

Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
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Case No. 145 of 2019

Case of Maharashtra State Electricity Distribution Co. Ltd. seeking review of Commission's Order dated 16.01.2019 in Case No. 278 of 2018 relating to measures for promoting fossil fuel based Captive Power Plants.

Coram

Anand B. Kulkarni, Chairperson
Mukesh Khullar, Member

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|---|--------------------|
| Maharashtra State Electricity Distribution Co. Ltd. | :Petitioner |
| M/s Llyod Metal & Energy Ltd. | :Respondent No. 1 |
| Tata Power Company Ltd. (Distribution) | :Respondent No. 2 |
| Adani Electricity Mumbai Ltd. (Distribution) | : Respondent No. 3 |
| General Manager, BEST Undertaking | : Respondent No. 4 |

Appearance

| | |
|--------------------|-------------------------|
| For the Petitioner | : Ms. Kavita Gharat |
| For Respondents | |
| Respondent No. 1 | : Sh. Abhishek Khare |
| Respondent No. 2 | : Ms. Swati Mehendale |
| Respondent No. 3 | : Sh. Ghanshyam Thakkar |
| Respondent No. 4 | : Sh. Rajendra Patsute |

ORDER

Date: 11 September, 2019

1. Maharashtra State Electricity Distribution Co. Ltd. (**MSEDCL**) has filed this Petition on 19 June, 2019 seeking review of Commission's Order dated 16 January, 2019 in Case No. 278 of

2018 in the matter of ‘Miscellaneous Application in Case No. 220 of 2014 in the matter of Section 86 (1) (e) of the EA, 2003 and suggestive promotional measures as called for by the Order dated 2 May, 2018’.

2. MSEDCL’s main prayers are as follows:

- a) *Review the directions of the Hon’ble Commission in its Order dated Case No. 278 of 2018 dated 16.01.2019 and to release MSEDCL for preparing Standard Bidding Documents for the Competitive Bidding process and for conducting Competitive Bidding for procurement of power from Fossil Fuel based Co-generation projects.*
- b) *Renew and withdraw the direction issued for procurement of fossil fuel based co-generation with ceiling Tariff of Rs. 3.50 per unit*
- c) *To allow MSEDCL, the condonation of delay in the filing of review petition positively and in the interest of the consumers of MSEDCL.*

3. MSEDCL in its Case has stated as follows:

3.1. The Commission vide Order dated 16 January, 2019 in Case No. 278 of 2018 directed as below:

- a. MSEDCL shall be the Nodal Agency to conduct Competitive Bidding exercise on behalf of all Distribution Licensees in the State and shall approach the Commission for approval of SBD within 6 months of this Order.
- b. The Ceiling Rate for Competitive Bidding shall be Rs 3.50/unit.
- c. The power procured from Fossil Fuel based Co-generation projects shall not be deducted from the total consumption of the Obligated Entities for their assessment of RPO.

3.2. MSEDCL sought review of above Order on following grounds:

- a. The Appellate Tribunal for Electricity (**APTEL**) in its judgment dated 2 December, 2013 in Appeal No 53 of 2012 has held that Distribution Licensees cannot be fastened with the obligation to purchase a percentage of its consumption from fossil fuel based co-generation under Section 86(1)(e) of the EA. The relevant extract of the said judgment is reproduced herein below:

“39. Upon conjoint reading of the provisions of the Electricity Act, the National Electricity Policy, Tariff Policy and the intent of the legislature while passing the Electricity Act as reflected in the Report of the Standing Committee on Energy presented to Lok Sabha on 19.12.2002, we have come to the conclusion that a distribution company cannot be fastened with the obligation to purchase a percentage of its consumption from fossil fuel based co-generation under Section 86(1)(e) of the Electricity Act, 2003. Such purchase obligation 86(1)(e) can be fastened only from electricity generated from renewable sources of energy.....”

- b. However, the Commission in its Order dated Case No. 278 of 2018 dated 16 January, 2019 has mentioned APTEL’s ruling regarding procurement of electricity from fossil fuel-based co-generation against the purchase obligation. Same is reproduced below:

“.....This important aspect has not been considered in the Century Rayon judgment, where in this Tribunal had held that the State Commission has to promote both co-generation as well as generation of electricity from renewable sources of energy. Accordingly, we feel that the State Commission could promote the fossil fuel-based co-generation by any other measures such as facilitate sale of electricity from such sources, grid connectivity, etc., but the State Commission could not compel the Distribution Licensee to procure electricity from fossil fuel-based co-generation against the purchase obligation to be specified under Section 86(1)(e) of the Electricity Act, 2003.....”

- c. The Commission in Case No. 56 of 2011 & 220 of 2014 had passed Order stating that Distribution Licensees cannot be fastened with the obligation to purchase power from fossil fuel-based co-generation.
- d. At present MSEDCL is in a power surplus scenario. Surplus power is in the range of 2000-5000 MW particularly in night hours due to seasonal variation in power demand. In such scenario, MSEDCL is forced to back down power from certain generating station due to lower power demand particularly during night hours i.e. between 22.00 Hrs to 06.00 Hrs, in winter season and monsoon. Accordingly, power from conventional sources is required to be backdown upto the variable cost of Rs. 1.50 to 2.00/unit. Further, power from conventional sources is being procured by MSEDCL at average variable rate of Rs. 2.40 to 2.50/unit. Thus, procuring power from Fossil Fuel based Co-generation projects at a tariff of around 3.50 per unit would not be economically viable for MSEDCL and will unnecessarily burden the consumers of Maharashtra.
- e. Unlike MSEDCL, some of other Distribution licensees in the State have power deficit conditions and cannot even meet their base demand through their contracted long term

power. The Tata Power Company Limited (TPC), Adani Energy Mumbai Limited (AEMLL) and BEST Undertaking (BEST) has the contacted the capacity of 700 MW, 1100 MW and 776 MW as against their average demand of 806 MW, 1436 MW and 826 MW respectively. Therefore, procurement of such power will be beneficial for these utilities to avoid short term power purchase cost and to backdown their highest variable cost generator.

- f. Power procured from such Fossil Fuel based Co-generation projects shall anyway is not to be considered towards fulfillment of Renewable Purchase Obligation. Further, such power produced from waste heat gases is by-product of the industrial process and hence is infirm in nature. Purchasing of such fossil fuel based power at a tariff as high as Rs. 3.50/unit is much higher than the present tariff of RE sources like solar, wind, etc and would not be beneficial to MSEDCL and its consumers.
- g. As the Commission has directed to procure all available energy, proposed competitive bidding mechanism for procurement of power from Fossil Fuel based Co-generation projects would not fulfil very objective of bidding process and would result in fed in tariff based power purchase.

3.3. In view of above, MSEDCL requests the Commission to relieve MSEDCL from the onus of conducting the competitive bidding process for procurement of power from Fossil Fuel based Co-generation projects. Also commission may not insist MSEDCL to purchase the power from fossil fuel based co-generation with ceiling Tariff of Rs. 3.50 per unit, when it is already having surplus power.

4. Lloyd Metal & Energy Ltd (**LMEL**) in its submission dated 20 August, 2019 stated that:

- 4.1. The instant Petition appears to be an attempt to walk away from the reasonability of preparing documents to facilitate competitive bidding of cogeneration power as per the Order of 16 January 2019. What is required as per the said Order is that MSEDCL should only prepare the bidding document with guidelines since it is best placed to do so. LMEL pledges its assistance to MSEDCL to prepare the competitive bidding guidelines and document whenever called for by MSEDCL and it should not shy away from the honour to assist the Commission in preparing these guidelines.
- 4.2. Regarding, MSEDCL's contention that it has surplus power, it is suggested that the Commission may pass appropriate orders directing those licensees to procure cogeneration power in ratios of their respective shortfalls. This would ensure availability of power for the licensee to overcome their shortfall so that LMEL would have buyers for its power.

- 4.3. Regarding MSEDCL's contention that LMEL's power is costly power, it is stated that The Commission by its Order of 16 January 2019 has capped the tariff at Rs. 3.50/unit and is far less than the otherwise prevalent tariff.
- 4.4. As per the data provided by MSEDCL in its Review Petition, average demand of the utilities of BEST, TPCL and AEML is more than the contracted demand. There is a total shortfall of 492 MW between TPCL, BEST and AEML and hence in the interest of the consumers of Maharashtra, it is feasible to procure 25 MW Power from LMEL on RTC basis.
- 4.5. The power generated and sold by the LMEL is Firm power, not in-firm as alleged by MSEDCL. LMEL is scheduling power on 15 minutes basis since 2010.
- 4.6. LMEL's power is cheaper than many other sources. Table below represents calculations showing impact on Distribution Company if they purchase power as per approved Orders of the Commission vis a vis procuring certain part from LMEL for FY 2019-20.

| Discoms/Utilities | Power Purchase cost (on Weighted Average basis) with Thermal Sources /Non Renewable Sources Only (Without Green Energy and without LMEL) | Power Purchase cost (on Weighted Average basis) with Thermal / Non Renewable Sources only (Without Green Energy along With LMEL) |
|---|---|---|
| | Rs./Unit | Rs./Unit |
| BEST 2019-20 | 4.46 | 4.41 |
| Adani 2019-20 | 4.41 | 4.39 |
| TATA 2019-20 | 4.25 | 4.21 |
| MSEDCL 2019-20 | 4.15 | 4.15 |
| Combined Weighted Average Power Purchase Cost of All Utilities (Rs./KWH) | 4.32 | 4.29 |
| Saving by using LMEL Power (Rs./KWH) | | 0.03 |

- 4.7. The Review as filed by the MSEDCL is an abuse of process of law, because it is an appeal in the garb of a Review. There is no error apparent on the face of the record which has been demonstrated by MSEDCL for this Petition to qualify as a review. Further, scope of a review proceedings can only be to correct errors (grammatical/arithmetical or the like) which are evident/demonstrable on the face of the record. LMEL has referred to various Orders to support its contentions.

- 4.8. The Commission may thus take appropriate measures to draw out a workable solution in the present circumstances.
5. BEST made following submission dated 20 August, 2019:
 - 5.1. The Commission had issued Order in Case No. 278 of 2018 pursuant to the Petition filed by LMEL. The issue was about purchase of energy supplied by co-generation plants where energy is generated from waste heat generated from burning of coal. The Commission had directed MSEDCL to carry out bidding for such kind of power with a ceiling tariff of Rs. 3.50/unit and share with other utilities in appropriate ratio. MSEDCL however has now submitted to relieve it from onus of conducting competitive bidding. BEST has no submission to make on this aspect.
 - 5.2. MSEDCL has also submitted that since ceiling tariff is already decided and entire co-generation energy is to be purchased, the idea of Competitive bidding therefore will not work. Submission made by MSEDCL seems correct and may be considered by the Commission.
 - 5.3. BEST has recently tied up with M/s Tata Power Co. Ltd. for 676.69 MW and with M/s Manikaran Power Ltd. for 100 MW, apart from this BEST procures RE power to fulfil its RE obligation. The present position of BEST is such that it doesn't require additional power and is able to optimize its power purchase cost by purchases from Exchanges and Bilateral Sources as and when required.
 - 5.4. Purchasing such fossil fuel based power at a tariff as high as at Rs. 3.50/unit, is much higher than the present tariff of RE sources. It would be more appropriate for Co-generation plant to sell power through competitive bidding in open market. BEST is presently purchasing power through Bilateral sources, the Co-generation plants can bid under this category.
 - 5.5. It would be more appropriate if the power is absorbed in the grid by the Distribution licensee in whose area the cogeneration plant is situated.
 6. TPC made the following submission dated 21 August, 2019:
 - 6.1. TPC has made power procurement arrangement to meet its entire requirement through medium term/long term power purchase arrangements which have been approved by the Commission. TPC does not have any shortfall as stated by MSEDCL and can meet its demand through its existing tie ups / short term purchases. The bilateral short- term power procurement is typically short term in nature and is done to meet the peak demand

requirement and is typically not a RTC requirement. In the present load curve of TPC, there is a significant variation in the demand on account of fluctuating Open Access demand as well as Captive Generation by consumers. Taking into account the existing tied up power sources, seasonal variations and fluctuating demand of consumers as stated above, it leads to surplus power situation during night time, especially during high wind seasons.

- 6.2. Further, as per the directions of the Commission, procurement of power on short term needs to be done only through competitive bidding. Accordingly, any shortfall during peak hours is met by purchase from short term market i.e. power exchange or bilateral market through DEEP Portal.
 - 6.3. Further, the APTEL's judgement dated 2 December, 2013 in Appeal No. 53 of 2012 clearly states that distribution company cannot be fastened with the obligation to purchase a percentage of its consumption from fossil fuel based co-generation plants.
 - 6.4. Any additional purchase from cogeneration power as suggested by MSEDCL, would create additional surplus and will increase the power purchase cost of consumers of TPC.
 - 6.5. TPC agrees that power generation from cogeneration should be promoted, however, it currently does not require any additional RTC power for meeting its demand. The cogeneration power plant may participate in the short-term bids issued by TPD as per their requirement which generally arises during summer season for peak time requirements i.e. 08:00 hrs to 17:00 hrs and it would procure power from the cogeneration plant if the bid is won through the transparent process of competitive bidding.
7. At the hearing held on 21 August, 2019 the representative of MSEDCL and the respondents reiterated their submissions.

Commission's Analysis and Rulings

8. MSEDCL has filed this Petition seeking review of Commission's Order dated 16 January, 2019 in Case No. 278 of 2018. In that Order, the Commission has provided following dispensation for promoting generation from fossil fuel based captive power plant:

"1. In compliance of the Order of APTEL in Appeal No. 53 of 2012, the Commission directs MSEDCL to prepare a single SBD to procure power from Fossil Fuel based Co-generation projects through Competitive Bidding Mechanism.

2. Relative share of procurement of such power would be apportioned among all the State Distribution Utilities in proportion of their transmission capacity rights. Based on such

quantum, each distribution licensee would accord its consent on the required capacity based on its own due diligence.

3. MSEDCL shall be the Nodal Agency to conduct Competitive Bidding exercise on behalf of all distribution licensees and shall approach the Commission for approval of SBD within 6 months of this Order.

4. The Ceiling Rate for Competitive Bidding shall be INR 3.50/unit as analysed in methodology given in paragraphs 15.8.1, 15.8.2 and 15.8.3 above.

5. The power procured from Fossil Fuel based Co-generation projects shall not be deducted from the total consumption of the Obligated Entities for their assessment of RPO...”

9. While justifying its Petition, MSEDCL has referred to APTEL’s Judgment wherein it is ruled that the Commission cannot compel Distribution Licensee to purchase power from Fossil fuel based co-generation plants. MSEDCL has also stated that it is in energy surplus situation and hence procuring such power at ceiling rate of Rs. 3.50 /unit will unnecessarily burden its consumers. MSEDCL has suggested that other Distribution Licensees in the State, who are relying on Short Term power, be directed to buy such power and accordingly MSEDCL should be relieved of the responsibility of conducting bidding process.
10. LMEL who is Petitioner in Case No. 278 of 2018, has objected to present review Petition filed by MSEDCL on the ground of delay in filing review Petition and also on the merits of grounds seeking review. However, it suggests that the Commission may take appropriate measures to arrive at workable solution for promoting fossil fuel based CPP.
11. On the issue of delay, as the present matter is not an adversarial proceeding but an effort to promote fossil fuel based CPPs in the interest of all stakeholders, the Commission condones the delay in filing the present review Petition.
12. The Commission notes that MSEDCL and other Distribution Licensees have referred to APTEL Judgment and have contended that the Commission cannot compel them to procure power from fossil fuel based CPPs. Relevant part of APTEL judgment dated 2 December, 2013 is reproduced below:

“39. Upon conjoint reading of the provisions of the Electricity Act, the National Electricity Policy, Tariff Policy and the intent of the legislature while passing the Electricity Act as reflected in the Report of the Standing Committee on Energy presented to Lok Sabha on 19.12.2002, we have come to the conclusion that a distribution company

cannot be fastened with the obligation to purchase a percentage of its consumption from fossil fuel based co-generation under Section 86(1)(e) of the Electricity Act, 2003. Such purchase obligation 86(1)(e) can be fastened only from electricity generated from renewable sources of energy.....”

As can be seen from the above judgment, APTEL has ruled that Distribution Licensees cannot be compelled to buy power from fossil fuel based CPP for complying with its RPO as this is not an energy generated from renewable sources. In the impugned Order dated 16 January, 2019, the Commission has duly recorded above dispensation of APTEL and has not considered such power for meeting RPO. Relevant part of impugned Order is reproduced below:

“15.6.”

In addition to the clear ruling in APTEL order of 2 December, 2013 that distribution licensees cannot be fastened with procurement obligations for fossil fuel cogeneration energy, the Commission is of the view that without knowing the exact potential in the State of Maharashtra, Distribution Licensees/Obligated Entities cannot be directed to procure any specific percentage of power from Waste Heat Recovery Co-generation plants or any specific percentage of their own consumption.

15.7. However, in line with the APTEL order, with the objective of promoting Fossil Fuel based Co-generation projects without burdening the Consumers with any additional energy costs, the Commission directs the MSEDCL to explore the option on behalf of all the Distribution Licensees of the State for procuring such power through competitive bidding mechanism with a ceiling rate.” (Underline added)

Thus, in the impugned Order, the Commission has not compelled Distribution Licensee to procure power from fossil fuel based cogeneration units of CPPs for meeting its RPO but has directed MSEDCL to explore option of procuring such power (which would not be used for meeting RPO) without burdening consumers with any additional cost. Hence, Distribution Licensee’s contention has already been addressed in the impugned Order with justification. Such reasoned decision of the Commission cannot be the ground for review.

13. MSEDCL, BEST and TPC-D have also contended that they have tied-up adequate capacities to meet their demand. BEST and TPC-D have also submitted that such plants can participate in the Short-term bids for their peak demand requirements. In this regard, the Commission notes that in the impugned Order dated 16 January, 2019, the Commission has directed MSEDCL to procure power from fossil fuel based CPP on behalf of all Distribution Licensees on medium term basis. It is a fact that all major Distribution Licensees in the State are contracting Short Term power almost in all months of the year with varying quantum to either meet their peak power requirement or to fulfill shortfall on account of non-availability of

contracted power. Therefore, in the opinion of the Commission, these Distribution Licensee may carve out certain quantum from its short-term procurement which can be procured on medium term basis from fossil fuel based CPP cogeneration units. Such procurement on medium term basis will protect the Distribution Licensee from large variation in Short Term rates which goes as high as Rs. 6/unit in certain months. Hence, in the opinion of the Commission, having tied up power is not a ground for review of the impugned Order.

14. LMEL in the instant Petition has offered to extend full support to MSEDCL in formulating the bidding document. The Commission opines that MSEDCL, along with the assistance from other DISCOMs should prepare the bidding documents in a time bound manner and shall abet the Commission's objective of promoting the Waste Heat Recovery projects based on fossil fuel-based Co-generation Plants.
15. MSEDCL and other Distribution Licensees have also contended that ceiling rate of Rs. 3.50/unit is on higher side. On the other hand, LMEL has contended that this ceiling rate is already lower than the cost of generation and is lower than other contracted sources of Distribution Licensees. In this regard, the Commission notes that in its impugned Order dated 16 January, 2019, it has provided detailed analysis of arriving at ceiling rate of Rs. 3.50/unit. At the same time, the Commission also notes that in its recent Orders dealing with competitive bidding process for Renewable Energy power procurement, it has left it to Distribution Licensees to fix ceiling rate for reverse auction process as per their own due diligence. Although fossil fuel based CPP cogeneration units are not RE sources, the principle that Distribution Licensee can fix ceiling for power procurement process needs to be followed. Hence, the Commission is inclined to review the ceiling rate of Rs. 3.50/unit fixed by it in impugned Order dated 16 January, 2019.
16. It is also a fact that industries do not setup co-generation plant for just production of electricity but it is a tool for improving plant's energy efficiency. Further, most of these industries have been notified as designated consumers under the Energy Conservation Act, 2001 which mandate them to improve their specific energy consumption as targeted under Performance Achieve and Trade Scheme. Improving energy efficiency is one of the tools for reducing specific energy consumption and co-generation helps in improving energy efficiency. Hence, in the opinion of the Commission revenue being earned by these industries by selling surplus power of its co-generation plant needs to be seen as opportunity to earn additional benefits from the capital investment made for improving efficiency of the plant. Therefore, Fossil fuel based CPP co generation units are also required to quote competitive rates in the aforesaid bidding process otherwise they will lose opportunity value of investment made by them.

17. Commission is not inclined to relieve MSEDCL of the assigned responsibility of preparing the bidding documents and initiating the bidding process as these cogeneration units primarily fall in the area of MSEDCL.
18. The Commission also notes that vide Order dated 11 September, 2019 in Case No. 183 of 2019, it has already approved MSEDCL's proposal to procure surplus energy from CPPs including fossil fuel based CPP on short term basis. Thus, CPPs have option to bid for its surplus power either in short term bidding process as per Order dated 9 September, 2019 or in medium term bidding process as per dispensation in this Order.


Hence the following Order

ORDER

1. **The review Petition in Case No. 145 of 2019 is partly allowed.**
2. **Maharashtra State Electricity Distribution Co. Ltd. may fix a ceiling rate at its own due diligence for procurement of power from fossil fuel based CPP on medium term basis through competitive bidding.**
3. **Maharashtra State Electricity Distribution Co. Ltd. with the assistance from other DISCOMs should prepare the bidding documents and shall abet the Commission's objective of promoting the Waste Heat Recovery projects based on fossil fuel-based Co-generation Plants.**

Sd/-
(Mukesh Khullar)
Member

Sd/-
(Anand B. Kulkarni)
Chairperson


(Abhijit Deshpande)
Secretary



