 2019 Tariff Regulation in the grab of urgency or stringent time line. He further sought time of time its reply/submission in the matters.

12. The learned counsel appearing on behalf of MPPMCL in Petition No. 517/MP/2020 submitted that the Petitioner may be directed to submit the cost benefit analysis for different available technologies and further that the reply filed by it in Petition No. 517/MP/2020 may be taken on record.

13. The Commission directed the Petitioner to clarify the issues raised by the beneficiaries/ Respondents by 24.5.2021 and the beneficiaries/ Respondents to file their comments, if any, by 11.6.2021. The Commission further permitted the parties to file their Written Submissions. The Commission also directed the parties to comply with the directions with the timeline specified and observed that no extension of time shall be granted.

14. The Petition shall be listed for final hearing in due course for which separate notice will be issued.

## By order of the Commission

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