Before the MAHARASHTRA ELECTRICITY REGULATORY COMMISSION World Trade Centre, Centre No.1, 13th Floor, Cuffe Parade, Mumbai 400005 Tel. 022 22163964/65/69 Email: mercindia@merc.gov.in Website: www. merc.gov.in

IA. No. 84 of 2024 in Case No. 198 of 2024

Interlocutory Application of Maharashtra State Electricity Distribution Company Limited (MSEDCL) for seeking urgent hearing in Case No. 198 of 2024 (Petition for adoption of tariff for long term procurement of 905 MW power from grid connected Solar PV projects to be set up on lands of Water Resource Departments of Maharashtra and lands owned by Lift Irrigation Schemes (LIS) consumers).

Case No. 198 of 2024

Petition seeking approval for adoption of tariff for long term procurement of 905 MW power from grid connected Solar PV Projects to be set up on lands of Water Resource Department of Maharashtra and private lands of LIS consumers for LIS in the State of Maharashtra.

Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL)		Petitioner
M/s. Carbon Minus Energy Private Ltd. (CMEPL)		
M/s. Prabhu Agarwalla Construction Pvt. Ltd.(PACPL)		
M/s. Waterfront Constructions Pvt. Ltd.(WCPL)	<u></u>	Respondents
M/s.Shree Tatyasaheb Kore Warana Sahakari Sakhar Karkhana		
Ltd. (STKWSSKL)		
M/s. Prama Instruments Pvt. Ltd.(PIPL)		

<u>Coram</u> Sanjay Kumar, Chairperson Anand M. Limaye, Member Surendra J. Biyani, Member

For the Respondent: None	Chawan (Adv)

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<u>ORDER</u>

Date: 17 March 2025

- Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) has filed the present Petition on 21 November 2024 for adoption of tariff for 905 MW Solar power from Solar PV projects at discovered tariff of Rs.0.81 to 0.90 per kWh. MSEDCL referred to Section 63 of the Electricity Act, 2003, Regulation 39 (a) & (c) of MERC (Transaction of Business and Fees & Charges) Regulations, 2022 and MERC (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2019 and its successive Amendments.
- 2. On 14 January 2025, MSEDCL filed application seeking Amendment in the present Petition. In said application, MSEDCL submitted additional prayer clauses (ix) and (x). The application filed by MSEDCL is taken on record and dealt herein.
- 3. On 19 December 2024, MSEDCL filed IA No.84 of 2024 in Case No.198 of 2024 for urgent listing of matter.
- 4. The IA along with main matter was listed for hearing on 14 January 2025. The Advocate of MSEDCL narrated the scheme of arrangement and process adopted by MSEDCL in conducting the bidding process. She mentioned that MSEDCL in present case is acting as an implementing agency and requested the Commission to consider the Petition on merits.
- 5. MSEDCL's prayers are as under:
 - "
 - *i.* To admit the Petition as per the provisions under Section 63 of the Electricity Act (EA), 2003.
 - *ii.* To accord approval for adoption of tariff for 905 MW Solar Power from solar photovoltaic power projects at discovered tariff Rs. 0.81 to 0.90 per kWh
 - *iii.* To permit MSEDCL to execute Power Purchase Agreement (PPA) with all the successful bidders for 905 MW solar power capacity as mentioned in appendix IV.
 - *iv.* To consider procurement of Solar Power from LIS consumers under Development mode for meeting Solar RPO requirement of MSEDCL.
 - *v.* To consider the submission made by the Petitioner and consider the same positively while deciding the Petition;
 - vi. To pass any other order/relief as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice;
 - vii. To condone any error/omission and to give opportunity to rectify the same;

viii. To permit the Petitioner to make further submissions, additions and altertions to this Petition as may be necessary from time to time; and

Additional Prayers made by MSEDCL vide Amendment Application dated 14 January 2025::

- *ix.* To accord approval for procurement of additional 85 MW capacity Solar Power from solar photovoltaic power projects at discovered tariff Rs.0.81 to 0.90 per kWh, within the 905 MW present tendering process.
- x. To accord approval for procurement of additional 20 MW capacity Solar Power from solar photovoltaic power projects at discovered tariff Rs.0.81 to 0.90 per kWh, within the 905 MW present tendering process.,,

6. **MSEDCL in its Petition has stated as follows:**

- 6.1. The Government of Maharashtra (GoM) in its endeavor to provide daytime electricity to agriculture consumers through decentralized solar power projects, has launched the Mukhyamantri Saur Krushi Vahini Yojana 2.0 (MSKVY 2.0) for solarization of agricultural feeders.
- 6.2. The Commission vide its Order in Case No. 164 of 2023 dated 11 August 2023, accorded its approval to the bid documents for solarisation of agricultural feeders. Further, vide Order dated 6 March 2024 in Case No. 32 of 2024, the Commission adopted the tariffs discovered under the bidding processes for projects under MSKVY 2.0.
- 6.3. Under MSKVY 2.0, the substations having predominant agricultural load are being solarized. However, the agricultural consumers connected to the LIS are not covered with the supply of day time power supply through solarisation. In order to cover such LIS consumers, the GoM has issued Government Resolution (GR) dated 15 March 2024 for solarisation of Lift Irrigation Schemes in the State of Maharashtra since these schemes also cater to the agricultural demand. The salient features of GR dated 15 March 2024 are as follows:
- 6.3.1. In line with MSKVY 2.0 where revenue lands were provided to the solar project developers upfront to de-risk and expedite the project implementation, the proposed scheme for LIS solarisation also envisages the provision of lands by the Water Resource Department (WRD) to the solar project developers
- 6.3.2. LIS consumers consume round the clock power. The solar capacity proposed will generate excess power during the daytime and result in bringing down the power purchase cost of MSEDCL, the power purchase cost may increase when LIS consumers require electricity supply during the non-solar evening peak time hours. Therefore, the solar capacity proposed is designed for such higher quantum so as to compensate for the

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increase in the power supply during the non-solar hours i.e. higher proposed solar capacity will enable excess generation during solar hours. The total generation will be sufficient to meet the existing requirement of the LIS consumers throughout the life of the solar plant.

- 6.3.3. Since the proposed scheme will result in reduction of subsidy burden of GoM, the Government shall provide incentive to the successful developers in the form of financial assistance of Rs.3,20,00,000/- per MW of solar capacity which will be disbursed based on specified milestones.
- 6.3.4. MSEDCL will be implementing agency and carry out competitive bidding process for purchase of power. Solar developers, selected in the competitive bidding process will have PPA with MSEDCL and will be paid the tariff discovered in the competitive bidding process and will also carry out the operation and maintenance of the solar plant during the PPA tenure.
- 6.3.5. MSEDCL will be revenue neutral.
- 6.4. At the time of preparing the scheme in January 2024 the actual LIS consumption of (9) months of FY 2023-24 was available. The consumption of both government WRD connections and private LIS consumers was taken into consideration. Accordingly the estimated solar capacity required as per GR was 1052 MW. Hence, initially tender was floated for 1052 MW.
- 6.5. The capacity of tender was revised based on the WRD connections consumption converted to 12 months proportionally to arrive at the annual consumption which was 939 MU. Hence, the capacity of the tender was revised from 1052 MW to 800 MW.
- 6.6. WRD's spare lands were jointly visited by MSEDCL and WRD officers to examine the technical feasibility of the lands for installation of solar plants. Accordingly, two categories of lands viz. free lands and submerged lands were observed. (115) free land parcels for 553 MW and (34) sub-merged land parcels for 489 MW were technically feasible and were provided in the data room for the bidders to select.
- 6.7. The deviations from standard bidding document for long term procurement of solar power were approved by the Commission vide its Order dated 6 March 2024 in Case No. 28 of 2024. Accordingly, the RfS and the draft Power Purchase Agreement (PPA) have been floated on 15 March 2024 (Round 1) in line with the Commission's Order in Case No. 164 of 2023 and Case No.28 of 2024.
- 6.8. The LIS operated by the cooperative societies/ sugar factories/others will also be solarized under similar model as and when they are able to provide the required land for the solar plants. The co-operative / private LIS consumers were included to participate in the tender.

- 6.9. The revised RfS was uploaded on 21 May 2024. The pre-bid meeting was held on 28 May 2024 and the reply to the pre-bid queries were uploaded on 11 June 2024.
- 6.10. The interested bidders were required to submit their responses to the Tender-Round 1 by 19 August 2024. A total of 5 (five) bidders (with a collective offering of 802 MW) submitted their responses. The technical bids were opened on 19 August 2024.
- 6.11. Upon evaluation of the technical bids, all bidders were technically qualified in terms of Round 1 of the Tender. Further one bidder M/s. Shri Tatyasaheb Kore Warana SSKL is a Co-operative/ private LIS consumer having bid capacity of 20 MW.
- 6.12. After completion of the technical evaluation, the financial bids were opened on 21 August 2024. Upon analysis of the financial bids received, it was found that 46 (forty six) locations with a capacity of 640 MW received with lowest bid tariff (i.e. the quoted tariff was not common for any of the locations and therefore reverse auction was not held). Accordingly, these were directly denoted as L1 bidders.
- 6.13. The tendering process is run in the similar way of MSKVY 2.0. Wherein the bidders submits bid for the land parcels and corresponding substation. The bids submitted for these substations are deduced and made available for the next round.
- 6.14. The Bid Due Date for Tender Round 2 was declared as 26 August 2024. Similar to the Tender Round 1, the technical bids were opened on 26 August 2024. One bidder with a bid capacity of 38 MW was technically qualified. The financial bid was opened and found qualified.

Round No	Date of Bid submission	Name of the bidders	Bid capacity (MW)	Capacity eligible for award (MW)	Rate (Rs/kWh)		
		STKWSSKL	20	20	0.90		
		CMEPL	612	505	0.88		
I 19.08.24	PACPL	60	60	0.83			
		WCPL	55	55	0.81		
		PIPL	55	0			
II	26.08.24	PIPL 38 29 0.88					
III	02.09.24	PACPL	11	11	0.90		
IV	12.09.24	Cancelled as bidder were not eligible as per RfS documents.					
V	03.10.24	CMEPL	225	225	0.88		
		Total = 885 MW (WRD lands) and 20 MW (Private LIS					
		land)					

6.15. Similarly, Round 3, 4 and 5 were conducted, the details of the same are as below:

6.16. The capacity of the tender was 800 MW. The tender capacity of 800 MW was based on the data available for (9) months. However, when the actual sales data was available, it was observed that the actual consumption has gone up to 1011 MU. Hence, the additional solar power procurement is proposed in this Petition.

6.17. Tariff Justification

- 6.17.1. In MSKVY 2.0 tender, the ceiling tariff was Rs. 3.10/- per unit. For tender considered in this Petition, 30 % (Central Financial Assistance) CFA was eligible to the bidders. In this tender SFA (State Financial Assistance) of 80 % is eligible to the bidders. Hence, MSEDCL has identified Rs. 0.90/kWh as the ceiling tariff both on the unit level and project level.
- 6.17.2. All the bidders have submitted their bids substation wise and the financial bid submitted is not more than Rs. 0.90/ kWh.
- 6.17.3. The Commission vide its Order dated 20 September, 2024 has allowed to proceed with the competitive bidding process with ceiling tariff of Rs. 0.90/ kWh.
- 6.18. <u>Purpose of Procurement Fulfilling Renewable Purchase Obligations</u>
 - 6.18.1. MoP vide its notification dated 22 July 2022 has notified the Renewable Purchase Obligation and Energy Storage Obligation trajectory till FY 2029-30.
 - 6.18.2. The Commission in its MERC (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) (First Amendment) Regulations, 2024, notified following trajectory:

Year	Wind RPO	HPO	Distributed RPO	Other RPO	Total RPO
2024-25	0.67%	0.38%	1.50%	27.35%	29.91%
2025-26	1.45%	1.22%	2.10%	28.24%	33.01%
2026-27	1.97%	1.34%	2.70%	29.94%	35.95%
2027-28	2.45%	1.42%	3.30%	31.64%	38.81%
2028-29	2.95%	1.42%	3.90%	33.10%	41.36%
2029-30	3.48%	1.33%	4.50%	34.02%	43.33%

- 6.18.3. The procurement of solar power will also enhance MSEDCL's ability to meet its RPO obligations.
- 6.19. <u>MSEDCL's RPO Status :</u>
 - 6.19.1. As on 30 June 2024, MSEDCL contracted 24740 MW renewable energy capacity for meeting RPO requirements, out of which 10196 MW has been commissioned.

- 6.19.2. Considering the future RPO targets (which includes Solar Power), MSEDCL needs to procure considerable quantum of Solar power for fulfilment of RPO targets. The above quantum is also considered in the Resource Adequacy Plan submitted to the Commission.
- 6.19.3. These Solar Project will likely to be commissioned in FY 2026-27. Hence, the energy generated from these projects will be utilized for mitigating the RPO target of Solar RPO.

7. MSEDCL in its Additional Submission on dated 24 January 2025:

- 7.1. The detailed status report on formation of separate Agricultural Company has already been submitted as part of the current MYT Petition (Case No.217 of 2024). Based on the approval received from the Commission and subsequent clearance from the relevant State Government Departments, MSEDCL plans to initiate the process of establishing a separate agricultural company starting in April 2025. MSEDCL will aim to ensure that the segregation is completed on or before 01 April 2028, enabling the Commission to implement a separate tariff order for both Distribution Licensees in the next MTR Order.
- 7.2. To achieve this objective, MSEDCL will undertake the following steps addressing key issues:
 - a. Asset Register
 - b. Employee matters
 - c. Commercial and Financial transactions
 - d. Governance structure.
 - e. Regulatory requirement for segregation
 - f. Amendment in MYT Regulations
 - g. MTR Order
 - h. Segregation and Post segregation activities.
 - i. Transfer Scheme
 - j. Preparation of Balance Sheet
 - k. Employee Transfer Scheme
 - l. Board of Directors.

Commission's Analysis and Rulings:

- 8. The Commission notes that in present Petition MSEDCL is seeking adoption of tariff for procurement of 905 MW (885 MW + 20 MW) Solar Power from projects to be set up on lands of WRD and private lands of LIS consumers.
- 9. From submission of record, it is evident that MSEDCL has carried out bidding in (5) rounds. The important timeline in the bidding process are as below:

Date	Event				
15.03.2024	GoM notified the scheme for Solarisation of LIS.				
	MSEDCL had floated a tender for procurement of solar power from				
	projects to be set up on lands of WRD for LIS.				
21.05.2024	Revised RfS was uploaded.				
28.05.2024	Pre-bid meeting was held.				
11.06.2024	Reply to the pre-bid queries are uploaded				
19.08.2024	Bid submission date Round-1				
26.08.2024	Bid submission date Round-2				
02.09.2024.	Bid submission date Round-3				
12.09.2024	Bid submission date Round-4 (Cancelled as bidder were not eligible as				
	per RfS conditionalities)				
03.10.2024	Bid submission date Round-5				

- 10. Considering the above background and submissions on record, the Commission frames following issues for its consideration:
 - a. Whether Competitive bidding process is accordance with the Guidelines notified under Section 63 of the EA, 2003?
 - b. Quantum of power procurement to be allowed;
 - c. Whether tariff discover through competitive bidding is in accordance with market condition?
 - d. Discussion on Revenue Neutral Model

The Commission's ruling on above issues is provided in the subsequent paragraphs.

11. Issue A: Whether Competitive bidding process is accordance with the Guidelines notified under Section 63 of the EA, 2003?

- 11.1 The Commission notes that MSEDCL has prepared the tender documents based on Guidelines for Tariff based Competitive Bidding for long-term procurement of grid connected Solar PV and KUSUM PPA along with certain deviations. The Tender documents along with deviations have been approved by the Commission in its Order dated 11 August 2023 in Case No.164 of 2023.
- 11.2 Various events of tender process conducted by MSEDCL are summarised in para 11 above. This demonstrate that MSEDCL has conducted transparent process of bidding which is in accordance with the guidelines notified by the Government of India. Accordingly, the Commission concludes that fair competitive bidding process has been followed in accordance with Guidelines notified under Section 63 of the Electricity Act 2003.

12. Issue B: Quantum of Power Procurement to be allowed

- 12.1 The Commission notes that MSEDCL has filed the present Petitions with two fold objectives i.e. to meet demand of LIS consumers by accommodating RE sources in power basket and to comply with RPO targets.
- 12.2 It is pertinent to note that the Commission vide its Order dated 20 September 2024 in Case No.122 of 2024 accorded its approval for procurement of 1052 MW of solar power. The Commission notes that MSEDCL in present Petition highlighted that the project capacity of 1052 MW was ascertained based on actual energy consumption of LIS consumers for (9) months of FY 2023-24. While tendering, MSEDCL revised the capacity to 800 MW for projects on WRD land, by applying proportionality principle. Subsequently, MSEDCL revised the RfS and also clarified the conditionalities therein based on queries of the prospective bidders.

When actual sales data of LIS consumers become available, it appears that actual sales has gone up to 1011 MU. Hence, MSEDCL proposed the procurement of 905 MW instead of tendered quantity of 800 MW.

- 12.3 The Commission notes that planned procurement of 905 MW is well within capacity decided by the Commission in its Order dated 20 September 2024 in Case No.122 of 2024. But it is exceeding the capacity tendered out by MSEDCL. The LIS solarisation scheme is backed by 30% CFA and 30% SFA contribution and tariff discovered is lowest that have been achieved so far for MSEDCL. Hence, the Commission is inclined to consider the additional procurement over and above tendered quantity as an exceptional circumstances.
- 12.4 Apart from above, the Commission notes that RPO (Amendment) Regulations, 2024 stipulates RPO trajectory till FY 2029-30. The notified trajectory is as below:

Year	Wind RPO	НРО	Distributed RPO	Other RPO	Total RPO
2024-25	0.67%	0.38%	1.50%	27.35%	29.91%
2025-26	1.45%	1.22%	2.10%	28.24%	33.01%
2026-27	1.97%	1.34%	2.70%	29.94%	35.95%
2027-28	2.45%	1.42%	3.30%	31.64%	38.81%
2028-29	2.95%	1.42%	3.90%	33.10%	41.36%
2029-30	3.48%	1.33%	4.50%	34.02%	43.33%

12.5 The quantum proposed to be procured by MSEDCL will supplement its effort to meet RPO targets and fulfil past RPO gaps. Considering these factors, the proposed quantum of 905 MW of solar power procurement seems to be justified.

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13. Issue C: Whether tariff discover through competitive bidding is in accordance with market condition?

13.1 MSEDCL stated that tariff discovered under the present bidding process i.e. Rs. 0.81-0.90/kWh is reflective of market conditions and hence requested the Commission to adopt the same.

Bidding Round No	Name of the bidders	Awarded Capacity (MW)	Rate (Rs/kWh)
	STKWSSKL	20	0.90
Ι	CMEPL	505	0.88
	PACPL	60	0.83
	WCPL	55	0.81
II	PIPL	29	0.88
III	PACPL	11	0.90
V	CMEPL	225	0.88
	Total	905	

13.2 The Commission notes that discovered tariffs are as follows:

- 13.3 The Commission notes that the projects under LIS solarisation scheme are eligible for 30% CFA and 30% SFA separately. Considering the same, MSEDCL has identified a ceiling tariff of Rs.0.90/kWh. The tariff derived from the bidding exercise is below such ceiling tariff.
- 13.4 Further, the projects under considerations are being developed within Maharashtra. Hence, impact of Inter State transmission charges and losses are not applicable. Considering the same, it can be concluded that the Tariff discovered in the present bidding process is reflective of the current market trends.
- 13.5 Accordingly, in line with the mandate under Section 63 of the Electricity Act 2003, the Commission deems it fit to adopt and approve tariff Rs. 0.81-0.90/kWh for 905 MW Solar power procurement on long term basis (for the period of 25 years).

14. Issue D: Revenue Neutral Model

- 14.1 For proposed procurement, MSEDCL has anticipated a new model, whereby netting of solar generation from the proposed solar projects will be carried out with consumption of LIS consumers. Considering operational hours of LIS schemes, MSEDCL in its proposal stated that during non-solar hours it will arrange the power to LIS. The solar capacity is designed for higher quantum, so as to compensate for the increase in the power purchase cost during the non-solar hours.
- 14.2 On the above aspect, the Commission in its Order dated 20 September 2024 in Case No.122 of 2024 has categorically noted following:

9. Having ruled as above, the Commission clarifies that it has not gone into merits and *implications of proposed modalities for supplying power to LIS consumers. The Commission will consider the same in the appropriate proceeding.*"

- 14.3 MSEDCL as part of its Multi Year Tariff Petition filed before the Commission has submitted modalities of LIS solarisation scheme and showcased the same as a revenue neutral model. Said MYT Petition is now undergoing public consultation process. Issue of financial impact, if any of such contended revenue neutral model will be dealt by the Commission in its Order on that MYT Petition of MSEDCL.
- 15. Hence, the following Order:

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ORDER

- 1. Petition in Case No. 198 of 2024 is allowed and IA filed therein is disposed of accordingly.
- 2. The Commission accords its approval to Maharashtra State Electricity Distribution Co. Ltd's proposal for procurement of 905 MW Solar Power (as stipulated in Para 13.2) at tariff of Rs. 0.81-0.90/kWh discovered through competitive bidding for 25 years.
- **3.** Issue of financial impact, if any, on account of LIS solarisation scheme will be dealt with in Order on MYT Petition filed by Maharashtra State Electricity Distribution Co. Ltd.
- 4. The power procured from projects considered in this Petition shall be considered for meeting the Renewable Purchase Obligation requirement of Maharashtra State Electricity Distribution Co. Ltd.
- 5. Maharashtra State Electricity Distribution Co. Ltd. shall execute the Power Purchase Agreement within (30) days from the date of this Order and copy of the same shall be submitted for records of the Commission.

Sd/-Sd/-Sd/-(Surendra J. Biyani) (Anand M. Limaye) (Sanjay Kumar) Member Member Chairperson (Dr. Rajendra G. Ambekar) Secretary