

Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
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Case No. 149 of 2022

Case of Adani Electricity Mumbai Limited – Distribution seeking adoption of tariff for procurement of 800 MW Round the Clock power on Medium-term basis for the period starting from 01 September 2022 to 14 October 2024 through Tariff Based Competitive Bidding Guidelines issued by the Ministry of Power , Government of India.

AND

Interlocutory Application No. 15 of 2022 in Case No. 149 of 2022

Interlocutory Application filed by Adani Electricity Mumbai Limited – Distribution seeking urgent and early hearing of the captioned matter

Coram

**Sanjay Kumar, Chairperson
I. M. Bohari, Member
Mukesh Khullar, Member**

Adani Electricity Mumbai Limited – Distribution (AEML-D)

Petitioner

Appearance

For Petitioner:

Shri Hemant Singh (Adv)

ORDER

Dated: 29 August 2022

1. Adani Electricity Mumbai Limited – Distribution (AEML-D) has filed this Petition on 25 July, 2022 under Section 63 read with Section 86 of the Electricity Act, 2003 (EA, 2003) for adoption of tariff for procurement of 800 MW Round the Clock (RTC) power on Medium-term basis for the period starting from 1 September 2022 to 14 October 2024 through Tariff Based Competitive Bidding Guidelines issued by the Ministry of Power (MoP), Government of India (GOI) dated 30 January, 2019 and the amendments thereof. AEML-D has also filed Interlocutory Application (IA) No 15 of 2022 dated 5 August, 2022 under Section 94 (2) of EA, 2003 seeking urgent and early hearing of the captioned matter.
2. **AEML-D's main prayers in the Petition are as follows:**

- a. *To admit the Petition as per provisions under Section 63 of EA 2003;*
 - b. *To accord approval for adoption of tariff for procurement of 300 MW power during 00-24 hrs (RTC) from Adani Enterprises Limited – Raipur Energen Limited and 500 MW power during 00-24 hrs (RTC) from Adani Enterprises Limited – Raigarh Energy Generation for the period starting from 01.09.2022 to 14.10.2024 at a price discovered in the e-reverse auction and L-1 matching round conducted on 13.07.2022, which has been determined in terms of the Bidding Guidelines.*
3. **AEML-D’s prayer under IA are as under:**
- a. *Allow the present application thereby directing urgent and early listing and hearing of the accompanying Petition on 05.08.2022;*

4. **AEML-D in its Petition has stated as follows:**

- 4.1. The Commission in its Order dated 30 March, 2020 in Case No. 325 of 2019 (**MYT Tariff Order**) directed AEML-D to rationalize its Power Procurement Plan with a view to ensure security of power supply considering its high dependency on short-term market. The Commission had directed that AEML-D should secure power supply by tying up from long-term/ medium-term sources at optimum rates for bulk of its requirement and rely on short-term power for only around 10% to 12% of its power requirement
- 4.2. The quantum of power procured under short-term arrangement has increased due to the termination of Power Purchase Agreement (**PPA**) with long-term coal based Round the clock (RTC) power source being Vidarbha Industries Power Limited (**VIPL**) located at Butibori. As such, maintaining a high dependency on the short-term market is not sustainable in the long run as volume of electricity and price at which it is available is uncertain in short-term market, and thus, the tariff at which power is supplied to the consumers can also be volatile.
- 4.3. The Commission in its Order dated 30 March, 2020, passed in Case No. 325 of 2019, has approved quantum for short-term power procurement as below:

Financial Year (UoM)	Approved Quantum (In Mus)
FY2022-23	3335
FY2023-24	3552
FY2024 -25	3784
Total	10671

- 4.4. Regulation 21.1 of MYT Tariff Regulations, 2019 mandates the distribution licensee to take approval from the Commission for every long term/ medium term power procurement including standby power. Further in the FAC approval dated 1 July, 2022, the Commission expressed the need for AEML-D to explore the option of tying up partial quantum for slightly longer duration contracts after assessing the market conditions through competitive bidding to avoid variation in short term prices on a daily/monthly basis at least till 100% availability of 700 MW RE Hybrid power contracted already.
- 4.5. Also, there was a huge demand and supply gap in Day Ahead Market (**DAM**) of Power

Exchanges in the recent past, and as such, the buy to sell ratio was reaching a new high every day, in the month of April 2022 which clearly implies that there is no guarantee of supply assurance even though the utility bids were at the ceiling rate i.e., Rs. 12/kWh in DAM and RTM Market. A similar situation of skewed demand supply was observed during the period starting from 1 October, 2021 to 15 October, 2021. Further, the price of imported coal are also showing an increasing trend, and therefore, the power rates for short term procurement are likely to be higher.

4.6. Thus, considering the uncertainty in short-term market, in compliance with the directions passed by the Commission, and to ensure reliable power supply at competitive rates to its consumers, AEML-D initiated a competitive bidding process on 3 June, 2022, through the Discovery of Efficient Electricity Price (DEEP) Portal for procurement of 500 MW RTC Power for period starting from 1 September, 2022 to 14 October, 2024 on medium-term basis. Bid submission date was extended to 6 July, 2022 addressing the queries raised by the prospective bidders in the bid document.

4.7. AEML-D received the bids from 6 bidders with a cumulative capacity of 1350 MW. Technical bids for the medium-term tender were opened on 6 July, 2022. All bids were found technically qualified. The Financial Bids of the Qualified Bidders were opened on 13 July, 2022. The price and the capacity quoted by the 6 qualified bidders is as follows:

Sl. No	Bidders	Capacity Offered in MW	Source of Power	Total Tariff at Maharashtra Periphery in Rs per unit
1.	Jindal Power Limited	100	Stg-1, 4X250MW, OP Jindal Super Thermal Power Station, Chhattisgarh	6.23
2.	Adani Enterprises Limited-	300	Raipur Energen Limited , Chhattisgarh	6.76
3.	IL&FS Tamil Nadu Power Company Ltd	250	IL &FS tamil Nadu Power Company Ltd Cuddalore	6.83
4.	Adani Enterprises Ltd-	500	Raigarh Energy Generation Limited, Chhattisgarh	6.87
5.	PTC India Limited	100	Jaypee Nigrie Super Thermal Power plant Singrauli -MP	9.99
6.	DB Power Limited	100	D B Power Ltd, Chhattisgarh	12.98

4.8. Post E-reverse auction dated 13 July, 2022 for 500 MW, following bidders were selected under the bucket filling procedure on DEEP Portal:

Sl. No	Bidders	Quoted Capacity in MW	Selected Capacity in MW	Tariff Rs/kWh	Ranking
1.	Adani Enterprises Limited (AEL) - Raipur Energen Limited (REL), Chhattisgarh	300	300	5.98	L1
2.	Adani Enterprises Limited (AEL)- Raigarh Energy Generation Limited (REGL) Chhattisgarh	500	200	5.98	L2

4.9. Break-up of the tariff quoted by AEL-REL and AEL-REGL is as under:

Details of Tariff	AEL-REL	AEL-REGL
Base Fixed Tariff (Rs per kwh)	2.62	2.62

Cost of Generation (Rs per kwh)	2.62	2.62
Cost of transmission charges (Rs per kWh)	0.53	0.53
Cost of transmission losses (Rs per kWh)	0.21	0.21
Total Tariff (Rs per kWh) at MSETCL periphery	5.98	5.98
Quoted Quantity (MW)	300	500

- 4.10. After recommendation from the Standing Committee, AEML-D has issued Letter of Awards (**LOAs**) dated 19 July, 2022 to the AEL-REL for procurement of 300 MW RTC power ; AEL- REGL for 200 MW RTC power and 300 MW additional RTC power from REGL under green shoe option for the period starting from 1 September, 2022 to 14 October, 2024 as per terms and conditions of Bid documents.
- 4.11. AEML-D has worked out reasonableness of the discovered tariff in the present MTOA tender considering 85% of the normative availability of the generator which is Rs 5.98 per unit including transmission charges and transmission losses and is comparable to the recently concluded tender of Haryana for medium term power purchase at Rs 5.70 per Unit and Rs 5.75 per unit:
- 4.12. AEML-D has submitted following reasons for tie up of 800 MW RTC Power for the period starting from 1 September 2022 to 14 October, 2024:
- (i) Changes in coal distribution mechanism along with change of modalities under coal e-auction system for domestic coal.
 - (ii) MOP direction under Section 11 of Electricity Act 2003 to blend at least 10% imported coal by State GENCO's and IPPs
 - (iii) Further, there has been a sharp increase in imported coal prices. In this regard, it is pertinent to mention that the prices of imported coal have tripled since April, 2021, as per the HBA Index of Indonesian Imported Coal Price.
 - (iv) Similarly, due to an increase in the international price of gas, the existing gas-based plants are not able to generate power, thereby, resulting in supply constraints from gas-based power plants, and it is likely to continue in near future.
 - (v) The substantial power capacity (~ 2000 MW) has been tied up in the Medium Terms Tenders, and hence, this power may not be available for sale in the Short Term Market which will also put pressure on Short Term Market prices in near future.
 - (vi) Increase in the Short-Term Power Prices
 - (vii) There was a huge demand and supply gap in the DAM of Power Exchanges in the recent past.
 - (viii) New Power Exchange, Hindustan Power Exchange (**HPX**) is operational and is launching its day ahead product on 21 July, 2022, and hence, it is likely that day ahead share of IEX will get transferred to HPX, which will make demand supply

more dynamic, and chance of having skewed demand supply is anticipated, which may put pressure on day ahead discovered rates in the absence of market coupling.

- 4.13. Furthermore, the approved cost of Adani Dahanu Thermal Power Station (**ADTPS**) for MYT Control Period starting from FY 2020-21 to FY 2024-25 is ranging from Rs. 4.63 per unit to Rs. 4.79 per unit. As such, in line with the direction issued by the MoP for blending of imported coal, ADTPS has procured imported coal at a rate of Rs. ~12581 per MT considering the prevailing high coal prices in the international market. Accordingly, ADTPS is planning to blend 15% imported coal with its domestic coal, and hence, it is likely that energy charges will be on higher side vis-à-vis the rate of energy rate approved by this Commission in its MYT Order. The current variable cost is ~ Rs 5.698 per kwh (MTD-July'22) (actual VC).
- 4.14. As such, the Proposed 800 MW power procurement can be used to optimize the ADTPS cost. Therefore, this can be considered as alternate economic supply for overall power purchase cost reduction. Surplus power, if any, can be channelized through short-term competitive bidding or through Power Exchanges.
- 4.15. It is settled law that once a tariff is discovered pursuant to a competitive bidding process under Section 63 of the EA, 2003, which is transparent and the tariff is market aligned, then the concerned Commission be pleased to adopt the same. AEML-D has relied on the APTEL judgments in Appeal No. 82 of 2011 dated 16 December, 2011; in Appeal No. 106 of 2011 dated 17 February, 2012 and in Appeal No 224 of 2019 dated 3 February, 2020

5. At the e-hearing held on 12 August 2022

- 5.1 AEML-D reiterated the submission made in the Petition. In reply to the query of the Commission about transmission constraint, AEML-D stated that it had proposed to bring power through Medium term power procurement as a replacement for existing short term power procurement and hence there were no issues of transmission constraints.

Commission's Analysis and Rulings:

6. AEML-D has filed the present Petition for adoption of tariff discovered through competitive bidding for procurement of 800 MW RTC power on Medium-term basis under Section 63 of EA, 2003 for the period starting from 1 September 2022 to 14 October 2024.
7. AEML-D in its Petition has cited various directions issued by the Commission in MYT Tariff Order as well as in FAC proposal along with the other reasons such as increasing imported coal price, uncertainty of availability of adequate quantum of power on DAM due to demand supply gap, variation in prices on exchange in support of medium term power procurement. AEML-D submitted that the proposed power procurement was initiated to ensure security of power supply considering its high dependency on short term market.
8. In this regard the Commission notes that it has approved the following power procurement plan for AEML-D in MYT Tariff Order dated 30 March 2020 in Case No

Source	FY 20-21		FY 21-22		FY 22-23		FY 23-24		FY 24-25	
	Quantum (MU)	Tariff (Rs/kWh)	Quantum (MU)	Tariff (Rs/kWh)	Quantum (MU)	Tariff (Rs/kWh)	Quantum (MU)	Tariff (Rs/kWh)	Quantum (MU)	Tariff (Rs/kWh)
ADTPS	3733	4.63	3733	4.78	3733	4.93	3744	5.05	3733	5.21
DSPPL	66	10.30	66	10.30	66.19	10.30	66	10.30	66	10.30
Existing Non-Solar	214	5.25	214	5.25	97.49	5.54	88	5.59	87	5.60
New Wind - Solar Hybrid			3066	3.24	3066	3.24	3066	3.24	3066	3.24
Short Term	5856	3.50	3003	3.50	3335	3.50	3552	3.50	3784	3.50
Total	9870	4.11	10082	3.98	10297	4.00	10515	4.04	10736	4.08

9. As seen from above, almost 1/3rd power (energy terms) is being sourced from ADTPS, 1/3rd from 700 MW RE Hybrid and balance 1/3rd from Short Term sources. Considering such high dependency on Short Term sources, the Commission in MYT Order dated 30 March 2020 in Case No. 325 of 2019, has directed AEML-D to rationalize its Power Procurement Plan. Relevant extract of the said Order is reproduced below:

“It is observed that the quantum of power purchase from short-term sources has been high in case of AEML-D even in the past, and ranges around 30-40% of the total power purchase quantum. For the next Control Period, the quantum of power purchase from short-term sources projected by AEML-D is in excess of 50% of the total energy requirement, and is projected to reduce to around 30-33% by the end of the next Control Period. This is a very high reliance on short-term power purchase, given the price volatility of such short-term power and the uncertainty attached to such short-term power. It is expected that a Distribution Licensee of the size of AEML-D supplying electricity to consumers in the financial capital of the country, would secure the power supply by tying-up power from long-term/medium-term sources at optimum rates for the bulk of its requirement and rely on short-term power for only around 10-12% of its power requirement. The Commission accordingly directs AEML-D to rationalise its Power Procurement plan with the view to ensure security of power supply at the most optimum rates, so that the consumers are not subjected to any risks of supply failure or spike in the power purchase rates.”

10. Further on account of delay in commissioning of 700 MW RE Hybrid Project, AEML-D has fulfilled such gap through short term contracts which has further increased its dependency on short term sources. After observing dependency of AEML-D on short term power through power exchange during FAC approval process, by its letter dated 1 July, 2022 while conveying approval for FAC proposal, the Commission directed AEML-D to explore the options of power procurement for longer duration considering the volatility in the short term market. Relevant extract of the same is as follows:-

“5.64 As regards bilateral purchases, it is observed that AEML has been purchasing short term power on a regular basis from power exchange or exchange linked bilateral contracts. Considering the variation in prices on

exchange, AEML should explore the option of tying up partial quantum for slightly longer duration contracts after assessing the market conditions through competitive bidding to avoid variation in short term prices on a daily/monthly basis. Such longer period may be up till 100% availability of hybrid contracted power, as the availability of cheaper source of Hybrid power will take some time.”

11. Thus, the Commission has been repeatedly directing AEML-D to reduce its dependency on short-term sources. Accordingly, AEML-D has approached the Commission in the present Petition for medium term power procurement. Therefore, the Commission is inclined to accept the medium term power procurement proposal to ensure reliability and security in power supply to AEML-D’s consumers.
12. The Commission notes that AEML-D in the present Petition has requested approval for 800 MW for the period from 1 September 2022 to 14 October, 2024. But Medium-Term Bid floated by AEML-D was limited for 500 MW. In fact, said bid document has specifically mentioned regrading 500 MW quantum as follows:

*“ *Procurer has obtained approval of Hon’ble MERC for short Term quantum in MYT Order in Case No. 325 of 2019 dated 30.03.2020. With this bid we intend to replace short term power with Medium Term Power as per direction in various orders of MERC from time to time”*

Thus, intention of floating medium-term bid is to replace short term power procurement. 500 MW at 85% of PLF which will provide 3723 MU in a year and the same will be sufficient to replace 3335 MU approved for FY 2022-23 and 3552 MU approved for FY 2023-24 under MYT Order from short-term sources. Therefore, quantum of 500 MW for which medium term bid was floated is justified. Said Bid document nowhere mentioned green-shoe option. Post bidding process, AEML-D has proposed additional 300 MW under green shoe option. As such green shoe option not being part of the bidding process, to maintain sanctity of bidding process, the Commission cannot allow such additional quantum of 300 MW against the bid which was floated only for 500 MW. Accordingly, the Commission is considering only 500 MW for approval under medium term contract.

13. The Commission notes that Medium Term Competitive Bidding Guidelines dated 30 January 2019, require the Commission to adopt the tariff discovered through competitive bidding process based on following provisions of guidelines:

“3. The tariff determined through the DEEP e-Bidding process using e-reverse Auction based on these Guidelines comprising the Model Bidding Documents shall be adopted by the Appropriate Commission in pursuance of the provisions of section 63 of the Act.

14. The Commission further observes that AEML-D has followed the stipulated procedure as per the competitive bidding guidelines dated 30 January 2019 and floated the bid on DEEP portal on 3 June, 2022. To receive more competitive rates from the prospective bidders, AEML-D has extended the bid submission up to 6 July, 2022 by uploading the clarifications sought by the bidders on DEEP Portal. Six bidders participated in the bid

and post e-reverse Auction dated 13 July, 2022, following two bidders emerged out to be successful and the tariff of Rs. 5.98 per Unit is discovered at Maharashtra Periphery.

Sl. No	Bidders	Quoted Capacity in MW	Selected Capacity in MW	Tariff Rs/kWh	Ranking
1.	Adani Enterprises Limited (AEL) - Raipur Energen Limited (REL), Chhattisgarh	300	300	5.98	L1
2.	Adani Enterprises Limited (AEL)- Raigarh Energy Generation Limited (REGL) Chhattisgarh	500	200	5.98	L2

15. The Commission notes that unlike result of short-term bidding auctions, which are readily available on DEEP Portal, results of medium term bidding process are not available on DEEP portal. Therefore, to evaluate market reflectiveness of discovered tariff under present medium term bidding process, the Commission has compared such discovered rate with short term rate which AEML-D intends to replace.
16. The Commission notes that recently, BEST and MSEDCL has filed Petition before this Commission for short term power procurement with following discovered tariff:
 - a. BEST (20 MW to 80 MW) : Rs.5.85 to 8.66 per unit from 1 August, 2022 to 15 Dec 2022
 - b. MSEDCL (100 MW to 400 MW) : Rs. 7.44 to 7.75 per unit from 1 October, 2022 to 31 March 2023
17. Further weighted average rate on DAM of Power Exchange is in the range of Rs 5.68 per unit and short-term power purchase rates are ranging from Rs 5.83 per unit to Rs. 10 per unit on DEEP Portal. The Commission notes that though the bid is for medium term power procurement, the discovered rate of Rs 5.98 per unit is market reflective. Further, recently discovered tariff for medium term bid by Haryana i.e. Rs 5.70 per Unit and Rs 5.75 per unit is close to the tariff discovered by AEML-D. The Commission also notes various factors stated by AEML-D which led to discovery of higher tariff in bidding process and those factors may continue to affect tariff in near future.
18. The Commission also notes AEML-D's submission that as the proposed medium term power purchase is for replacement of short term power purchase as approved in MYT Tariff Order, it would not create any difficulties in transmitting the power and separate STU permission for such power flow may not be required.
19. The Commission finds that AEML-D has followed the procedure stipulated under the competitive bidding guidelines dated 30 January, 2019. Further Section 63 of the EA, 2003 mandates the Commission to adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government.
20. In view of the foregoing, the Commission notes that Power Procurement rate discovered by AEML-D fulfils mandate and requirements for adoption as set out in Section 63 of the EA, 2003. Accordingly, the Commission adopts following Power Procurement tariff

for AEML-D for the period from 1 September 2022 to 14 October, 2024 as follows:

Sl. No	Bidders	Capacity in MW	Tariff Rs/kWh
1.	Adani Enterprises Limited (AEL) - Raipur Energen Limited (REL), Chhattisgarh	300	5.98
2.	Adani Enterprises Limited (AEL)- Raigarh Energy Generation Limited (REGL) Chhattisgarh	200	5.98

21. Hence the following Order:

ORDER

1. The Case No. 149 of 2022 along with IA No. 15 of 2022 is partly allowed.
2. Under Section 63 of the Electricity Act, 2003, the Commission adopts 500 MW Medium Term Power Procurement proposal for the period of 1 September 2022 to 14 October 2024 by Adani Electricity Mumbai Limited – Distribution as stated in para 20 above.

Sd/-
(Mukesh Khullar)
Member

Sd/-
(I. M. Bohari)
Member

Sd/-
(Sanjay Kumar)
Chairperson

