Before the MAHARASHTRA ELECTRICITY REGULATORY COMMISSION World Trade Centre, Centre No.1, 13th Floor, Cuffe Parade, Mumbai 400005 Tel. 022 22163964/65/69 Fax 22163976 Email: <u>mercindia@merc.gov.in</u> Website: www. merc.gov.in

Case No. 06 of 2023

Petition of Maharashtra Energy Development Agency under Section 86(1)(e) seeking appropriate directions to Distribution Licensees to meet 50% of total Renewable Purchase Obligation (RPO) requirement by purchase of energy from Renewable Sources within the State as per amendment dated 30 June 2022 in Renewable Energy Generation Policy 2020 issued by Government of Maharashtra.

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

| Ma | harashtra Energy Development Agency (MEDA) | Petitioner |
|-----|--|-------------------|
| 1. | Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) | Respondent No. 1 |
| 2. | Tata Power Co. Ltd. – Distribution (TPC-D) | Respondent No. 2 |
| 3. | Adani Electricity Mumbai Ltd. – Distribution (AEML-D) | Respondent No. 3 |
| 4. | BEST Undertaking (BEST) | Respondent No. 4 |
| 5. | Indian Railways (IR) | Respondent No. 5 |
| 6. | Mindspace Business Parks Private Limited (MBPPL) | Respondent No. 6 |
| 7. | Gigaplex Estate Private Limited (GEPL) | Respondent No. 7 |
| 8. | KRC Infrastructure and Projects Private Limited (KRCIPPL) | Respondent No. 8 |
| 9. | Nidar Utilities Panvel LLP (NUPLLP) | Respondent No. 9 |
| 10. | Maharashtra Airport Development Company Limited (MADC) | Respondent No. 10 |
| 11. | Eon Kharadi Infrastructure Pvt. Ltd. (EON SEZ Phase I) | Respondent No. 11 |
| 12. | Eon Kharadi Infrastructure Pvt. Ltd. (EON SEZ Phase II) | Respondent No. 12 |
| 13. | Jawaharlal Nehru Port Trust (JNPT) | Respondent No. 13 |
| 14. | Laxmipati Balaji Supply Chain Management Limited (LBSCML) | Respondent No. 14 |
| 15. | State Transmission Utility (STU) | Respondent No. 15 |
| 16. | Maharashtra State Power Generation Co. Ltd. (MSPGCL) | Respondent No. 16 |

Appearance:

| For the Petitioner : | : Shri. Ghanshyam Thakkar (Rep.) |
|-----------------------------|--------------------------------------|
| For the Respondents: | |
| 1.For MSEDCL | : Shri. Abhishek Khare (Adv.) |
| 2.For TPC – D | : Smt. Hawwa Inamdar (Rep.) |
| 3.For AEML – D | : Shri. Vivek Mishra (Rep.) |
| 4. For BEST Undertaking | : Dr. R. D. Patsute (Rep.) |
| 5. For Indian Railways | : Shri. Shubham Arya (Adv.) |
| 6. For MBPPL | : None |
| 7. For GEPL | : None |
| 8. For KRCIPPL | : None |
| 9. For NUPLLP | : None |
| 10. For MADC | : Shri. Ashish Nagarkar (rep.) |
| 11. For EON (SEZ Phase I) & | |
| 12. For EON (SEZ Phase II) | : Smt. Prajakta Aphale (Rep.) |
| 13. For JNPT | : Shri. Anil Chopade (Rep.) |
| 14. For LBSCML | : None |
| 15. For STU | : Shri. Sanjeevkumar Suradkar (Rep.) |
| 16.For MSPGCL | : Shri. Anil Bapat (Rep.) |
| | <u>ORDER</u> |

Date: 14 December 2023

- 1. Maharashtra Energy Development Agency (MEDA), Pune has filed petition on 20 December 2022 under Section 86(1)(e)of the Electricity Act, 2003 (EA, 2003) seeking appropriate directions to Distribution Licensees in Maharashtra, to meet 50% of total Renewable Purchase Obligation (RPO) requirement by purchase of energy from Renewable Sources within the State as per amendment dated 30 June 2022 in Renewable Energy (RE) Generation Policy 2020 issued by Government of Maharashtra (GoM).
- 2. Main Prayers of MEDA are as follows:

• Issue appropriate directions to Distribution Licensees to meet 50% of total Renewable Purchase Obligation (RPO) requirement by purchase of energy from Renewable Sources within the State

• Pass any Order(s) as this Hon'ble Commission may deem fit in the facts and circumstances of the present case."

3. MEDA in its petition dated 20 December 2022, has stated that:

(a) MEDA is a State Nodal Agency to perform its role and mandate of promoting RE in Maharashtra. The EA,2003 provides for policy formulation by the Government of India (GOI) and mandates Electricity Regulatory Commissions (ERCs) to take steps to promote renewable sources of energy within their area of jurisdiction. As per the provisions of EA 2003 and Tariff Policy, the Maharashtra Electricity Regulatory Commission (MERC or the Commission) has taken proactive measures for promoting RE based generation within the State, such as determination of preferential tariff, Renewable Purchase Specification framework, grid connectivity framework, etc. The Commission has been very proactive in promoting energy generation from RE sources. (b) GoM has also issued various policies from time to time for promotion of RE within the State. Maharashtra is a RE rich state and due to the long-term certainty provided by the prevalent regulatory framework and several other policy initiatives by GoM, there has been significant development of installed capacity based on RE. The estimated potential of various RE sources within the State and capacity commissioned as on 30.09.2022 is as given below:

| Sr. No | Source | Potential (MW) | Installed Capacity (MW) |
|--------|------------------------------------|----------------|----------------------------|
| 1 | Wind | 98210 | 5011 |
| 2 | Solar | 65000 | 2816 |
| 3 | Biomass | 781 | 215 |
| 4 | Bagasse | 3650 | 2339 |
| 5 | Small Hydro | 732 | 370 |
| 6 | Waste to Energy (Urban/Industrial) | 637 | 48 |
| | Total | 169010 | 10799 |

(c) GoM has been issuing policies from Year 1996 for promotion of RE within the State. The State has achieved installed capacity of 10,799 MW as on 30 September 2022, wherein it has achieved only 7 % of the total potential within the State. GoM has issued RE Generation Policy, 2020 on 31 December 2020 (RE Policy 2020) wherein it has set the target of capacity addition of 17,360 MW by 2025 (As per amendment dated 30 June 2022 the deadline was changed to year 2027). The details of RE capacity addition target within State are as given below:

| Sr.No | Source | Capacity Addition Target (MW) |
|-------|------------------------------------|----------------------------------|
| 1 | Wind | 2500 |
| 2 | Solar | 12930 |
| 3 | Bagasse/Biomass | 1350 |
| 4 | Small Hydro | 380 |
| 5 | Waste to Energy (Urban/Industrial) | 200 |
| | Total | 17360 |

- (d) The amendment issued by GoM to RE Policy 2020 on 30 June 2022 provides various incentives to Developers including Electricity Duty exemption for 10 years for captive use for Solar, Wind, Urban Industrial Waste and Biogas Cogen projects within the State. The said amendment also provides that 50% of the total Renewable Purchase Obligation (RPO) of the Distribution Licensees within Maharashtra has to be met from the sources within Maharashtra. It further has mandated MEDA to approach/file Petition before the Commission for issuance of appropriate directions to Distribution Licensees (obligated entities) to purchase RE within the State to meet 50% of the total RPO requirement. Hence, MEDA has filed the current Petition compliance of the directions given in RE Policy 2020.
- (e) As per RPO Compliance Orders issued by the Commission for the Distribution Licensees

within Maharashtra up to 2019-20, it is observed that there has been significant cumulative shortfall in meeting the RPO targets specified by the Commission. Total RPO shortfall is 15070 MU's (Non-Solar: 9907 MU's and Solar: 5163 MU's).

- (f) Based on the sales estimate and Input Energy of the various Distribution Licensees (MSEDCL, AEML-D, TPC-D, BEST, MBPPL, Gigaplex, KRCIPPL) approved by the Commission in the Multi Year Tariff Orders issued on 30 March 2020 for FY 2023-24, FY 2024-25 and the RPO targets specified by the Commission through RPO Regulations, 2019 for the relevant years, the total renewable capacity (at 20% CUF) required to meet the RPO is 36049 MU's (20576 MW) and 42363 MU's (24180 MW) for FY 2023-24 & FY 2024-25 respectively.
- (g) The total capacity required to meet the 50% RPO from within the state is ~10250 MW and ~12100 MW for FY 2023-24 and FY 2024-25 respectively. There is significant potential within the State to meet 50% RPO. The Commission may call for the data from the respective Discoms to assess the incremental RPO requirement considering the sales projections, PPAs signed by Discoms and whether such source of power is within or outside the State.
- (h) Considering the RPO% specified by Ministry of Power, GoI vide its Order dated 22 July 2022, the total capacity required to meet the RPO at the end of year FY2029-30 is 85118MU's (48584 MW). Considering 50% RPO to be met from within the State, the capacity required is ~24250 MW. It is submitted that the State has enough potential for such capacity addition.
- (i) Important aspect considered by the Commission while specifying the RPO targets is the impact of tariff on the consumers. Based on a compilation of the details of tariff adoption order issued by the Commission w.r.t. Solar/hybrid sources for various Discoms, from Year 2019 to Year 2021 it is observed that there has been hardly any difference in tariff discovered from Inter-state and Intra-State projects. Thus, MEDA submits that mandating 50% purchase of RE from within the state will not have any impact on consumer tariff vis-à-vis allowing purchase from anywhere within the Country.

| Sr No | DISCOM | RE Source | Quantum - MW | Tariff -Rs/Unit | IntraState /InterState | Case No | Date of Order |
|----------|--------|--------------|-----------------|-----------------|---------------------------|-------------|---------------|
| 1 | MSEDCL | Solar | 1000 | 2.74/2.75 | Intra/Inter State | 87 of 2019 | 27.05.2019 |
| 2 | AEML | Hybrid | 700 | 3.24 | Inter State | 281 of 2019 | 08.01.2020 |
| 3 | TPC | Solar | 150 | 2.83 | Inter State | 292 of 2019 | 04.12.2019 |
| 4 | MSEDCL | Solar | 500 | 2.89/2.90 | Intra State | 349 of 2019 | 10.01.2020 |
| 5 | MSEDCL | Solar | 350 | 2.9 | Intra State | 81 of 2020 | 15.05.2020 |
| 6 | TPC | Hybrid | 225 | 2.59 | Intra/Inter State | 152 of 2020 | 10.08.2020 |
| 7 | MSEDCL | Solar | 250 | 2.58 | Intra State | 134 of 2021 | 17.12.2021 |

(j) The Solar/Hybrid rates discovered by Solar Energy Corporation of India (SECI) in an around the same time reverse auction was conducted for Intra-State projects was lower than rate adopted by the Commission.

| Sr No | Discom | RE Source | | | SECI discovered Rate -Rs/Unit | SECI -Bid Date | |
|----------|--------------|-----------------------|-----------|--------|----------------------------------|----------------|--|
| 1 | MSEDCL Solar | | 2.74/2.75 | Feb-19 | 2.58/2.60 | Feb-19 | |
| 2 | MSEDCL | MSEDCL Solar 2.89/2.9 | | Dec-19 | 2.71 | Oct-19 | |
| 3 | MSEDCL | Solar | 2.9 | Mar-20 | 2.61 | Mar-20 | |
| 4 | TPC | Hybrid | 2.59 | Jul-20 | 2.99/2.41 | Aug-20/Dec-20 | |

- (k) As a promotional measure, inter-state transmission charges have been waived off for the RE projects to be commissioned before June 2025. In view of the same, the projects commissioned outside the state are competitive. Once the promotional measures end, the tariff within the State will be competitive as compared to projects outside the State.
- (1) Presently, there are transmission constraints to bring power within Maharashtra. To bring additional RE power from outside the State would require additional investment in transmission strengthening of ISTS-InSTS interconnection. This will increase the overall transmission charges (ISTS) for the State. However, creation of RE capacity within the State will lower such investment required for transmission strengthening. It is further submitted that Study Group in respect of RE Capacity addition in the State, in its report has submitted that considering the fact power projects are mainly coming up in Solapur, Osmanabad, Beed and Dhule Districts, STU has adequately planned the required infrastructure and also included the same in the STU plan for development. Further, there is ample capacity available for evacuation of solar and wind projects.
- (m) Specifying that 50% RPO should be met from within the State will not only bring investment within the State but also has other benefits as given below:
 - 1) Local Entrepreneurial development and employment (direct/indirect) opportunities and Electricity can be provided to farmers in daytime.
 - 2) Additional GST, NA Tax, Gram Panchayat tax etc Additional revenue to the State estimated as Rs. 13,055 Crore over life of the Project (NPV- Rs. 3252 Crore). The said amount is as per report submitted by CRISIL for the study initiated by MEDA for calculating financial impact assessment as per RE Policy 2020.
 - 3) Infrastructure and Economic Development of remote rural areas due to RE Power plants.
 - 4) Meet capacity addition target specified in the RE Policy 2020.
 - 5) This will help in increasing RE capacity of the State and it helps to ensure energy security of the State.
 - 6) Distributional generation will be increased, and it will help for grid security of the State.
- (n) As far as the ability of Distribution Licensees to contract and procure incremental RE energy is concerned (timelines and capacity), MEDA submits that all Distribution Licensees are inviting bids for procurement of RE power. However, even after signing

of the PPA, minimum period of 12-18 months is required for commissioning of the project. Possibilities of issues related to land acquisition; Right of Way (RoW) permission cannot be ruled out which could delay commissioning of the projects. Hence, the Commission may consider specifying 50% RPO target to be met within the State in a gradual manner so as to provide sufficient time to Distribution Licensee for entering into new contracts for procurement of RE within the State and also to provide sufficient time for commissioning of such projects.

4. EON (SEZ Phase I &II) in its submission dated 25 January 2023 has stated that:

- a) It has already started discussion with SECI and MSPGCL for procurement of power from RE sources.
- b) With the background of GoM RE policy, EON shall strive to include a condition in the future tender to be floated by SECI, that the generation plant for procurement of at least 50 % of RPO shall be situated in Maharashtra. This condition shall be subject to approval of the Commission.

5. State Transmission Utility (STU) in its submission dated 23 February 2023 has stated that:

- a) Presently the ATC margin available for Maharashtra at CTU-STU network is (- 80.41) MW i.e. negative or resultantly zero MW (ATC of Maharashtra 9760 MW and total LTA operationalized is 9840 MW).
- b) Total 8 transmission network strengthening schemes are being completed on urgent basis for enhancing ATC of Maharashtra which will be included in STU plan to facilitate RE evacuation without system constraints. Expected COD of all those schemes is ranging from Feb.2023, March 2023, Jun.2023, July 2023, Dec. 2023 & Dec.2024. After completion of these schemes total increase in ATC will be 3622 MW.

6. BEST Undertaking in its submission dated 27 July 2023 has stated that:

a) BEST has already tied up 400 MW Solar Wind Hybrid power and 234 MW Solar power. Through such tie up, BEST will be capable to fulfill its Solar and Non-solar RPO from FY 2025-26 onwards as per RPO trajectory of MoP as tabulated below:

| Particulars | FY25-26 | FY26-27 | FY27-28 | FY28-29 | FY29-30 | |
|---------------------------|---------|---------|------------|---------|---------|--|
| | | | Projection | | | |
| Target | | | | | | |
| Energy requirement at G-T | 5334 | 5435 | 5538 | 5643 | 5750 | |
| interface | | | | | | |
| Wind RPO % | 3.36 | 4.29 | 5.23 | 6.16 | 6.94 | |
| Wind RPO in MU | 179.22 | 233.16 | 289.64 | 347.61 | 399.05 | |
| HPO % | 1.48 | 1.80 | 2.15 | 2.51 | 2.82 | |
| HPO in MU | 78.94 | 97.83 | 119.07 | 141.64 | 162.15 | |
| Other RPO % | 28.17 | 29.86 | 31.43 | 32.69 | 33.57 | |
| Other RPO in MU | 1502.59 | 1622.89 | 1740.59 | 1844.70 | 1930.28 | |
| Total RPO % | 33.01 | 35.95 | 38.81 | 41.36 | 43.33 | |
| Total RPO in MU | 1760.75 | 1953.88 | 2149.30 | 2333.94 | 2491.48 | |

| Total RPO fulfilment in MU | 1766.87 | 1768.87 | 1770.87 | 1772.87 | 1774.87 |
|--|---------|---------|---------|---------|---------|
| Total RPO fulfilment in % | 33.12 | 32.55 | 31.98 | 31.42 | 30.87 |
| | | | | | |
| RPOfulfilmentbypurchasing RE power withinMaharashtra | 2.64% | 2.48% | 2.35% | 2.25% | 2.19% |
| | | | | | |
| RPO fulfilment by | 98% | 88% | 80% | 74% | 69% |
| purchasing RE power outside | | | | | |
| Maharashtra | | | | | |

- b) From the above table, BEST will be fulfilling its 98 % RPO in FY 2025-26 by procuring RE power from SECI which is outside the state of Maharashtra and only 2.64 % RPO will be met from RE sources within the State of Maharashtra.
- c) It is the duty of Distribution Licensees to supply electricity to its consumers at an economical rate. Therefore, the factors such as transmission constraint, lower solar radiation, Capacity Utilization Factor, high land cost and higher interest rate cannot be the reasons to load higher tariff to the consumers for a long period of 25 years. Every Distribution Licensees has the right to import cheaper power from anywhere in the country. In today's scenario, the tariff of RE projects in Maharashtra is higher than other state and therefore the consumers of Maharashtra state cannot be deprived from getting the cheaper power.
- d) In these circumstances, MEDA's petition is not appropriate and may not be considered.

7. MBPPL, GEPL and KRCIPPL's in their similar submission dated 12 August 2023 states that:

- a) MBPPL along with GEPL and KRCIPPL are planning to enter long term power procurement agreement of wind solar hybrid for a period of 25 years. Around 60 -70% of demand of KRC Discom is proposed to meet through Hybrid arrangement. If this petition of MEDA is allowed, KRC will strive to include condition in its tender that generation plant for procurement of at least 50% of RPO shall be situated in Maharashtra.
- b) MEDA's petition states compulsion on Discom to procure RE power for their 50% RPO fulfilment from the intra-state RE generators. But this petition does not ask such compulsion on Generators.
- c) If the waiver on ISTS charges extends beyond June 2025, then tariff for Inter-state RE plants will be lucrative as compared to the intra-state RE plants.
- d) In light of upcoming 'Promoting RE through Green OA Regulations, 2022' green OA market will be open to industrial and commercial consumers of below 1 MVA capacity. In this background intra-state RE generators may prefer to supply RE power to industrial and commercial consumers rather than to Discoms.
- 8. **AEML-D** in its submission dated 13 August 2023 has stated that:

- a) The petition ought to be dismissed because the directions sought by the MEDA are completely contrary to the provisions of the EA 2003, inasmuch as it seeks to curtail the right of a distribution licensee to procure RE for the purpose of complying with its RPO from a particular source.
- b) Although procurement of RE Power is a necessary mandate cast upon distribution licensees, however, neither the EA 2003 nor the NTP mandates that a certain percentage of RE power has to be procured by a distribution licensee from within the State. To strike a balance between the States REC mechanism is established.
- c) Relevant extract of the amendment dated 30.06.2022 to the Maharashtra RE Policy, referred by MEDA in its Petition is reproduced below:

"A) Incentive Reforms under Non-Conventional Energy Generation Policy - 2020

4) <u>MEDA is allowed to file petition before Hon'ble MERC, for mandating</u> Distribution Companies in the State to procure 50% of their total Renewable Purchase Obligation (RPO) from Non-conventional energy projects in the State under the Non-Conventional Energy Generation Policy-2020. MEDA is advised to immediately initiate necessary action to file petition before Hon'ble MERC. <u>Post</u> order of Hon'ble MERC on the petition, necessary action will be initiated with the approval of Respected Cabinet."

Above clause shows that MEDA is allowed to file the petition before the Commission for mandating Distribution Licensees in the State to procure 50% of their total RPO from Non-Conventional energy projects in the State, however, the same does not mean that the aforesaid amendment is a binding direction qua procurement of 50% RE power from intra-state sources for the purpose of RPO compliance by distribution licensees, since the above provision itself states that the same is subject to approval of this Commission.

- d) It is a settled principle of law that any policy framed by the State cannot contravene the provisions of the parent statute. For this AEML-D has relied upon Hon'ble Supreme Court judgment in *N.C. Dhoundial vs. Union of India*, reported in, (2004) 2 SCC 579.
- e) Furthermore, a right conferred by the parent statute (*qua freedom to procure RE power for the purpose of meeting RPO from any source*) cannot be withdrawn in such an indirect and camouflaged manner. It is a settled principle of law that what cannot be done directly, cannot at all be indirectly. On this principle, AEML-D relies upon judgment passed by the Hon'ble Supreme Court in T.N. vs. K. Shyam Sunder, reported in (2011) 8 SCC 737.
- f) In the earlier Order in Case No 53 of 2019 wherein the petitioner of that case had proposed compulsion of Domestic Content Requirement (DCR) in line with MoP, GoI, specified certain minimum percentage of DCR for Hydro, Thermal and Renewable projects. While dealing with such proposed compulsion, the Commission held as below;

"12. Regarding, compulsion of Domestic Content Requirement, during the hearing and also in its subsequent submission dated 2 April, 2019; AEML has referred to various circulars of the Government of India wherein certain percentage of local content requirement has been specified. AEML has also stated that there is sufficient domestic manufacturing capacity in India and with the imposition of safeguard duty on imported Solar modules / cells, domestically manufactured solar modules / cells are now at par with imported modules / cells. The Commission notes that with this claim of price parity between imported and domestic solar modules / cell, there is no justification of including condition of DCR and thereby restricting the competition. As domestically manufactured units are at par with imported one, they will easily compete with them and AEML as a Distribution Licensee can have unrestrictive competitive bidding process with the objective of procuring solar energy at lowest possible rate for distributing it to its consumers. The Commission also notes that GoI has still not made the DCR mandatory. Hence, the Commission directs AEML to remove requirement of DCR from its bidding documents."

- g) AEML-D further submitted that to comply with its entire RPO, AEML-D, has already tied up 45 MW wind power, 40 MW solar power, 700 MW wind-solar hybrid power and 4.5 small hydro power on long term basis. Further, it is already at advanced stage to procure another 1500 MW power from grid connected RE Power Projects, complemented with Power from Non-RE or any other source Power Projects in India on Round the Clock (RTC) basis, under Tariff-based Competitive Bidding process. In future, if RPO targets are increased then in order to comply with increased RPO, AEML-D, will undertakes long/ medium/ short term Competitive Bidding in terms of the guidelines issued by the Central Government. The bidding guidelines are only for the purpose of providing exhaustive guidelines for enabling an entity to carry out bidding in a transparent and fair manner; and while inviting bids, the only requirement is that the power must be from Unconventional sources/ renewable sources (*i.e., solar/ non-solar*) so as to allow AEML-D to meet its RPO. As such, the bidding guidelines do not restrict AEML-D to procure RE power from intra-state sources only.
- h) While considering the deviation sought by the petitioners under Case No 140 of 2020 from standard guidelines notified by Government of India, the Commission has expressed as under:

"14.2. Before dealing with the deviations sought by AEML, the Commission would like to emphasize that as per Section 63 of the Electricity Act, 2003, the Government of India is empowered to notify bidding guidelines for procurement of power through competitive bidding process. This is with the intention to have uniformity in bidding conditions across the country. <u>Once such guidelines are notified, all stakeholders need to comply with these guidelines.</u> Considering practical difficulties which may arise during implementation, such guidelines also empower the appropriate Commission to allow deviation sought from the bidding guidelines. While allowing such deviation, one needs to ensure that basic premise of bidding guideline remain unaltered. If we allow the deviation which are contradicting / radically deviating from bidding guidelines then it will undermine very basis of having uniform bidding guideline under Section 63 of the Electricity Act, 2003. With

this background, the Commission is dealing with the deviation sought by AEML in instant Petition." (Underline Supplied)

i) In addition to the foregoing, as a matter of fact, it is submitted that in the past, AEML-D along-with other distribution licensees in the State of Maharashtra have invited bids for procurement of RE power. In the said bids, developers were also required to specify the project location. It is interesting to note that 75% capacity proposed was from outside the State. In this regard, reference may be made to the following details of the bids floated by the distribution licensees in the State of Maharashtra:

| Sl. | Nodal | Capacity | Winner(s) | Capacity | Project location |
|-----|--------|---------------|------------------------------------|----------|------------------|
| No. | Agency | & Type | | Allotted | proposed in |
| | | | | (in MW) | Maharashtra? |
| 1. | MSEDCL | 500 - Wind | Adani Green Energy (MP) Limited | 75 | |
| | | | KCT Renewable Energy Pvt. Ltd. | 75 | Yes |
| | | | Inox Wind Ltd. | 50 | |
| | | | Mytrah Energy (India) Pvt. Ltd. | 100 | Yes |
| | | | Hero Wind Energy Pvt. Ltd. | 75.6 | Yes |
| | | | Torrent Power Ltd. | 124.5 | Yes |
| 2. | MSEDCL | 1000 - | JLTM Energy India Pvt. Ltd. | 20 | Yes |
| | | Solar | Mahoba Solar (UP) Pvt. Ltd. | 200 | Yes |
| | | | Renew Solar Power Pvt. Ltd. | 250 | |
| | | | ACME Solar Holdings Ltd. | 250 | |
| | | | Tata Power Renewable Energy | 150 | Yes |
| | | | Ltd. | | |
| | | | Azure Power India Pvt. Ltd. | 130 | |
| 3. | MSEDCL | 1000 - | Shiv Solar Pvt. Ltd. | 50 | Yes |
| | | Solar | ACME Solar Holdings Ltd. | 300 | |
| | | | Renew Solar Power Pvt. Ltd. | 300 | |
| | | | Avaada Energy Pvt. Ltd. | 350 | |
| 4. | AEML | 700 – | Rosepetal Solar Energy Pvt. | 700 | |
| | | Wind | Ltd. | | |
| | | Solar | | | |
| | | Hybrid | | | |
| 5. | TPCL | 150 – | Tata Power Renewable Energy | 150 | |
| | | Solar | Ltd. | | |
| 6. | TPCL | 225 – | Tata Power Green Energy Ltd. | 225 | Yes (partially) |
| | | Wind | | | |
| | | Solar | | | |
| | | Hybrid | | 200 | |
| 7. | MSEDCL | 500 - | ACME Solar Holdings Ltd. | 300 | |
| | | Solar | Renew Solar Power Pvt. Ltd. | 200 | |
| 8. | MSEDCL | 500 – | TP Saurya Ltd. | 300 | Yes |
| | | Wind | Azure Power India Pvt. Ltd. | 200 | Yes partially |
| | | Solar | | | |
| 0 | MCEDOL | Hybrid | | 200 | |
| 9. | MSEDCL | 500 – | NTPC Renewables Energy Ltd. | 200 | |
| | | Solar | Avaada Energy Pvt. Ltd. | 300 | |

Out of the above 5075.1 MW, only 1260 MW i.e., 25% of the projects have been proposed to be developed in Maharashtra by the developers, whilst the balance 3815 MW

i.e., 75% of the RE power projects comes from outside the State through inter-state RE sources. With restriction to have 50% RE to be procured within State may impact the rates.

- j) The EA, 2003 only mandates procurement of RE power and not the location of such RE power. Furthermore, considering the fact that any procurement done by a distribution licensee (*such as the AEML-D*) is done on the basis of commercial principles, and therefore, it is completely unjust to curtail the right of distribution licensees to the extent of compelling them to procure 50% RE power from intra-state sources as it will impact the tariff to its Consumers.
- k) The Commission in its Order dated 31.03.2023 in Case No. 242 of 2022, which was filed by MSEDCL for seeking approval for adoption of Tariff for long term procurement of 500 MW power from intra-state grid connected solar power projects under Section 63 of the EA 2003, was aware that even calling bids for intra-state projects is an unavoidable action, the same is not desirable as such restrictions has led to increase in discovered tariff as Maharashtra has lower solar radiation and higher cost of land as compared to States like Gujarat and Rajasthan. The relevant extract of the aforesaid order is set-out hereinbelow:

"8.4. However, as stated by MSEDCL, even after addition of such transmission capacity, it would only be sufficient for projects to whom STU has already issued conditional NoC. Hence, there is little capacity left for new projects. <u>Under such</u> circumstances, the Commission is inclined to accept MSEDCL's action of calling bids for only intra-state projects as unavoidable action. The Commission is aware that the same is not desirable at all and it does not subscribe to the same in medium term and long term when MSEDCL will be tenderising bids for RE procurement. As can be seen from subsequent paragraph of this Order, such restriction of transmission corridors has led to increase in discovered tariff as Maharashtra has lower solar radiation and higher cost of land as compared to States like Gujarat and Rajasthan. MSEDCL is not responsible for the limitation of ATC. Had MSEDCL gone ahead with interstate procurement ignoring these restrictions on the transmission capacities there would have been a possibility that the bid rates would have been lower but there would always be an uncertainty of MSEDCL requiring to compensate such bidder for loss of generation without getting any power supply. Therefore, in view of transmission constraints, the Commission accepts MSEDCL's decision to bid for only intra-state projects." (Emphasis added)

From the aforesaid extract, it can be seen that the Commission also suggested that if MSEDCL had gone ahead with the "interstate" procurement, thereby ignoring the restrictions qua the transmission capacities, then a possibility would be that the bid rates would have been lower. The said view was also taken by this Commission in another Order dated 11.05.2023 passed in Case No. 41 of 2023 (*Para 7.4*), wherein it had taken a similar view in terms of the aforesaid Order dated 31.03.2023.

1) The Ministry of Power (MoP) and the Ministry of New and Renewable Energy (MNRE)

have time and again come out with guidelines for procurement of RE power by a distribution licensee. These guidelines do not place any restriction upon the distribution licensee to procure RE power from a particular source (*i.e., intra-state sources as alleged by MEDA*). In fact, the aforesaid guidelines have pegged intra-state and inter-state projects equally, and as such, it is only on the basis of competitiveness of tariff that the distribution licensee procures RE power.

- m) Without prejudice to the above, even if this Commission deems it appropriate to direct all distribution licensees to procure 50% RE power from within the State for the purpose of meeting RPO, such an imposition can only be made prospectively for the future RPO to be met and should not be applicable to procurement already approved or at advanced stage for meeting the current RPO. Additionally, if this Commission may also consider providing an opportunity to the Intra-State bidders to match the L1 bidding tariff so that the consumer tariff is not impacted.
- n) MEDA cannot allege that merely because tariff of intra-state sources is near about the same with inter-state sources, 50% procurement of RE power must be mandated from intra-state sources. Such an interpretation runs completely contrary to the EA 2003 and the competitive bidding guidelines. It is pertinent to mention that all Distribution Licensees in Maharashtra are calling open Tender & selecting Bidder based on price only, hence this analysis does not make any value addition as if there is any generator who offers competitive rate it would automatically get selected.
- o) MEDA cannot seek a direction from this Commission to compel distribution licensees in the State of Maharashtra to procure RE power from within the State. This Commission must consider the fact that procurement of RE power should be done on competitive basis as it directly impacts the tariff payable by the Consumers of Distribution Licensee. In the past when the distribution licensees have carried out competitive bidding for RE power procurement, it has been seen that there is minimal participation from the intra-state projects. In view of the foregoing detailed objections and submission, the Commission may dismiss MEDA's current petition, for being devoid of any merits.

9. MSEDCL in its submission dated 14 August 2023 stated that:

- a) The section 63 of EA, 2003 provides that, the bidding process has to be transparent adhering to the guidelines provided by Central Government. These guidelines issued by Central Government enables the Discom to procure from a wind- solar project located anywhere across India. In case of any deviation or relaxation is required from said guidelines, then such deviation / relaxation has to be approved by the Commission.
- b) MSEDCL procures the RE to meet out the RPO targets in fair and transparent manner adhering to provisions of Act, Regulations, and policies and in the interest of common consumers.
- c) The Commission on dated 05.08.2023 has circulated the Draft MERC (RPO, its Compliance and implementation of REC framework) (First Amendment) Regulations 2023. The said draft Regulations has introduced new provisions such as separate Wind

RPO, Hydro RPO, storage target etc. Hence, MEDA's prayer may be due deliberated during the public consultation process.

10. Indian Railways in its submission dated 14 August 2023 has stated as follows:

- a) Amendment to the GoM, RE Policy, 2020 in regard to procurement of 50% of the electricity form the Generating Stations within Maharashtra towards compliance of the RPO Obligation cannot be said to be binding on this Commission.
- b) The condition that RPO Obligations to be met by RE Purchases from RE Power Plants established in Maharashtra only is not consistent with the Scheme under the EA, 2003 and the principles of allowing interstate trade under the Constitution of India. The EA, 2003 is a Central Legislation enacted by the Parliament and applies to whole of India. The Act also has a number of provisions dealing with interstate supply of power namely generation in one State and supply in another state, inter-state transmission and the Regional / National Grid being maintained with free flow of electricity throughout the Country. The electricity requirements in Maharashtra is not being met only by generating stations established within Maharashtra but also by sourcing electricity from generators, traders and others from outside Maharashtra.
- c) The electricity purchases cannot be seen in a manner isolated and in a watertight manner within any State. The RPO obligations for consumption in any State can be met by Renewable Energy Certificates (RECs) which is traded in power exchanges and cannot be said to be a State Specific phenomenon. The REC is regulated by the Central Commission. The State Commission cannot directly or indirectly take away the right to fulfil RPO through purchase of REC. There is no rationale for not accounting for RE Generation or purchase of RE Generation outside the State being not considered as satisfaction of RPO. The State Government cannot under the guise of policy directives exclude the consideration of RE Consumption outside the State to be not eligible for showing RPO fulfilment.
- d) Indian Railways has already tied-up sufficient capacity in the form of Long-term PPA's with various Generators pan-India, which will enable Indian Railways to fulfil its RPO obligations within the State of Maharashtra. It may be exempted from complying with the amendment to the RE Policy, 2020 as it has already tied up 75% of its estimated load consumption in the State of Maharashtra through renewable sources and the same is expected to come by FY 2025-26 in a phased manner. Similar arrangements have been/are being done with the Renewable Generators *qua* the load consumption in other States as well, and therefore, as at present, Indian Railways is not in a position to further tie up any more capacity as the same would be in excess of the electricity requirement of Indian Railways.

11. Nidar Utilities (NULLP) in its submission dated 16 August 2023 has stated that:

a) NUPLLP is a Deemed Distribution Licensee have demand of the tune of around 5 MW and would gradually increase in due course of time. NUPLLP is having an approved PPA (Case No.218 of 2022, dated 16 January 2023) with Small Hydro Power Plant in

Maharashtra. At present the price discovered in the Competitive Bidding at Deep portal was less from the RE Generator within the State.

- b) Restriction of the 50% Power Procurement within State for RE is ultra vires of the Act and defeat the purpose of the providing the competitive/ economic electricity rates to end consumers. It is envisaged that the Generators within State need to compete with the Generators outside the State and provide reliable and competitive tariff to the Distribution Licensee.
- c) The Commission in its Order dated 31.03.2023 in Case No. 242 of 2022 in the matter of Petition filed by MSEDCL seeking approval for adoption of Tariff for long term procurement of 500 MW power from intra-state grid connected solar power projects, has noted that the Commission is inclined to accept MSEDCL's action of calling bids for only intra-state projects as unavoidable action. The Commission has opined that it is not desirable at all and it does not subscribe to the same in medium term and long term when MSEDCL will be tenderizing bids for RE procurement.
- d) Distribution Licensees responsibility is to supply electricity to its consumers at economical rate. Therefore, the factors such as transmission constraint, lower solar radiation, lesser Capacity Utilization Factor, high land cost, etc could not be the reasons to load higher tariff to the consumers. Every Distribution Licensees has the right to procure power through Competitive Bidding without any restriction of participation by a generator either from the State or Outside the State and ensure that the cheaper power is procured. Presently Government of India through its PSU is also procuring cheaper power from Country like Nepal and improving the Transmission Infrastructure between the two Countries.
- e) To protect the interest of the consumers, NUPLLP submits that the petition filed by the MEDA seeking approval for appropriate directions to Distribution Licensees to meet 50% of total RPO requirement by purchase of energy from RE Sources within the State is not appropriate and cannot be considered.

12. TPC-D in its submission dated 17 August 2023 has stated that:

- a) TPC-D supports the proposal of MEDA, however, the Commission may like to consider the following for implementation of the same:
 - The increase in percentage share may be done in a gradual manner as has been already suggested by MEDA and the % share of intra-state RE in total RPO may be clearly specified for each year by the Commission.
 - Development of RE capacity requires a coordinated and synchronized effort in as much as land availability and acquisition, making available adequate transmission infrastructure for evacuation of power, timebound approvals and timely development of the project by the Developer. Delay in any of these actions leads to delay in commissioning of projects and consequently shortfall in meeting the RPO

targets of the Distribution Licensees. MEDA may consider proactively smoothening this entire process for speedy development of the RE projects by enabling a coordinated effort amongst various concerned entities, specifically since, the stated RPO target is significantly high.

• TPC-D agrees with the views of MEDA that the promotion of intra-state RE Generation may help relieve the inter-state transmission constraint to some extent. However, due to the infirm nature of RE sources generation, the capacity constraint in Transmission system may not improve significantly in proportion to the addition of capacity of RE sources commissioning.

13. MSPGCL in its submission dated 17 August 2023 has stated that:

- a) Being a pioneer RE generating company in the State, MSPGCL agrees with the submissions made by MEDA in the present matter and supports the prepositions made thereunder. In order to increase the installed RE capacity in the State to the quantum desired under the RE Policy, 2020 notified by GoM at a fast pace, there is need to provide some additional provisions in RPO Regulations apart from the incentives and initiatives by GoM.
- b) Around 20576 MW RE capacity will be required to fulfill the 22% RPO requirement for FY 2023-24 and considering demand rise and RPO % increase it will rise to 24180 MW and 48584 MW by FY 2024-25 and FY 2029-30 respectively.
- c) The estimated RE capacity potential in Maharashtra is around 1,69,000 MW out of which around 65,000 MW is solar power capacity. Against this, projects of only around 12000 MW capacity can be installed till now. So, there is wide untapped capacity till date. As per MSPGCL, while there are some geographical issues like limitations on availability of adequate radiation density or wind velocity at many regions and comparatively costly land prices, the comparatively lower tariffs observed in Inter-state contracts is the major reason behind the lower capacity addition within the State. Presently the tariffs for the Inter-State RE contracts are observed to be cheaper by around 30 paise to 50 paise as compared to the tariffs for the Intra-State RE projects.
- d) There is significant rise in PGCIL charges, there is similar significant increase in RE power purchases. The average per unit PGCIL charge paid has increased from 48 paise in FY 17-18 to 54 paise in FY 21-22. So, it is obvious that due to the concessional facility available to the Inter-State RE power, the tariffs for these contracts are apparently cheaper by around 50 paise when the Maharashtra State is paying these charges. This is apart from the Transmission losses benefit currently available to the Intra- State RE generators. Thus, MSPGCL strongly demands that in order to make a level playing field available to the Intra-State RE generators there is a need for some protective measure like provision of State specific RPO targets.
- e) Adequate capacity addition is planned by STU for the required infrastructure and included the same in the STU plan for development. Further, there is ample capacity

available for evacuation of solar and wind projects. As against it, presently there are transmission constraints to bring power within Maharashtra. To bring additional RE power from outside the State would require additional investment in transmission strengthening of ISTS-InSTS interconnection. This will increase the overall transmission charges (ISTS) for the State. Thus, it will be more appropriate if more RE capacity addition is achieved within the State instead of going for procurement of RE power from Inter-state RE generators.

- f) As per MSPGCL's understanding, the EA, 2003 as well as the National Tariff Policy, 2016 provide the statutory authority for framing regulatory mechanism to promote the usage of RE power. Section 86 1(e) mandates State Commission to promote generation of electricity from RE resources by specifying RPO for purchase of power by the Distribution Licensees and there is no prohibition to specify a particular source for such procurement. Thus, the Commission is well within its power to specify 50% RPO from the State irrespective of the GoM Policy.
- g) In view of the above, MSPGCL requests the Commission to consider MEDA's prayers. MSPGCL also requests that the Commission can gradually increase RPO requirements to be met from the State so that it gives sufficient time for obligated entities to tie up capacity within the State.

14. At the E-hearing held on 18 August 2023:

- a) MEDA reiterated its submissions as made in the petition.
- b) During the hearing the Commission asked MEDA that if it's prayer is allowed then what will be the impact on the existing PPA's of the Distribution Licensees with the RE Generators? Under which section of the EA, 2003 and under which provisions of the Regulations MEDA's prayer can be addressed? To which MEDA replied that the petition has been filed u/s 86 (1) (e) of EA, 2003 and the provision of RPO Regulations can be relied upon. MEDA has also replied that, Discoms need to fulfil its RPO targets under RPO Regulations upto FY 2024-25, after that period MoP has given RPO targets.
- c) The Commission directed MEDA to submit the Discom wise data such as RPO shortfall, PPA executed, tenure of PPA, RPO fulfilment with existing PPA etc. The Commission opined that in absence of such data, specific directions cannot be given. Generic or blanket directions to all Discoms may not be possible. Moreover, MoP policy also does not provide that for RPO fulfilment Discoms are mandated to procure certain percentage of RE on intra state level only.
- d) The Commission further opined that since MEDA is working as Nodal Agency in Maharashtra for promotion of energy from RE sources, it is privy to all such data. The Commission directed MEDA, to submit its additional submission /say within fifteen days, after obtaining data from all respondents. The Commission also asked to all parties to submit the rejoinder, replies, written submissions within seven days and reserved the matter for final Orders.

15. MEDA in its additional submission dated 15 September 2023 states that:

- a) All the Deemed Distribution Licensees except Railways have either no contract for RE Purchase (JNPA, LBSCML, MADC) or have tied up renewable power in short term (MBPPL, GEPL, KRCIPPL, NUPLLP, EON-I and EON-II with existing PPA's expiring latest by July 2024.
- b) As per existing PPA's signed by the TPC-D, BEST, AEML, MSEDCL, RPO% to be met from within the State and from outside the State considering the input energy for FY 2024-25 approved in the respective MTR Orders dated 31 March 2023 is as given below:

| | Discom | Gross | RPO | RE | RE Tied up | o in Long Ter | rm PPA (MU |) | Total RE | Total | Total | RPO% to |
|-----|----------|--------|-----|-------|------------|---------------|------------|------------|----------|------------|--------|----------|
| Sr | Name | Input | (%) | Req. | Solar | Solar | Non- | Non- | purchase | Intrastate | RPO% | be met |
| No | | Energy | | (MU) | Interstate | Intrastate | Solar | Solar | (MU) | RE | likely | from |
| 110 | | (MU) | | | | | Interstate | Intrastate | | Purchase | to be | Intra- |
| | | | | | | | | | | (MU) | met | state |
| | | | | | | | | | | | | Purchase |
| 1 | MSEDCL | 141595 | 25% | 35399 | 4363 | 3607 | 429 | 9935 | 18333 | 13541 | 13% | 10% |
| 2 | AEML-D | 13495 | 25% | 3374 | 1330 | 0 | 952 | 123 | 2405 | 123 | 18% | 1% |
| 3 | TPC-D | 6052 | 25% | 1513 | 736 | 45 | 0 | 301 | 1082 | 346 | 18% | 6% |
| 4 | BEST | 4663 | 25% | 1166 | 1342 | 31.5 | 379 | 0 | 1752 | 32 | 38% | 1% |
| 5 | Railways | 3497 | 25% | 874 | 273 | 0 | 196 | 95 | 564 | 156 | 16% | 4% |
| | Total | 169302 | 25% | 42325 | 8045 | 3684 | 1955 | 10453 | 24137 | 14198 | 14% | 8% |

Note: i. For Central Railways, the load (energy) as submitted in the Reply filed in Case No 6 of 2023 is considered.

ii. Yearly Generation availability is considered for BEST from its existing PPA's which are yet to achieve COD (COD date is Dec 24 for PPAs with SECI).

- c) From the above table, on a standalone basis for FY 2024-25, considering the RPO% of 25% specified in the RPO Regulations, 2019, there is shortfall in overall RPO% to be met from the Licensees except for BEST (for which generation availability for full year of FY 2025-26 is considered). Further, there would be additional requirement for meeting the RPO shortfall for the past period.
- d) Even if the Commission directs RPO to be met from the sources within the state, there would not be any surplus with the licensees.
- e) The Commission has proposed to increase the RPO% from 29.9% to 43% upto FY 2029-30 in accordance with the RPO% specified by MoP, GoI vide its Order dated 22 July 2022. This will give further flexibility to accommodate the RE power to be purchased from within the State to meet the RPO. The State has enough potential for such capacity addition and meet the RPO from within the State. This will also promote the RE Capacity addition within the State and meet the target of capacity addition of 17,360 MW as per RE Policy, 2020 on 31 December 2020 issued by GoM.
- f) Specifying that 50% RPO should be met from within the state will not only bring investment within the State but also has other benefits as given below:
 - Local Entrepreneurial development and employment (direct/indirect) opportunities.

- Additional GST, NA Tax, Gram Panchayat tax etc Additional revenue to the State estimated as Rs 13,055 Crore over life of the Project (NPV- Rs 3252 Crore). The said amount is as per report submitted by CRISIL for the study initiated by MEDA for calculating financial impact assessment as per RE Policy 2020.
- Infrastructure and Economic Development of remote rural areas due to RE Power plants.
- Meet capacity addition target specified in the RE Policy 2020.
- g) Therefore, MEDA submits that the Commission may allow its prayers.

Commission's Analysis and Rulings:

- 16. The Commission notes that the GoM has issued RE Policy, 2020 on 31 December 2020 wherein it has set the target of capacity addition of 17360 MW by 2025 (This deadline was further changed to Year 2027 as per subsequent amendment dated 30 June 2022). This amendment also provided various incentives to RE developers including Electricity Duty exemption for 10 years for captive use for Solar, Wind, Urban Industrial Waste and Biogas Cogen projects. Further said policy also states that 50% of the total RPO of the Distribution Licensees in Maharashtra has to be met from the RE sources within Maharashtra and it mandated MEDA to approach/file Petition before the Commission for issuance of appropriate directions to Distribution Licensees (obligated entities) to purchase RE within the State to meet 50% of the total RPO requirement. Accordingly, the present petition has been filed by MEDA.
- 17. Based on the materials, documents and submissions made in present proceedings, the Commission notes that main issue which needs to be decided in the present matter is that whether the Commission can impose such mandate of procuring 50% of RPO requirement from projects within the state on Distribution Licensee?
- 18. Before proceeding with the preliminary issue on merits, the Commission is canvassing the succinct regulatory framework under the EA 2003 as well as certain other important policies issued by the GoI, which governs the procurement and sale of RE power.
 - a) The EA 2003 in terms of Section 61(h) and Section 86(1)(e) mandates and promotes procurement of RE power by Obligated Entities (i.e., distribution licensees, captive generating plants, open access consumers etc.) as a promotional tool. The relevant extracts of the aforesaid sections are reproduced hereinbelow:

"61.Tariff regulations:

The Appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff, and in doing so, shall be guided by the following, namely:

•••• ••• •••

(*h*) the promotion of co-generation and generation of electricity from renewable sources of energy;

86. Functions of State Commission:

(1) The State Commission shall discharge the following functions, namely:

(e) <u>promote co-generation and generation of electricity from renewable sources</u> <u>of energy</u> by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;"

b) National Tariff Policy (NTP), 2016 [issued in terms of Section 3 of EA 2003] also provides as under:

"4.0 OBJECTIVES OF THE POLICY

The objectives of this tariff policy are to:

...

(e) Promote generation of electricity from Renewable sources;

...

6.4 Renewable sources of energy generation including Co-generation from renewable energy sources:

(1) <u>Pursuant to provisions of section 86(1)(e) of the Act, the Appropriate</u> <u>Commission shall fix a minimum percentage of the total consumption of electricity</u> <u>in the area of a distribution licensee for purchase of energy from renewable energy</u> <u>sources, taking into account availability of such resources and its impact on retail</u> <u>tariffs</u>. Cost of purchase of renewable energy shall be taken into account while determining tariff by SERCs. Long term growth trajectory of Renewable Purchase Obligations (RPOs) will be prescribed by the Ministry of Power in consultation with MNRE.

Provided that cogeneration from sources other than renewable sources shall not be excluded from the applicability of RPOs.

(i) Within the percentage so made applicable, to start with, the SERCs shall also reserve a minimum percentage for purchase of solar energy from the date of notification of this policy which shall be such that it reaches 8% of total consumption of energy, excluding Hydro Power, by March 2022 or as notified by the Central Government from time to time.

(ii) Distribution Licensee(s) shall compulsorily procure 100% power produced from all the Waste-to-Energy plants in the State, in the ratio of their procurement of

power from all sources including their own, at the tariff determined by the Appropriate Commission under Section 62 of the Act.

(iii) It is desirable that purchase of energy from renewable sources of energy takes place more or less in the same proportion in different States. To achieve this objective in the current scenario of large availability of such resources only in certain parts of the country, an appropriate mechanism such as Renewable Energy Certificate (REC) would need to be promoted. Through such a mechanism, the renewable energy based generation companies can sell the electricity to local distribution licensee at the rates for conventional power and can recover the balance cost by selling certificates to other distribution companies and obligated entities enabling the latter to meet their renewable power purchase obligations. The REC mechanism should also have a solar specific REC.

(iv) Appropriate Commission may also provide for a suitable regulatory framework for encouraging such other emerging renewable energy technologies by prescribing separate technology based REC multiplier (i.e. granting higher or lower number of RECs to such emerging technologies for the same level of generation). Similarly, considering the change in prices of renewable energy technologies with passage of time, the Appropriate Commission may prescribe vintage based REC multiplier (i.e. granting higher or lower number of RECs for the same level of generation based on year of commissioning of plant).

(2) States shall endeavour to procure power from renewable energy sources through competitive bidding to keep the tariff low, except from the waste to energy plants. Procurement of power by Distribution Licensee from renewable energy sources from projects above the notified capacity, shall be done through competitive bidding process, from the date to be notified by the Central Government.

(Emphasis added)

Careful observation of above regulatory framework indicates that, procurement of power from RE sources is a necessary mandate cast upon distribution licensees, however, neither the EA 2003 nor the NTP mandates that a certain percentage of RE power has to be procured from sources within the State.

- 19. In line with above legal framework, the Commission deems it fit to mention the options available to RE Projects to sale its power as enumerated below.
 - a) Generation of electricity being delicensed activity under the EA 2003, any person can setup generating facility by complying with technical standards. Such generator is free to use electricity so generated for its self-use or sell it to Distribution Licensee or any other person through Open Access.
 - b) In case of RE generators, since 2010, one more option of REC mechanism was made available wherein RE generator can sell brown component of energy at Average Power

Purchase Cost (APPC) to Distribution Licensee and earn cost of green attribute by selling RECs on the power exchanges. The above option has been continued under the provisions of MERC RPO Regulations, 2019 notified on 27 December 2019. Operating period of these Regulations is from 01 April 2020 to 31 March 2025. Under provisions of Regulations 14 of these Regulations, certain pricing principles and options for RE Projects are provided which are as mentioned below:

14. Pricing Principles for Renewable Energy Projects commissioned during the Operating Period

<u>All RE Projects</u> commissioned during the Operating Period specified in these Regulations <u>shall have the option of participate in competitive bidding process</u> or <u>following the Tariff structure and other conditions as specified in the Regulations of</u> <u>the State Commission governing the terms and conditions for determination of RE</u> <u>Tariff or adopt the REC mechanism for pricing of the electricity generated from such</u> <u>Projects:</u>

Provided that Projects that choose one or the other option shall have to continue with that option during the entire Tariff Period or until validity of the Power Purchase Agreement, whichever is later;

Provided also that such RE Projects shall exercise their choice of pricing mechanism prior to execution of the PPA with a Distribution Licensee or an Open Access Consumer, as the case may be. (Emphasis added)

- c) Besides above, RE project shall have the option of participate in competitive bidding process under section 63 or can go for Generic tariff determined under section 62 of EA, 2003.
- 20. On similar lines to that of RE Generators, it is worthwhile to mention the options available to Obligated Entities/ Distribution Licensees to procure power from RE sources for fulfilment of their RPO:
 - a) For fulfilment of RPO, an obligated entity/ Discoms has an option to fulfil its RPO either by procuring RE in physical form or by REC or partly by REC and partly by physical renewable energy. These facts had been upheld by APTEL in its Judgment dated 16 April 2015 in Appeal No. 258 of 2013 as under:

"71…

(i) <u>The National Tariff Policy and the Regulation of the Central Commission and the</u> <u>State Commission recognize REC as valid instrument for fulfilling Renewable</u> <u>Purchase Obligation cast upon the obligated entities under Section 86(1)(e) of the</u> <u>Electricity Act, 2003. Purchase of REC would be deemed as purchase of energy from</u> <u>renewable energy source for fulfilling RPO obligation</u>. <u>When a legal fiction has been</u> <u>created by a statute, the same should be given full effect.</u> (ii) An obligated entity <u>has option to fulfil its RPO either by procuring renewable</u> <u>energy in physical form or by REC or partly by REC and partly by physical</u> <u>renewable energy</u>. However, a <u>distribution licensee has to exercise the option based</u> <u>on economic principles...</u>...

An obligated entity other than the distribution licensee <u>may also opt for purchase of</u> <u>REC for fulfilling its RPO obligation to avoid the issues involved in banking, open</u> <u>access, sale of surplus power, etc., or if the RPO requirement is too small</u>.

(iv) The State Commission can revise the RPO before or during a year or after passing of year under Regulation 4.2 of RE Regulation 2010 as explained under paragraphs 47 to 51 above. If the distribution licensee has not made efforts to procure requisite renewable energy to fulfil the RPO and also has not procured REC, the State Commission should not revise RPO under Regulation 4.2. <u>However, while revising the RPO targets, the State commission has to ensure that such revision should not defeat the object of the Electricity Act and the Regulations.</u>

(v) If the RPO targets are revised under Regulation 4.2 <u>due to inadequate capacity</u> addition in a resource rich State, such reduction has to be uniform for all the entities.

vi) Under 5th proviso to Regulation 9, <u>if the Commission is convinced that the</u> obligated entity has faced genuine difficulty in meeting the RPO due to nonavailability of power from renewable sources or the REC, it may allow carry forward the compliance requirement to the next year. However, before exercising power under Regulation 9, the State Commission has to satisfy itself that there was difficulty in meeting the RPO from purchase of REC. Therefore, <u>non-availability of REC is a</u> <u>pre-condition for carry forward</u> under Regulation 9.

(vii) <u>Admittedly there was substantial reduction in capacity addition of wind energy</u> and other sources of renewable energy in the State during FY 2012-13 due to reasons beyond the control of the distribution licensee. Under such a condition the State Commission can reduce RPO targets for the wind energy and other energy. However, such reduction due to capacity constraints has to be uniform for all the obligated entities in the State.

- b) Further, Section 42 of EA, 2003 provides that it shall be the duty of the distribution licensee to develop and maintain an efficient, coordinated, and economical distribution system in its area of supply and to supply electricity in accordance with the provisions of the EA,2003. Discoms are duty bound to supply electricity to its consumers at economical rate.
- c) NTP 2016 notified by the GoI recommended procurement of RE (except waste to energy plant) through competitive bidding/market discovered price to encourage competition and possibility of reduction in tariffs.
- d) As required under section 63 of the EA 2003, the ministry of Power, GoI has notified

various competitive bidding guidelines for procurement of power from various sources of Renewable Energy.

- e) Green Term Ahead Market (GTAM) and Green Day Ahead Market (G-DAM) enables procurement of green energy through Power Exchanges which is accounted towards the Renewable Purchase Obligation of Obligated Entities. Thus, now-a-days, Discoms are making efforts to meet the RPO by procuring RE power from GDAM/GTAM or through competitive bidding process.
- 21. The Commission further notes that while comparing tariff discovered in intra-state and inter-state projects, MEDA has stated that projects commissioned outside the state are competitive due to waiver of inter-state transmission charges. However, the Commission notes that said waiver of transmission charges is limited for the projects to be commissioned before June 2025. Post such period there would be parity and intra-state projects would easily compete with inter-state projects. Even if payer of MEDA is allowed it has to be with prospective effect and considering 18-24 moths period require for commissioning of the project, these projects can be commissioned post June 2025 only i.e. period when there would be parity in inter-state and intra-state projects as waiver of inter-state charges would ceases to be exists. Hence, even without imposing any restriction of procurement of power from projects with Maharashtra, as projects become competitive vis-à-vis landed cost of inter-state projects, intend of the Government Policy can be met.
- 22. It is important to note that the GoM in its amendment dated 30 June 2022 to RE Policy has recognised the fact that tariff for RE projects setup in Maharashtra is higher than that being setup in other States and hence provided additional incentives to RE projects to be setup in Maharashtra. Relevant part of the Policy is reproduced below:

प्रस्तावना

केंद्र शासनाने नवीन व नवीकरणीय (अपारंपारिक) ऊर्जास्त्रोतांचे महत्व विचारात घेऊन सन २०३० पर्यत ५०० गिगावॅट इतकी वीजनिर्मिती विविध अपारंपारिक ऊर्जा स्त्रोतातून करण्याचे उद्दिष्ट ठेवले आहे. सदर उद्दिष्टांची पूर्तता निश्चित केलेल्या कालावधीत पूर्ण होण्यासाठी सर्व राज्याचा सहभाग महत्वाचा ठरणार आहे. राज्यातील उपलब्ध ऊर्जा स्त्रोतांतून वीज निर्मितीचा वाव लक्षात घेता सन २०२७ पर्यत २७००० मेगावॅट क्षमतेचे अपारंपारिक ऊर्जा प्रकल्प कार्यान्वित प्रयत्न होण्याची गरज आहे.

अपारंपारिक ऊर्जा स्त्रोतांपासून निर्माण होणाऱ्या वीजेचे प्रमाण पारंपारिक वीज निर्मितीच्या तुलनेत वाढविण्याकरीता शासनाद्वारे अपारंपारिक ऊर्जा निर्मिती धोरण-२०२० दि.३१ डिसेंबर, २०२० रोजी जाहीर केले आहे. अपारंपारिक ऊर्जा निर्मिती धोरण-२०१५ व धोरण-२०१६ अंतर्गत अपारंपारिक ऊर्जा प्रकल्पांना देण्यात येत असलेल्या सवलती वगळून सन २०२० चे धोरण जाहीर करण्यात आले. सदरचे धोरण जाहीर झाल्यानंतर अपारंपारिक ऊर्जा निर्मिती प्रकल्प उमारणाऱ्या प्रमुख Stake holder यांनी शासन पातळीवर व महाऊर्जाकडे अपारंपारिक ऊर्जा निर्मिती प्रकल्प उमारणाऱ्या प्रमुख Stake bolder यांनी शासन पातळीवर व महाऊर्जाकडे अपारंपारिक ऊर्जा निर्मिती प्रकल्प उमारणाऱ्या प्रमुख Stake bolder यांनी शासन पातळीवर व महाऊर्जाकडे अपारंपारिक ऊर्जा निर्मिती प्रकल्प उमारणासाठी होणारी मोठी गुंतवणूक, त्याद्वारे राज्यात निर्माण होणारी वीज तसेच निर्माण होणारा रोजगार आणि अनुषंगिक फायदे विचारात घेऊन सदर धोरणामध्ये त्यांना सोयी सवलती देण्याबावत विनंती केली होती. <u>तसेच राज्यामध्ये जमिनीची किंमत इतर राज्यांच्या तुलनेने जास्त असल्याने राज्यातील</u> <u>अपारंपारिक ऊर्जा प्रकल्पांपासून निर्माण झालेली वीज इतर राज्यांच्या तुलनेत महाग असून राज्यातील</u> <u>अपारंपारिक ऊर्जा प्रकल्पांतून वीज विकत घेतात. वीज विक्री दरातील फरक कमी करण्यासाठी व अपारंपारिक ऊर्जा प्रकल्पांतून वीज विकत घेतात. वीज विक्री दरातील फरक कमी करण्यासाठी <u>अपारंपारिक ऊर्जा प्रकल्पांती शासनामार्फत सोयी सवलती/ अनुदान स्वरूपात आर्थिक सहाय्य मिळणे/</u> <u>अपारंपारिक ऊर्जा प्रकल्पांना उद्योगाचा दर्जा देणे, इ. उपाय योजना करणे आवश्यक झाले.</u></u>

या सर्व बाबी विचारात घेता राज्यात अपारंपारिक ऊर्जा स्त्रोतांपासून मोठ्या प्रमाणावर वीज निर्मिती प्रकल्प आस्थापित होऊन देशात अपारंपारिक ऊर्जा क्षेत्रात देशात राज्य अव्वल स्थानावर येण्यासाठी ''अपारंपारिक ऊर्जा निर्मिती धोरण-२०२० मध्ये अपारंपारिक ऊर्जा प्रकल्पांना सोयी सवलती/ अनुदान स्वरूपात आर्थिक सहाय्य अंर्तभूत करुन प्रोत्साहनात्मक सुधारणा करण्याची बाब शासनाच्या विचाराधीन होती.

शासन निर्णय :-

अपांरपारिक ऊर्जा निर्मिती धोरण-२०२० मध्ये अपारंपारिक ऊर्जा प्रकल्पांना खालीलप्रमाणे सुधारणा/ आर्थिक सहाय्य व सोयी सवलती देण्यास शासन मान्यता देण्यात येत आहे. <u>----</u>

२) राज्याचे नवीन अपारंपारिक ऊर्जा निर्मिती धोरण-२०२० अंतर्गत उद्योगांनी स्वयंवापरासाठी सौर, प्रवन, शहरी व औद्योगिक घन कचरा ऊर्जा निर्मिती व उसाच्या चिपाडावर आधारित वीज निर्मिती प्रकल्प आस्थापित केल्यास त्यातून निर्माण झालेल्या विजेवर प्रकल्प कार्यान्वित झालेल्या दिनांकापासून पहिल्या १० वर्षापर्यंत विद्युत शुल्क माफ करण्यास मंजूरी देण्यात येत आहे.

३) <u>अपारंपारिक ऊर्जा निर्मिती धोरण-२०२० अंतर्गत सौर व पवन वीज निर्मिती प्रकल्पांसाठी बिगर शेती</u> <u>कर माफ करण्यास मान्यता देण्यात येत आहे.</u>

8) राज्यात अपारंपारिक ऊर्जा निर्मिती धोरण-२०२० अंतर्गत राज्यातील वीज वितरण कंपन्यांना त्यांच्या एकूण अपारंपारिक ऊर्जा बंधनासाठी (RPO) आवश्यक असणाऱ्या वीजेपैकी <u>५०% वीज</u> राज्यातील अपारंपारिक ऊर्जा प्रकल्पातून घेणे बंधनकारक करण्यासाठी मा. वीज नियामक आयोगाकडे महाऊर्जामार्फत याचिका दाखल करण्यास मान्यता देण्यात येत आहे. यावावतची कार्यवाही महाऊर्जाने त्वरित करावी. सदर याचिकेत मा. आयोगाने दिलेल्या निर्णयानुसार पुढील आवश्यक ती कार्यवाही मा.मंत्रीमंडळाच्या मान्यतेनुसार करण्यात येईल.

As can be seen from above, the GoM has provided additional incentives to the projects to be setup in Maharashtra to make them competitive vis-à-vis inter-state projects. Thus, the intent of the GoM policy is not to restrict competition but to increase competition by providing additional incentives to intra-state plants so as to make them competitive.

Also, regarding meeting 50% RPO requirement from the RE plants in Maharashtra, it is observed that it is just a suggestive approach mentioned in policy document and the GoM has clearly stated that on this aspect it will take necessary action as per decision of the Commission. Hence it cannot be considered as mandate under the policy.

- 23. On the issue of transmission constraint to bring power into the Maharashtra, the Commission notes that STU in its submission has submitted plan to increase transmission capacity. Further, as per Competitive Bidding Guidelines, if power cannot be evacuated on account of transmission constraint, then byer has to compensate the generator for deemed generation loss. Therefore, while entering contract with RE plant located outside Maharashtra, Distribution Licensee has to consider such important aspect of transmission constraint to avoid paying deemed generation compensation.
- 24. In view of above, the Commission notes that with expiry of waiver of inter-state transmission charges, intra-state RE projects would be able to compete with RE projects located outside Maharashtra. Further imposing restriction of procuring 50% RPO requirement from projects located in Maharashtra would be anti-competitive and be against the preamble of the EA 2003 which mandates 'promoting competition'. Further when entities who are required to comply with RPO also includes captive and open access consumers consuming power from conventional sources, imposing such restrictions only on Distribution Licensee would lead to discrimination which is not at all desirable. Hence, the Commission is not inclined to impose any restriction of procuring 50% of RPO requirement from projects within Maharashtra.

- 25. The Commission takes this opportunity to express that even though intra-state projects become successful bidder and signed PPA with Distribution Licensee, development of RE capacity requires a coordinated and synchronized effort in as much as land availability and acquisition, making available adequate transmission infrastructure for evacuation of power, timebound approvals and timely development of the project by the Developer. Delay in any of these actions leads to delay in commissioning of projects and consequently shortfall in meeting the RPO targets of the Distribution Licensees. In this background MEDA being state nodal agency shall consider proactively smoothening this entire process for speedy development of the RE projects by enabling a coordinated effort amongst various concerned entities, specifically since, total RPO target of 43% is to be achieved by the year 2030.
- 26. Hence, the following Order.

<u>ORDER</u>

The Petition in Case No. 06 of 2023 is dismissed.

Sd/-(Surendra J. Biyani) Member Sd/-(Anand M. Limaye) Member Sd/-(Sanjay Kumar) Chairperson

