



**ORDER  
OF THE  
WEST BENGAL ELECTRICITY REGULATORY  
COMMISSION**

**IN CASE NO. OA- 448/22-23**

IN REGARD TO THE APPLICATION SUBMITTED BY THE WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED IN TERMS OF CLAUSE 2.8.4.1 OF THE WEST BENGAL ELECTRICITY REGULATORY COMMISSION (TERMS AND CONDITIONS OF TARIFF) REGULATIONS, 2011 AS AMENDED FROM TIME TO TIME FOR INVESTMENT APPROVAL OF CAPITAL EXPENDITURE TO THE TUNE OF ₹ 19000.00 LAKH FOR INSTALLATION OF EMISSION CONTROL SYSTEM USING DRY SORBENT INJECTION (DSI) METHOD IN RESPECT OF UNIT NOS. 3, 4, 5 AND 6 OF 210 MW EACH AT KOLAGHAT THERMAL POWER STATION.

**PRESENT:**

**DR. MALLELA VENKATESWARA RAO, CHAIRPERSON**

**SRI PULAK KUMAR TEWARI, MEMBER**

**DATE: 26.12.2023**



### **FACTS IN BRIEF**

- 1.0 The present petition has been filed by West Bengal Power Development Corporation Limited ("**Petitioner** / WBPDCCL") on 2<sup>nd</sup> March, 2023 in terms of the clause 2.8.4.1 of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011, as amended from time to time (in short "Tariff Regulations"), seeking investment approval of capital expenditure to the tune of Rs. 19000.00 Lakh (including taxes and duties) for installation of Emission Control System of Dry Sorbent Injection (DSI) in respect of Unit Nos. 3, 4, 5 and 6 (210 MW each) at Kolaghat Thermal Power Station.
- 2.0 The Petitioner Company, WBPDCCL, wholly owned by the Government of West Bengal which was constituted in the year 1985 under the Companies Act, 1956, is a Generating Company in terms of Section 2(28) of the Electricity Act, 2003 and is engaged in the business of generation of electricity within the State.
- 3.0 The petition has been admitted by the Commission on 31-3-2023.
- 4.0 The petition is filed by WBPDCCL to comply with the provisions of new environment regulations, which were notified on 7<sup>th</sup> December 2015 by the Ministry of Environment Forest and Climate Change (MoEF & CC), Government of India as applicable to coal fired thermal power plants in the country. The new environmental regulations need to be complied with by all operating thermal power stations and new thermal power projects within a period of two years from the date of the notification. Further to the above notification, an amendment was issued by MoEF & CC for stack height. As per the latest amendment issued by MoEF & CC on 28<sup>th</sup> June, 2018, the emission is to be measured and corrected at 6% O<sub>2</sub>, dry basis of flue gas.
- 5.0 Out of total six units in Kolaghat Thermal Power Station (KTPS) with capacity of 210 MW each, Unit 1 & 2 have since been decommissioned. While in the first stage, three units were commissioned between 1984 and 1990, three more were commissioned between 1991 and 1993 in the second stage. Thus, first stage of KTPS is more than thirty years old whereas second stage is more than twenty years old. Most of the equipment in systems and sub-systems have crossed its useful working life. A table showing capacity, COD (Date of Commercial Operation) and age of the six units of Kolaghat TPS (KTPS) are given below:



Investment approval of Capital Expenditure to the tune of ₹ 19000.00 lakh for installation of Emission Control System using Dry Sorbent Injection (DSI) method in respect of Unit Nos. 3, 4, 5 and 6 of 210 MW each at Kolaghat Thermal Power Station



Table-1: Showing Capacity, COD and age of six units of KTPS

Unit	Capacity (MW)	COD	Age as on 31.01.2023
1	210	13.08.1990	32 Yrs. 172 days
2	210	16.12.1985	37 Yrs. 47 days
3	210	12.10.1984	38 Yrs. 112 days
4	210	01.04.1995	27 Yrs. 306 days
5	210	14.05.1991	31 Yrs. 263 days
6	210	01.01.1994	29 Yrs. 31 days

- 6.0 The petitioner has further submitted that the present notification from MoEF & CC modifies existing norms (prior to December 2016) related to emission of Suspended Particulate Matter (SPM) and introduces new norms for emission of SO<sub>x</sub>, NO<sub>x</sub> and mercury from thermal power plants (TPSSs). A summary of new regulations on air emission norms is given in Table – 2 below:

Table-2: Environment Norms as per MoEF & CC notification dated 07.12.2015.

Year	SPM	SO <sub>2</sub>	NO <sub>x</sub>	Mercury
Pre 2003	100 mg/ Nm <sup>3</sup>	600 mg/Nm <sup>3</sup> for 500 MW 200 mg/Nm <sup>3</sup> for >= 500 MW	600 mg/ Nm <sup>3</sup>	0.03 mg/Nm <sup>3</sup> for >500 MW
2003-2016	50 mg/ Nm <sup>3</sup>	600 mg/Nm <sup>3</sup> for < 500 MW 200 mg/Nm <sup>3</sup> for >= 500 MW	450 mg/ Nm <sup>3</sup>	0.03 mg/Nm <sup>3</sup>
Post 2017	30 mg/ Nm <sup>3</sup>	100 mg/Nm <sup>3</sup>	100 mg/ Nm <sup>3</sup>	0.03 mg/Nm <sup>3</sup>

- 7.0 WBPDCCL has made a commitment to National Green Tribunal (NGT), Eastern Zone Bench vide various affidavits to install the DSI based FGD to reduce the SO<sub>x</sub> emission in Kolaghat TPS, which shall be completed by December, 2024.
- 8.0 Following the detailed tendering process, the petitioner has since issued the Letter of Award (LOA) after obtaining administrative approval from the competent authority for installation of DSI (Dry



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Sorbent Injection) type of FGD at Kolaghat TPS for Unit#3, Unit#4, Unit#5 and Unit#6.

The activities in respect of tendering and bid evaluation as submitted by the petitioner are given below:

- E-Tender/NIT was floated at M-Junction portal on 13.11.2020 and even after 4(Four) extensions of due date of submission of bids, not a single bid was received. The said tender was cancelled on 06.04.2021.
- Re-tender with revised qualification requirement (QR) was floated on 26.06.2021 on M-Junction portal. Even after 3 (Three) extensions, only one bid of M/s ISGEC Heavy Engineering Ltd. participated. The technical bid was opened on 07.12.2021 with approval from the competent authority (who is the competent authority). Thereafter bid evaluation was done and the bidder qualified as per QR. Post bid meeting was held with bidder on 05.01.2022. The price bid was received on 07.02.2022 and Quoted price was Rs 19,476.00 lakhs including taxes & duties.
- A meeting for techno-commercial discussion and price justification was done with the bidder by high level Tender Committee on 18.02.2022 as per approval of competent authority where the bidder revised the value of the quotation and submitted a letter of revised price through email dated 24.02.2022. The Revised price of the project is Rs 19,000.00 lakhs including taxes & duties.
- The tender committee found the price reasonable and recommended to award the contract to the qualified and successful bidder, M/s. ISGEC Heavy Engineering Ltd. at the revised price of Rs 19,000.00 lakhs inclusive of taxes & duties after taking approval from the competent authority as per WBPDCCL procurement manual.
- The proposal in this regard was placed before the Board of Directors (BoD) of WBPDCCL for approval. The Board of Directors of WBPDCCL in its 210<sup>th</sup> meeting accorded the approval for award of contract for the DSI system package for KTPS Unit#3, Unit#4, Unit#5 and Unit#6 (4x210 MW) through EPC turnkey package to the qualified and successful bidder, M/s. ISGEC Heavy Engineering Ltd. at a revised price of Rs. 19,000.00 lakh inclusive of taxes & duties.



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- 9.0 The petitioner has also enclosed the copy of the Letter of Award (LoA) for supply, erection and commissioning of Dry Sorbent Injection (DSI) system package for Kolaghat Thermal Power Station Unit#3, Unit#4, Unit#5 and Unit#6 (4 x 210 MW) of WBPDC through EPC Turnkey Package for a total Contract Price of Rs. 19,000.00 lakhs (₹ 190.00 crore) inclusive of all applicable taxes, levies and duties and GST @ 18%.
- 10.0 In addition, the petitioner has also attached a sanction cum allotment order dated 16.12.2022 for Rs. 3.43 crore from the Government of West Bengal which inter alia mentioned Administrative Approval of the project for Rs. 190 crore with 30% equity participation amounting to Rs. 5,700.00 lakh by Government of West Bengal.
- 11.0 It has also been mentioned by the petitioner that the total shut down period required for the project is 18 months from the zero date. The shutdown will be taken in phased manner. As mentioned in the petition, after completion of the project, the SO<sub>x</sub> level at Kolaghat TPS will be below 600 mg/NM<sup>3</sup> in compliance with the MoEF & CC norms. The NO<sub>x</sub> level at Kolaghat TPS is stated to be within the permissible limit of less than 600 mg/NM<sup>3</sup>.
- 12.0 It is submitted by the petitioner that the SPM level of Unit#3 of Kolaghat TPS of 210 MW will be within the permissible limit of 100 mg/NM<sup>3</sup> after completion of ESP & AHP renovation. However, the SPM level of Unit#4, Unit#5 and Unit#6 is above the permissible limit. To reduce the SPM level of Unit#4, Unit#5 and Unit#6, the petitioner is preparing the project report and a separate petition will be filed before the Hon'ble Commission.

#### **OBSERVATION OF THE COMMISSION**

- 13.0 The Commission has noted the commitment made by the petitioner before the National Green Tribunal (NGT), Eastern Zone Bench regarding installation and commissioning of the DSI based FGD by December, 2024 to reduce the SO<sub>x</sub> emission in Kolaghat TPS following the detailed tendering process.
- 14.0 The Commission has noted that the petitioner has since issued the LOA after obtaining administrative approval from the competent authority for installation of DSI (Dry Sorbent Injection) type of FGD at Kolaghat TPS. The Contract Price as per LOA placed on M/s. ISGEC Heavy Engineering Ltd. is ₹ 190.00 crore, which is inclusive of all applicable taxes, levies and duties and GST @ 18%. The petitioner has submitted on record the approval of the project from the Ministry of



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Power, Govt. of West Bengal for Rs. 190.00 Crore vide letter dated 22.7.2022.

- 15.0 In reply to a query of the Commission dated 14.6.2023 with regard to water consumption in Post-DSI scenario, the petitioner (WBPDCCL) vide affidavit dated 30.6.2023 has submitted that the water consumption of Kolaghat TPS will remain within the permissible limit of 3.5 M<sup>3</sup>/MWh as notified in Environment (Protection) Amendment Rules, 2015.
- 16.0 As per LOA dated 02.08.2022, the Contract Period for installation of DSI system is stated to be total 540 days from zero date i.e. 22.08.2022 as mentioned at para # 6 of LOA (Page-11). Therefore, taking the above zero date into consideration, the completion date is 13.02.2024, which is more than ten months ahead of the commitment made before the Hon'ble NGT. Further, bifurcation of activities in details as mentioned at para 6 of LOA dated 29.07.2022, duly accepted by M/s. ISGEC Heavy Engineering Ltd. is also noted by the Commission.
- 17.0 From the submission, it is observed that petitioner has prayed for investment approval under section 2.8.4.1 of the Tariff Regulations. In terms of regulation 2.8.4.1, prior approval of capital expenditure is required in small schemes, where such capital expenditure in a year exceeds Rs. 300 Crore of 5% of the gross fixed asset.
- 18.0 It is also noted that WBPDCCL has retained the services of TCE to study and analyze the impact of the new MoEF & CC norms for WBPDCCL, Kolaghat (4x210) MW operating units in West Bengal state and provide comprehensive optimal solutions to comply with the new regulation standards. The DPR as prepared by TCE is placed on record by the petitioner.
- 19.0 Subsequently, in reply to this Commission's letter dated 14.6.2023, the petitioner vide affidavit dated 30.6.2023 has submitted that the said LOA price has further increased to Rs. 218.08 Crore (including IDC of Rs. 10.45 crore).

### **ORDER**

- 20.0 While taking into consideration various aspects of the submission made in the instant petition, the Commission is inclined to accord in-principle approval for the Contract Price as per LOA placed on M/s. ISGEC Heavy Engineering Ltd. amounting to ₹ 190.00 crore inclusive of all applicable taxes, levies and duties and GST @ 18%, based on the approval by the Board of Directors of WBPDCCL as well as Government of West Bengal for installation of Emission Control System of Dry Sorbent Injection (DSI) in respect of Unit Nos. 3, 4, 5 and 6 (210 MW each) of Kolaghat Thermal Power



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Station, which is to be completed by 31<sup>st</sup> December 2024., in compliance of the order of Hon'ble National Green Tribunal dated 5.04.2022 in terms of the clause 2.8.4.1 of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011, as amended from time to time, subject to the following directions:

- a) In case of revision of project cost from the approved cost of Rs. 190 crore, approval of the competent authority shall be taken by WBPDCCL and submitted to the Commission.
- b) WBPDCCL shall show separately the interest component and bank charges thereof upto the date of both scheduled and actual COD of the project duly certified by the auditor, including justifications for the delay, if any.
- c) WBPDCCL shall also submit the details of actual expenditure vis-à-vis projected expenditure as indicated in the Scope of Work duly certified by the Auditor. The necessary details along with detailed justifications for deviations from the investment plan, if any, shall also be submitted as per Regulation 2.8.5.1 of Tariff Regulations, 2011 as amended.

21.0 The petition is disposed of in terms of the above.

22.0 A copy of the order shall be posted in the website of the Commission.

23.0 WBPDCCL shall download the copy of the order from the website of the Commission and act on it. Certified copy of the order, if applied for, be given to the parties on completion of formalities laid down in the West Bengal Electricity Regulatory Commission (Conduct of Business) Regulations, 2013, as amended and on submission of necessary fees.

**Sd/-**  
**(PULAK KUMAR TEWARI)**  
**MEMBER**

**Sd/-**  
**(MALLELA VENKATESWARA RAO)**  
**CHAIRPERSON**

**DATE: 26.12.2023**

**Sd/-**  
**SECRETARY**