

**IN THE JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION AT
RANCHI**

Case No. 13 of 2020

Tata Power Company Limited (TPCL) Petitioner

Versus

Tata Steel Limited (TSL) Respondent

CORAM: HON'BLE MR. R.N. SINGH, MEMBER (ENGINEERING)
HON'BLE MR. P.K. SINGH, MEMBER (LEGAL)

For the Petitioner : Mrs. Richa Sanchita, Advocate, Mr. Pankaj Prakash,
and Representative

For the Respondent (TSL): Mr. Bishwajeet Kumar, Representative

ORDER

Date – 30th September, 2020

1. This petitioner- Tata Power Company Limited (hereinafter referred to as 'TPCL') is a Generating Company; it operates two units (unit 2 and unit 3) of 120 MW each in Jojobera Power Plant and supplies power to Tata Steel Limited. This petition has been filed in exercise of power given under Section 86 of the Electricity Act, 2003 read with Regulation 7.6 (ii) and Regulation 6.10, Regulation 6.13 (b) alongwith other applicable regulations of the JSERC (Terms and Conditions of Determination of Generation Tariff) Regulations, 2015 for approval of expenditure on installation of various Emission Control System in order to make compliance of the directions issued by Ministry of Environment and Forests and Climate Change (MoEFCC), Government of India(Notification dated 7th December, 2015) mandating compliance with revised Environmental norms for Thermal Power Stations. The Petitioner in its petition prayed for the following reliefs:-

- a) *To allow the capital cost of approximately Rs 143.24 Crore each for Jojobera Unit 2 and Jojobera Unit 3, totalling to Rs 286.48 Crores required to be incurred by the petitioner towards installation of the FGD system subject to true-up based on actual expenditure;*
- b) *To allow incremental auxiliary consumption of 1.0% for computation of Tariff post commissioning of the FGD and other associated facilities at Jojobera Unit 2 and Unit 3 respectively;*

- c) *To allow incremental Operation & Maintenance cost of approximately 5% of the capital cost for 1st year for installation of FGD system and other associated facilities at Jojobera Unit 2 and Unit 3 respectively;*
- d) *To allow incremental cost on account of Limestone consumption;*
- e) *To allow shutdown period required for installation and commissioning of FGD System as opportunity cost in the Capital cost of the Project or in the alternative allow 85% availability for this period as deemed availability for payment of capacity charges during shutdown period;*
- f) *To allow availability to be computed with Normative Auxiliary consumption of 10% increased by 1% additional Auxiliary consumption for FGD System after its commissioning;*
- g) *To allow increased expenditure on water cost required for operation of the FGD System and other associated facilities at actuals in addition to (c) above;*
- h) *To allow procurement cost of limestone for operation of FGD System as part of Energy charges as proposed in the petition above;*
- i) *To allow disposal cost of Gypsum (by-product) to be recovered at actuals over and above of O & M cost at (c) above;*
- j) *To allow to approach this Hon'ble Commission for remaining ECS which is not being implemented presently, but may be required in future based on actual assessment to comply with revised environmental norm;*
- k) *To Condone any inadvertent omissions/errors/rounding-off differences/shortcomings and permit the petitioner to add/alter this filing and make further submissions as may be required in future; and*
- l) *To pass any such other and further reliefs as this Hon'ble Commission deems just and proper in the nature and circumstances of the present case;*
- m) *To pass such other order/s, as this Hon'ble Commission may deem fit and proper, keeping in view the facts and circumstances of the case.*

Brief facts of the case as submitted by the petitioner

2. Learned Counsel for the petitioner submitted that the MoEFCC vide its notification no. S.O. 3305(E) dated 7th December, 2015 notified the Environment (Protection) Amendment Rules, 2015 ("MoEFCC Notification") amending/introducing the standards for emission of environmental pollutants to be followed by all existing as well future thermal power plants (units). It is further submitted that by the said MoEFCC Notification, all Thermal Power Plants (TPP) are mandatorily required to comply with the revised norms within the period of two years from the date of the said MoEFCC Notification.

3. Learned Counsel for the petitioner submitted that on the basis of said MoEFCC Notification, the Central Pollution Board (**CPCB**) issued directions to Unit 2 & 3 of Jojobera Power Plant of Tata Power vide its letter dated 6th April, 2018, under Section 5 of the Environment Protection Act, 1986 regarding

compliance of emission limit notified vide the MoEFCC Notification dated 7th December, 2015 setting the revised deadline for meeting the environmental norms as December, 2020 after deliberation with all stakeholders.

4. Learned counsel for the petitioner submitted that on 30th May, 2018 Government of India, through Ministry of Power (**MoP**) issued a direction under Section 107 of the Electricity Act, 2003 vide letter no. 23/22/2018-R & R with the subject '*Mechanism for implementation of New Environmental Norms for Thermal Power Plants (TPP) supplying power to distribution licensees under concluded long term and medium-term Power Purchase Agreement (PPA)*'.

5. Learned Counsel for the petitioner submitted that on 10th April, 2018, Central Electricity Authority (**CEA**) issued a letter no. 44/FGD/UMPP/CEA/2018 with the subject, '*Adherence to Environmental norms as per Environmental (Protection) Amendment Rules 2015 for Thermal Power Stations-Implementation of FGD reg*' to TPP's requesting them to approach concerned regulator with a '*Detailed Feasibility Report of the Emission Control Systems*' required to meet the notified norms.

6. Learned Counsel for the petitioner submitted that the petitioner Tata Power Company Limited currently operates unit 2 and 3 of its Generating Station at Jojobera within new limits prescribed by MoEFCC for water consumption, particulate matter and NOx. Learned Counsel also submitted that the other metrics except Sulphur Dioxide are currently within the new limits and the petitioner shall have to carry out modifications in the project in order to comply with the norms prescribed for Sulphur Dioxide.

7. Learned Counsel for the petitioner submitted that for meeting SO₂ norms, the petition bearing case no. 21 of 2018 was filed on 05.09.2018 before this Commission seeking in-principle approval of capital expenditure on installation of FGD systems for compliance of MoEFCC notification, on 06.11.2018 by an interim order, this Commission accepted Tata Power's request to proceed with tender process for installation of FGD systems in unit 2 & 3 of the Jojobera TPP.

8. Learned Counsel submitted that in order to comply with the requirement of the MoEFCC notification, Tata Power issued notice in the newspapers/website inviting Expression of Interest. (EoI) for installation of FGD system with regard to unit 2, 3, 4 & 5 of Jojobera TPP and the pre-bid meeting was fixed on 23.11.2018 and the opening of Technical Bid was fixed on 29.11.2018, however, at the request of the bidders, the date of submission of bids was extended till 12.02.2019.

9. Learned Counsel further submitted that Tata Power on 07.01.2019 filed its Mid-term Review petition being case no. 01 of 2019 for Revised ARR & Generation

Tariff for FY 2019-20 to FY 2020-21 including Truing up for FY 2017-18 and APR for FY 2018-19 and also for approval on proposal of installation of FGD systems and its Tariff post commissioning.

10. Learned Counsel submitted that this Commission by order dated 13.05.2019 disposed of the case no. 21 of 2018 stating the petition to be premature citing that the 2015 Tariff Regulations do not provide in-principle approval for the grant of capital expenditure.

11. It was pointed out that this Commission by order dated 14.02.2020 disposed of the case (T) no. 01 of 2019 and turned down the Tata power's prayer for approval of FGD costs directing TPCL to approach CEA for recommendations on technology and cost. Following facts have been placed for consideration of the Commission:-

12. In compliance of directions dated 14.02.2020 issued by this Commission, TPCL on 03.03.2020 submitted a feasibility report to the CEA for FGD system of Jojobera TPP based on wet limestone technology, but due to prevalent COVID-19 pandemic and lockdown the approval process for CEA with respect to FGD systems was restricted, however, after active follow up with CEA an approval for the proposed technology was given by CEA.

13. CEA has approved the wet lime stone based technology for the FGD System for Jojobera plant unit 2 and unit 3, with respect to the cost, it is stated that the estimated cost for different FGD technologies are available on CEA website and the actual cost of retrofitting of FGD for cases like unit 2 & unit 3 of Jojobera, TPP needs to be discovered through open competitive bidding in consultation with the lead procurer of power from the project, as such the lead procurer (to be invited by TPCL) may be involved in bidding process till final award of FGD contract.

14. The said recommendation of CEA for a bidding process to be followed in consultation with the lead procurer could be brought to the notice of the petitioner only in June, 2020 i.e, much later than the initiation and finalization of the bidding process, as the bidding process commenced much prior to the same for meeting deadlines stipulated by CPCB for completion of FGD system. It was further submitted that TPCL had continuously involved Tata Steel during the bidding process and provided the copies of the documents, sought inputs and provided the replies to Tata Steel Limited.

15. It was pointed out that there are five units at Jojobera TPP (1x 67.5 MW (unit 1) + 2 x 120 MW (unit 2 & 3) + 2 x 120 MW (Unit 4 & 5) and out of these unit 2 & 3 are supplying power to Tata Steel and the balance are being supplied to Tata Steel works for captive purpose and further that due to the layout and optimization of space, there are certain common facilities which are being utilized

by two or more units ,the sum of standalone and common cost allocated to each unit shall be one fourth of the total bid amount of all these 4 units.

16. The cost of main package discovered for 4x120 MW (i.e. unit 2, 3, 4 & 5) is Rs. 422.38 crores inclusive of GST of 18 % and the base cost without GST works out to Rs. 357.98 Crores (422.38/1.18) for all the four units, as such the allocated cost of each units 2 & 3 of 120 MW would be 105.59 crores with GST and Rs 89.48 crore without GST or Rs. 74.57 Lakh/MW.

17. In order to ensure that the prices are reasonable, TPCL made a comparison with similar other packages and noted that for similar scope of EPC main Package, the lowest price which NLC Neyveli (2x210 MW) has discovered is 81 Lakhs/MW during the auction for scope similar to TPCL L1 price.

18. As per MoEFCC notification, TPCL is required to keep SO₂ emission from unit 2 & 3 of Jojobera power plant below 600 mg/Nm³ which are pf 120 MW rated capacity each i.e. smaller than 500 MW and as such TPCL is required to install FGD system for both the units in order to reduce excess of SO₂ from exhaust flue gases of the units.

19. The MoEFCC notification is a mandatory '*Change in Law*' event which requires TPCL to carry out major capital works/modifications for it to be able to operate and supply power to the beneficiary viz. Tata Steel Limited and as such TPCL is obliged to incur substantial one time capital expenditure apart from recurring operational expenditure and additional increase in cost due to operational parameters.

20. CERC, taking cognizance of the MoP directions and challenges being faced by the Generators departed from its earlier position taken and proceeded to declare the MoEFCC notification as change in Law event and granted in-principle approval for installation of FGD system to MPL in its order dated 11.11.2019 in petition no. 152/MP/2019 and subsequently to Sasan and CGPL which is done for Regulatory certainty and recovery of costs associated with meeting the Revised Emission Norms.

21. Maharashtra Electricity Regulatory Commission ("MERC") in its Order dated 06.02.2019 in Case No. 300 of 2019, titled Adani Power Maharashtra Limited ("APML") vs. Maharashtra State Electricity Distribution Company Limited ("MSEDCL"), has declared that the MoEFCC Notification is an event of Change in Law. It was further pointed out that, MERC has also granted in principle approval to APML to proceed with the installation of FGD System based on the guidelines notified by CEA.

22. Hon'ble Supreme Court has been monitoring the progress of compliance of environmental norms in case titled as MC Mehta vs Union of India & Others in Writ Petition(s)(Civil) No(s). 13029/1985 and connected matters and has been very strict in compliance of the above said norms. It was further pointed out that in a recent Order passed on 19.06.2020 in IA No. 44408 of 2020; Hon'ble Supreme Court has dismissed the request of Association of Power Producers to allow generators extension in meeting the environmental norms beyond the timelines stipulated by CPCB. It was submitted that Hon'ble Supreme Court has refused to give any blanket approval for extension to all generators which means each case will have to be seen on its own merits to see whether the delay is for reasons attributable to generator or not.

23. Hon'ble APTEL in the Order dated 28.08.2020 in Appeal Nos. 21 & 73 of 2019 and Appeal no. 153 of 2019 has allowed Capital Cost of the FGD project; wherein it is held that 2015 notification is a *change in law* event and directed Punjab State Electricity Regulatory Commission to devise mechanism for its recovery i.e. to formulate tariff determination principles for recovery of FGD project cost. Learned Counsel reads out the relevant part of the Hon'ble APTEL's order as follows:

"140. In the light of our discussion and reasoning, we are of the opinion that the impugned orders, dated 21.12.2018 and 09.01.2018 challenged in both the appeals deserves to be set aside and accordingly set aside by allowing the appeals.

a)

b) **The installation and operation of the FGD and associated system to comply with emission levels of SO₂ is change in Law and additional expenditure for the same including all allied cost like taxes, duties etc., has to be included as Additional Capital Cost to be incurred by the Appellants.**

c)"

24. Learned Counsel concluded with submission that the instant petition has been filed seeking regulatory certainty **qua** the treatment of such costs and to seek approval from this Commission with regard to the additional capital expenditure to be incurred by Tata Power for installation of FGD System, Fixed cost recovery for shut down period, additional O & M expenditure and additional APC due to installation of ECS as a result of the MoEFCC Notification which has mandated the installation of ECS at the projects.

25. Learned Counsel for the petitioner submitted that the Commission has inherent powers, power to Relax and Power to remove difficulties under Conduct of Business Regulations as well as 2015 Tariff Regulations to meet this piquant situation by way of granting reliefs to the petitioner as prayed.

Submission of the Respondent

26. The Representative of the respondent – Tata Steel Ltd has submitted that the petitioner operates two units (unit 2 and unit 3) of 120 MW each at Jojobera Power Plant, this plant was set up in the year 2000 and 2001 respectively and the said units supply power to the respondent exclusively for its use as distribution licensee under a PPA duly approved by this Commission. Following submissions have been raised for consideration of the Commission:-

27. The petitioner has significantly relied on the CERC (Terms and Conditions of Tariff) Regulations, 2019 which is not applicable in the present case, as this Commission is governed by the Regulations framed by its own. It is argued that the provisions of the CERC Regulations may be used only as a reference.

28. The petitioner has divided its cost into two broad categories viz. (i) Hard Cost, i.e. the Main Package Cost amounting to Rs 221.02 crores & (ii) Soft Costs amounting to Rs 67.26 crores and the petitioner is praying for approval of the hard cost subject to true up based on actual expenditure and soft cost to be considered during truing up based on actuals and prudence check, as such the projected cost in installation of the FGD is very high and is required to be considered in strict compliance of the provisions of the Generation Tariff Regulations and the requisite checks for approving such high cost must be applied by the Commission.

29. The estimated cost of the petitioner appears to be on the higher side and after comparison of the figures of the petitioner with the figures of cost projected and approved for other thermal generating plants; it may be inferred that the price quoted by the petitioner in the instant case is significantly high.

30. The Petitioner-TPCL has not complied with the recommendation of CEA that the actual cost of retrofitting of FGD for Unit 2 & 3 of Jojobera, TPP needs to be discovered through open competitive bidding in consultation with the lead procurer of power from the project, as such the lead procurer was to be involved in bidding process till final award of FGD contract, it was submitted that the role of the Respondent-TSL during the process of bidding was limited to sharing information intermittently on need basis and there was no continuous involvement in the bidding process as such.

31. CEA has recommended that TPCL may study the “the cases of failure” of all Systems including lining material used for corrosion protection for various sections of FGD system and the life cycle cost analysis for selection of corrosion protection lining is to be done considering these failure studies for optimum selection. It was also suggested that while choosing Chimney options, TPCL may

see the feasibility and conduct lifecycle cost benefit analysis for constructing new wet chimney or using the existing chimney.

32. It is argued that the recovery of the additional cost of FGD installation and its implication should not be limited to the validity of the PPA/Plant life but at least be spread over to the entire life span of the newly installed FGD System as according to the data available with the with the Central Electricity Authority, several Generating thermal plants are still generating Electricity even after 50 years of service.

33. It was submitted that it is required to be assessed over as to what life of the plant would be feasible and what additional investments are required to extend the life of the plant, in this regard a complete Residual Life Assessment study to ascertain the remaining life along with DPR for life extension needs to precede before approval for compliance with the MoEFCC notification.

34. The Representative of the Respondent – Tata Steel Utility and Infrastructure Services Limited (TSUISL) submitted that it purchases power from TSL Licensee, which procures power from the petitioner TPCL's unit 2 & unit 3 based on the tariff of TPCL determined by this Commission.

35. It was submitted that that the approval of the capitalisation of FGD's capital cost and its impact by increase in capacity charges may be done timely, so that the passing on the same to ultimate consumer may not be delayed as delay in approval of tariff based on increased capitalisation of FGD's capital cost shall lead to additional burden on consumers in the form of carrying cost.

Commission's observation and findings

36. Heard Learned Counsel for the petitioner as well as the Representatives for the respondents in detail and perused the records of the case.

37. The Commission observes that in view of the submission of the Respondent that the recommendations of the CEA given vide its letter dated 11.06.2020 has not been complied with and the involvement of the Respondent in the bidding process was not made as per the recommendation of CEA.

38. It is also observed that Hon'ble Supreme Court has dismissed the request of Association of Power Producers to allow generators extension in meeting the environmental norms beyond the timelines stipulated by CPCB.

39. The Commission further observes that the retrofitting of FGD has now become mandatory in terms of compliance of MoEFCC notification dated

07.12.2015, it qualifies as change in Law as held by the Hon'ble APTEL in order dated 28.08.2020 passed in Appeal Nos. 21 & 73 of 2019 and Appeal no. 153 of 2019 . We find that the petitioner will be required to install the FGD system which will result in additional capital cost and certain recurring costs as detailed in the petition.

40. Upon due consideration of the Order of the Hon'ble Supreme Court, Hon'ble APTEL and submission of the parties, it is ordered :

ORDER

41. Prayer of the petitioner is partly allowed to the extent that the Commission grants approval for installation of the FGD system.

42. The Commission is presently not approving any specific amount of additional expenditure at this stage; however, the Commission will consider the additional expenditure on the issue, subject to prudence check at the time of tariff determination, once the commissioning of the FGD System is over. Accordingly, the Petitioner is directed to approach the Commission after completion of work, for approval of cost incurred on account of installation of FGD System.

43. It is also hereby clarified that the depreciation of the additional cost for installation of FGD System and its implication shall be spread over for the entire life span (not less than 25 years) of the FGD unit to be installed. Petitioner is at liberty to search for a fresh PPA beyond the current PPA period for the purpose.

44. Accordingly, the petition stands disposed of in above terms.

Sd/-
Member (Legal)

Sd/-
Member (Engg.)