

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

- Petition No.** : **94/MP/2019**
Subject : Petition under Section 79 of the Electricity Act, 2003 read with Regulation 14(3)(ii) and Regulation 8(3)(ii) of the Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2014 for approval of Expenditure on installation of various Emission control systems in Durgapur Thermal Power Station (DSTPS)(1000MW) for compliance of Ministry of Environment and Forests and Climate Change, Government of India Notification dated 7.12.2015.
- Petition No.** : **459/MP/2019**
Subject : Petition under Section 79 of the Electricity Act, 2003 read with applicable Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2019 for approval of Expenditure on installation of various Emission Control Systems in Bokaro 'A' Thermal Power Station ("BTPS 'A')(1x500MW) for compliance of Ministry of Environment and Forests and Climate Change, Government of India Notification dated 7.12.2015.
- Petition No.** : **460/MP/2019**
Subject : Petition under Section 79 of the Electricity Act, 2003 read with applicable Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2019 for approval of Expenditure on installation of various Emission Control Systems in Koderma Thermal Power Station (KTPS) (1000 MW) for compliance of Ministry of Environment and Forests and Climate Change, Government of India Notification dated 7.12.2015.
- Petition No.** : **461/MP/2019**
Subject : Petition under Section 79 of the Electricity Act, 2003 read with applicable Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2019 for approval of Expenditure on installation of various Emission Control Systems at Mejia Thermal Power Station (MTPS) (Unit 1 to 6) (1340MW) for compliance of Ministry of Environment and Forests and Climate Change, Government of India Notification dated 7.12.2015.
- Petition No.** : **462/MP/2019**
Subject : Petition under Section 79 of the Electricity Act, 2003 read with applicable Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2019 for approval of Expenditure on installation of various Emission Control Systems in Mejia Thermal Power Station (MTPS) Unit 7 & 8

(1000 MW) for compliance of Ministry of Environment and Forests and Climate Change, Government of India Notification dated 7.12.2015.

Petition No. : **463/MP/2019**
Subject : Petition under Section 79 of the Electricity Act, 2003 read with applicable Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2019 for approval of Expenditure on installation of various Emission Control Systems in Raghunathpur Thermal Power Station (RTPS)(1200 MW) for compliance of Ministry of Environment and Forests and Climate Change, Government of India Notification dated 7.12.2015.

Date of Hearing : 1.6.2021

Coram : Shri P. K. Pujari, Chairperson
Shri I. S. Jha, Member
Shri Pravas Kumar Singh, Member

Petitioner : Damodar Valley Corporation (DVC)

Respondents : Punjab State Power Corporation Limited (PSPCL) and Ors.

Parties present : Shri Venkatesh, Advocate, DVC
Shri Ashutosh K. Srivastava, Advocate, DVC
Ms. Swapna Seshadri, Advocate, PSPCL, HPPC
Shri Anand Ganesan, Advocate, PSPCL, HPPC
Ms. Ritu Apurva, Advocate, PSPCL, HPPC
Shri Amal Nair, Advocate, PSPCL
Shri Manoor Shoket, Advocate, TPDDL
Shri Kunal Singh, Advocate, TPDDL
Ms. Shefali Sobti, TPDDL
Shri R. B. Sharma, Advocate, BRPL
Shri Megha Bajpeyi, BRPL
Shri Subrata Ghoshal, DVC

Record of Proceedings

The matters were called out for virtual hearing. All the six petitions were heard together as a common question of law and facts is to be decided by the Commission, between a common Petitioner and different Respondents.

2. The learned counsel for the Petitioner submitted a Note for Arguments during the course of hearing and requested to take it on record and told that the same will be shared with the Respondents. Referring to the Note for Arguments, in which the process of tendering and awarding FGD (Flue-Gas Desulphurization)_systems was explained, made the following submissions:

- a) The Environment Clearance (EC) in case of Petition No. 94/MP/2019, 459/MP/2019, 460/MP/2019, 461/MP/2019, 462/MP/2019, 463/MP/2019 was granted on 27.11.2006, 30.3.2007, 23.6.2005, (14.9.1995 and 12.11.2001), 10.2.2004 and 18.10.2007 respectively.
- b) Petition No.94/MP/2019 was filed prior to the notification of 2019 Tariff Regulations and the other petitions are filed after the notification of the 2019 Tariff Regulations. However, the process for installation of ECS (emission control system) was initiated in all these petitions in the 2014-19 tariff period.
- c) NIT was floated for Durgapur, Bokaro A, Koderma, Mejia Unit 1 to 6, Mejia Unit 7&8 and Raghunathpur on 12.9.2018, 4.10.2018, 4.10.2018, 31.10.2019, 4.10.2018 and 4.10.2018 respectively. For all the projects, NIT was floated during the 2014-19 tariff period except for the Mejia project, where the NIT was floated on 31.10.2019 i.e. during the 2019-24 tariff period.
- d) In 2016, Maithon Power Limited (“MPL”) filed Petition No. 72/MP/2016 for “in-principle approval” of the capital cost to meet the Revised Emission Norms in terms of the MoEFCC Notification dated 7.12.2015 and the Commission vide order dated 20.3.2017 observed that the 2014 Tariff Regulations do not provide for granting in-principle approval. However, the Commission directed MPL to approach CEA to decide specific optimum technology, associated costs and major issues to be faced in installation of the Flue-Gas Desulphurization (FGD) system.
- e) CEA vide its letter dated 10.4.2018 directed all generators to file a Detailed Project Report (“DPR”) with the concerned Regulator for approval of Change in Law. Accordingly, the Petitioner prepared the required DPRs for its various projects.
- f) The Commission vide order dated 20.7.2018 in Petition No. 98/MP/2017, declared MOEFCC notification dated 7.12.2015 as ‘Change in Law’ event and observed that the expenditure incurred on the basis of the guidelines notified by the CEA would be considered for approval of capital cost. On the basis of the order dated 20.7.2018 in Petition No. 98/MP/2017, the Petitioner filed the instant petitions.
- g) The Petitioner floated NIT from 12.9.2018 onwards for its various projects in order to meet the stringent timeline for installation of FGD system.
- h) In 2018, the Petitioner submitted Feasibility Report along with the tender documents of DSTPS (Durgapur Super Thermal Power Station) to CEA for its observation. NTPC (Consultant of DVC) recommended WFGD (Wet Limestone-based FGD) system for installation in DSTPS as the same was a proven technology recommended by CEA. Accordingly, after considering the feasibility report of the said technology for each of its plants, the Petitioner adopted WFGD technology for all of its stations.

- i) On 12.10.2018, the Petitioner issued technical specification for its 500 MW and 600 MW projects for reduction of NO_x generation in its generating stations. Accordingly, the Petitioner invited bids for NO_x package for its six projects.
- j) On 26.11.2018, a meeting of officials of CEA, the Petitioner and NTPC was held and in the said meeting observations were made by CEA on proposal for installation of FGD for DSTPS.
- k) On 27.11.2018, the Petitioner wrote a letter to CEA apprising about complying with CEA's observation for installation of WFGD system for DSTPS and sought clarification with respect to other power plants of the Petitioner.
- l) Pursuant to letter dated 27.11.2018, CEA gave 'No Objection' to the Petitioner regarding the tendering process and award of contract for ECS in Petitioner's power plants on 28.11.2018.
- m) Accordingly, the instant petitions have been filed. However, Petition No. 94/MP/2019 was filed in the 2014-19 tariff period. On 15.7.2019, NOA was issued for supply of plant & equipment and for work of providing all services for installation of FGD system.
- n) Most of the units of the Petitioner are of 500 MW capacity and due to its various advantages like 98% efficiency in SO₂ removal, lower cost for reagent consumption, suitability for high PLF units, abundance of suppliers, etc., WFGD technology has been selected for the thermal stations of the Petitioner. WFGD technology has been regarded as the most versatile and prominent technology to meet the revised emission norms as regards SO₂.
- o) The capital cost discovered through the Domestic Competitive Bidding Process for the various stations is comparable to CEA's benchmark cost. The cost of BTPS (Bokaro Thermal Power Station) is on the higher side as it is single unit plant and due to higher cost on the ancillary activities.

3. The learned counsel appearing on behalf of PSPCL in Petition No. 94/MP/2019 sought time to file their reply to the submissions made by the Petitioner.

4. Learned counsel appearing on behalf of PSPCL in Petition No. 460/MP/2019 sought time to file their reply to the submissions made by the Petitioner.

5. Learned counsel appearing on behalf of BRPL in Petition No. 461/MP/2019 submitted that the Petitioner has not filed the complete information as sought by the Commission in the last Record of Proceedings. He submitted that the Petitioner has not submitted the reasons for not calling International Competitive bidding (ICB) in case of installation of FGD system and list for segregation of thermal power station where the tender process took place prior to and after the enactment of the 2019 Tariff Regulations. He requested the Commission to direct the Petitioner to submit the desired information. Learned counsel for BRPL submitted that the reply was filed in October, 2020 on the preliminarily issues. He sought time to file its reply in response to the

information filed on additional affidavit by the Petitioner.

6. Learned counsel appearing on behalf of TPDDL in Petition No. 461/MP/2019 submitted that Mejja Thermal Power Station (MTPS) needs to be distinguished from other thermal power stations of the Petitioner. He submitted that for MTPS (Units 1 to 6), NIT was issued on 31.10.2019 and the NoA was awarded in the year 2021. He submitted that in MTPS, tendering of process and awarding of FGD package took place after the notification of the 2019 Tariff Regulations. He requested the Commission to take the said fact into consideration and adopt a different approach while dealing with installation of FGD system in case of MTPS. He further submitted that the Units 1, 2 and 3 of MTPS were declared under commercial operation in 1996, 1997 and 1998 respectively whereas Units 4, 5 and 6 were declared under commercial operation on 13.2.2005, 29.2.2008 and 24.9.2008 respectively. He submitted that the useful life of the Unit 1 has already been completed on March, 2021 and for Unit 2 and 3, the useful life comes to an end in the year 2023 and 2024 respectively. He further submitted that if the cost claimed by the Petitioner is commercially unviable, it may not be prudent to extend the life of the power plant based on FGD system and the procurers/ discoms should be free to exercise their right to exit from the PPA. He submitted that TPDDL, therefore, reserves its statutory right to exit from the PPA if the cost of FGD system is commercially unreasonable. He submitted that till now no arrangement has been arrived between the Petitioner and TPDDL under Regulation 17 of the 2019 Tariff Regulations. As regards the hard cost, the Petitioner has not given the reasons for higher cost of ECS when compared to the CEA benchmark cost. He sought time to file reply/ submissions in the matter.

7. In response to the arguments advanced by learned counsel for TPPDL on the aspect of differential treatment/ approach to be adopted for dealing with MTPS, the learned counsel for the Petitioner submitted that the petition for MTPS was filed in November, 2019. The Petitioner had filed the DPR along with the cost of the project and the copy of the same was also shared with the beneficiaries. He further submitted that 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. As regards the cost variation, the learned counsel for the Petitioner submitted that the details for the same will be submitted.

8. The Commission directed the Petitioner to clarify the issues raised by the Respondents during the hearing and the following information, on affidavit, by 21.6.2021, with a copy to the Respondents and the Respondents to file their reply by 12.7.2021 and the Petitioner to file its rejoinder, if any, by 23.7.2021.

- (i) The present emission level of SO₂ of its Thermal Power Units certified by competent Authority.
- (ii) SO_x and NO_x emission levels during the past three years as submitted to the Pollution Control Board.
- (iii) Whether the Respondents were consulted regarding the proposed additional capital expenditure prior to floating/ finalizing the bid for

incurring such additional capital expenditure, if not, reasons for the same;

- (iv) Copy of NIT along with bid opening/closing dates.
- (v) 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/ DVC guidelines.
- (vi) 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.
- (vi) Station-wise/unit-wise break-up of the capital cost claimed for FGD as per the following table:

Unit No.	Capacity (MW)	CEA's indicative hard cost (₹ lakh per MW)	Hard cost claimed (₹ lakh per MW)	*Total IDC claimed (₹ lakh)	*Total IEDC claimed (₹ lakh)	#Total FERV claimed (₹ lakh)	*Total taxes & duties claimed (₹ lakh)	Total other costs claimed (₹ lakh)	**Total costs claimed (₹ lakh)
1									
2									
3									
4									
5									
6									

- (vii) Reasons for deviation from CEA's indicative hard cost, if applicable.
- (viii) If any contract for NOx reduction at the generating station has also been awarded, the cost of the same is to be segregated and the capital cost for FGD is to be provided separately and distinctly.
- (ix) Present status of implementation of FGD.

9. The Commission further directed the parties to comply with the directions with the timeline specified and observed that no extension of time shall be granted.

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

By order of the Commission

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(V. Sreenivas)
Deputy Chief (Law)