

**Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
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Case Nos. 108 of 2016

In the matter of

**Petition of Maharashtra State Electricity Distribution Co Ltd. for review and merger of
Solar and non-Solar Renewable Purchase Obligation targets, and related issues**

Coram

**Shri. Azeez M. Khan, Member
Shri. Deepak Lad, Member**

Maharashtra State Electricity Distribution Co. Ltd. Petitioner

1. Brihanmumbai Electric Supply and Transport Undertaking
2. The Tata Power Co. Ltd. (Distribution)
3. Reliance Infrastructure Ltd. (Distribution)
4. Maharashtra Energy Development Agency Impleaded Parties

Appearance

| | |
|-----------------------------|---------------------------------|
| For the Petitioner | : Shri. Ashish Singh, Adv. |
| For Impleaded Party No. 1 | : Shri. N.P Jagaldas (Rep.) |
| For Impleaded Party No. 2 | : Smt. Swati Mehendale (Rep.) |
| For Impleaded Party No. 3 | : Shri. Ghansham Thakkar (Rep.) |
| For Impleaded Party No. 4 | : Shri. P.C. Diwakar (Rep.) |
| For Consumer Representative | : Dr. Ashok Pendse, TBIA |

ORDER

Date: 12 December, 2017

1. Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) has filed a Petition on 8 August, 2016 under Regulations 5, 11, 18 and 19 of the MERC (Renewable Purchase Obligation (RPO), its compliance and implementation of Renewable Energy Certificate Framework) Regulations ('RPO Regulations'), 2016 for review and merger of the Solar and non-Solar RPO targets and related issues.

2. The prayers of MSEDCL are as follows:

“a. To admit the Petition as per the provisions of the Regulation

b. To review and merge the Solar and non-Solar RPO targets and to specify a composite RPO target by clubbing both Solar and non-Solar RPO targets.

c. To consider the concerns submitted by the Petitioner and to hold all Obligated Entities having load not less than 1 MW and below 5 MW eligible for RPO fulfillment;

d. To consider providing an appropriate mechanism to monitor the compliance of RPO targets by Open Access Users and Captive consumers and also provide suitable enforcement mechanism; ...”

3. The Petition states as follows:

a) MSEDCL is seeking relaxation or amendment of the RPO Regulations, 2016 considering certain difficulties faced in their implementation.

b) Clubbing of Solar and non-Solar RPO targets

The RPO targets (as per Regulation 7.1) are as below:

| Year | Quantum of purchase (in %) from RE sources (in terms of energy equivalent in kWh) | | |
|---------|---|----------------------|--------|
| | Solar | Non-Solar (other RE) | Total |
| 2016-17 | 1.00% | 10.00% | 11.0% |
| 2017-18 | 2.00% | 10.50% | 12.50% |
| 2018-19 | 2.75% | 11.00% | 13.75% |
| 2019-20 | 3.50% | 11.50% | 15.00% |

i) The Solar RPO targets have been trebled from 1% in FY 2016-17 to 3.5% in FY 2019-20, and the non-Solar RPO target has also been increased to 11.5%.

ii) The current status of Renewable Energy (RE) generation capacities contracted by MSEDCL and commissioned are as given below:

| Installed Capacity as on March 31, 2016 | |
|---|---|
| Particulars | Current Installed Capacity contracted with MSEDCL |
| Wind | 3012 + 10 (own generation) = 3022 |
| Bagasse | 1776 |
| Solar | 252 |
| Biomass | 157 |

| Installed Capacity as on March 31, 2016 | |
|---|---|
| Particulars | Current Installed Capacity contracted with MSEDCL |
| Small Hydro | 69 + 185 (MSPGCL) = 254 |
| Municipal Waste | 4 |
| Total | 5465 |

From the above Table, it will be seen that Wind and Bagasse-based co-generation are the main contributors to MSEDCL's RPO compliance.

c) Stagnation of non-Solar Generation capacities

The non-Solar capacity additions in future are likely to be lower on account of the following:

i) The Wind Energy capacity of 1500 MW envisaged under the Govt. of Maharashtra (GoM)'s RE Policy 2015 which would be eligible for purchase by MSEDCL at the Feed-in Tariff for meeting its RPO target is almost exhausted in FY 2015-16. There will not be any further capacity addition until the Policy targets are revised.

i) The GoM RE Policy 2015 target of 1000 MW (in addition to the 1000 MW target of the 2008 Policy) for Bagasse-based co-generation is also almost exhausted in FY 2015-16. Hence, there will not be further capacity addition until Policy targets are revised. Wind and Bagasse-based co-generation contribute the most (> 90%) in the non-Solar RE segment, and hence it will be difficult to meet the increased (as compared to the earlier Regulations of 2010) non-Solar RPO requirements.

ii) Other non-Solar RE sectors, namely Small Hydro and Biomass, have not seen much capacity addition in the recent past and the same trend is likely to continue.

d) Major thrust on Solar Power by Government:

i) The Ministry of New and Renewable Energy (MNRE), Govt. of India (GoI) has declared an ambitious plan of 175 GW RE generation by 2022, of which the largest share of 100 GW is expected from Solar power. Consequently, the Solar target is expected to be fixed at 8% by 2022 as per MNRE guidelines. Further, MNRE has set a target of 4700 MW for Maharashtra under its "Grid Connected Rooftop Small Solar Power Plants Program". The Solar power purchase from such projects will also be accounted for RPO. Various schemes are

being declared by GoI for development of Solar power in the country such as Solar Parks, Rooftop Solar on warehouses and canals, etc.

ii) The GoM RE Policy 2015 also envisages 7500 MW Solar capacity addition in the State in the coming 5 years. Out of this, 2500 MW Solar power purchase is expected from Projects undertaken by Maharashtra State Power Generation Co. Ltd. (MSPGCL) in the Public-Private Partnership (PPP) mode. The MNRE has also announced Ultra Mega Solar Power Project schemes under which 3 X 500 MW Solar power projects are proposed to be commissioned in the State.

iii) MSEDCL has already contracted 327 MW Solar power and has given consent to purchase 1000 MW Solar power from Solar Energy Corporation of India (SECI). Presently, this contracted capacity along with Rooftop Solar projects as per the MNRE target is sufficient to meet the Solar RPO for FY 2019-20. The rates of Solar power are being rationalized and are coming down through competitive bidding to a level as low as Rs. 4.50 per unit. Thus, now Solar power will be available in abundance and at a cheaper price than non-Solar power. However, MSEDCL cannot purchase Solar power beyond the Solar RPO target of 3.5 % (FY 2019-20).

iv) In view of the significant increase expected in Solar capacity addition and comparably negligible rise expected in non-Solar generation capacities, the Solar and non-Solar RPO targets are required to be reviewed. The Solar target needs to be increased with proportionate reduction in the non-Solar target, or the separate categorization Solar and non-Solar RPO may be cancelled and both targets should be clubbed into a composite target.

e) Removal of RPO exemption of Obligated Entities with load below 5 MW

i) The definition of ‘Obligated Entity’ under the RPO Regulations is as follows:

“Obligated Entity’ means a Distribution Licensee, a user owning a captive power plant, and Open Access Consumer in the State of Maharashtra required to comply with the Renewable Purchase Obligation (“RPO”) under these Regulations subject to the fulfillment of the conditions mentioned in Regulation 5.”

As per Regulation 5.1, the specified RPO targets are applicable to

“(a) Any person who owns a grid connected Captive Generating Plant based on conventional fossil fuel with installed capacity of 5MW and above, or such other capacity as may be stipulated by the State Commission from time to time, and consumes electricity generated from

such Plant for his own use shall be subject to RPO to the extent of a percentage of his consumption met through such fossil fuel based captive source.

(b) Any person having a Contract Demand of not less than 5 MVA and who consumes electricity procured from conventional fossil fuel based generation through Open Access shall be subject to RPO to the extent of a percentage of his consumption met through such fossil fuel based Open Access source.”

ii) The Electricity Act (EA), 2003 entrusts the Commission with the responsibility of promotion of co-generation and generation based on RE sources. The Policy framework of the GoI also stresses the encouragement of RE sources keeping in view the need for energy security.

iii) The EA, 2003 requires the State Commission to specify RPO for the Obligated Entities as per Section 86(1)(e), which reads as follows:

“86. (1) The State Commission shall discharge the following functions, namely: -

(e) promote cogeneration and generation of electricity from renewable sources of energy 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;

iv) Development of the market with a suitable mechanism for promotion of RE sources is essential to facilitate the new investment in this vital segment of the electricity sector. Hence, it is essential that RPO Regulations are made applicable to all the Obligated Entities, including Open Access consumers, whereby the eligibility limit is 1 MW.

v) In the previous RPO Regulations, 2010, the sphere of the Obligated Entities was wide as any person who owns a Captive Generating Plant (CGP) based on conventional fossil fuel with installed capacity of 1 MW and above and consumes electricity generated from such Plant for his own use was subjected to RPO to the extent of a percentage of his consumption met through such fossil fuel-based captive source. Further, any person with a Contract Demand of not less than 1 MVA and who consumes electricity procured from conventional fossil fuel-based generation through Open Access was subjected to RPO to the extent of a percentage of his consumption met through such fossil fuel-based Open Access source.

vi) In the present Regulations of 2016, the number of Obligated Entities required to fulfil the RPO has been reduced as persons who own CGPs based on conventional fossil fuel with installed capacity of below 5 MW and

persons having a Contract Demand of less than 5 MVA and who consume electricity procured from conventional fossil fuel-based generation through Open Access have been excluded from fulfillment of RPO. With such smaller consumers being taken out of the ambit of RPO, the onus to purchase RE and fulfill the RPO is on the Distribution Licensees and a few large entities engaged in Captive consumption and Open Access. This aberration may be rectified.

vii) On the one hand, Open Access and Captive consumers with demand less than 5 MW have been excluded, and on the other hand the quantum of RPO to be fulfilled by the Obligated Entities like Distribution Licensees by FY 2019-2020 has been increased to 15% by FY 2020. The exclusion of small consumers from the RPO is a discriminatory approach as compared to the provisions of other State Electricity Regulatory Commissions (SERCs) mandating RPO for all Open Access consumers.

viii) The RPO mandate in the National Tariff Policy is on all the consumption by consumers. Since the consumers of the Distribution Licensee are procuring power from it, their Obligation is indirectly fulfilled by the Distribution Licensee. However, the Open Access consumers and captive consumers with load between 1 MW and 5 MW, although having an obligation to promote RE, no RPO is imposed on them under the RPO Regulations, 2016 and hence they are not required to fulfill the RPO as specified in the National Tariff Policy.

ix) In the Statement of Reasons for the RPO Regulations, 2016, the Commission has mentioned the following reason for not including the consumers with a demand of 5 MW or 5 MVA and below:

“Considering the difficulties experienced in Maharashtra and in other States in monitoring compliance of RPO of a very large number of Obligated Entities, the operational difficulties of smaller Entities and the fact it may be more productive to focus on larger potential contributors to renewable procurement to meet the objective of stipulating a RPO, the Commission has considered it appropriate to increase the minimum limit for fastening such Obligation from 1 MW installed capacity or 1 MVA Contract Demand to 5 MW and 5 MVA, respectively, for the time being, though the option of a different stipulation at a later date would be retained by the Commission.

In case of Captive Users and Open Access Consumers who are Obligated Entities, the RPO target (Solar and Non-Solar) shall be applicable only on their consumption from fossil fuel-based sources, considering the objective of the Regulations.”

x) The difficulty in monitoring compliance and operational difficulties were never raised, and it is reiterated that there is no operational difficulty in monitoring the compliance of 1 MW and above Open Access consumers and captive users. As per the directives of the Commission, every 15 min. time block wise energy accounting of all Distribution Licensees is being carried out by the Maharashtra State Load Despatch Centre (MSLDC) under the Dinal Balancing and Settlement Mechanism (FBSM) since August, 2011. Further, the billing of Open Access consumers is carried out on 15 min. time block basis by the Distribution Licensees. Therefore, with advancements in Information Technology (IT) and communication facilities, monitoring of RPO compliance by Open Access consumers on monthly or quarterly basis is not an issue.

xi) The applicability of the RPO Regulations in different States is given below. These States have not stated any difficulties in monitoring the compliances and have set the load limit in line with the Open Access Regulations or 1 MW.

| State | Regulations | CGP | Open Access |
|---------------|--|---|---|
| Gujarat | GERC (Procurement of energy from renewable sources) Regulations, 2010 | Any person consuming electricity from conventional Captive Generation having capacity of above 5 MW | No limit i.e. 1 MW: Any person procuring from conventional generation through Open Access and third party sale |
| Delhi | DERC (RPO and REC framework implementation) Regulations, 2012 | Any Captive user, using other than RE sources exceeding 1 MW | Any Open Access consumer with contract demand exceeding 1 MW from sources other than renewable sources of energy |
| Uttar Pradesh | UPERC (Promotion of Green Energy through Renewable Purchase Obligation) Regulations, 2010. | grid connected captive generating plant having installed capacity of 1 MW and above | Open Access consumer consuming electricity procured from conventional fossil fuel based generation through Open Access |
| Tamil Nadu | Procurement from New and Renewable Sources of Energy Regulations, 2008 | No minimum capacity: Consumers owning grid connected captive generating plants | No limit i.e. 1 MW: Open Access consumers in the state of TN |
| Karnataka | KERC (Procurement of energy from renewable sources)(3 rd amendment) Regulations, 2015 | Any captive consumer consuming electricity from grid connected captive plants including co-generation plants and having total installed capacity above 5 MW | Consumer having contract demand over 5 MW with the distribution Licensee and procuring electricity above 1 MW through Open Access |

| State | Regulations | CGP | Open Access |
|----------------|--|--|--|
| Rajasthan | RERC (Renewable Energy Obligation)2007 | Captive consumer of a Captive Plant of installed capacity above 1 MW | No limit i.e. 1 MW: All Open Access consumer |
| Andhra Pradesh | APERC RPO (Compliance by purchase of RE/ REC) Regulation, 2012 | Consumer owning a Captive Generating Plant of installed capacity 1 MW. | No limit i.e. 1 MW: All Open Access consumer |

xii) The RPO Regulations of other States have a limit of 1 MW and above for Open Access and Captive consumers, except for Gujarat and Karnataka which have a limit of 5 MW and above for Captive Consumers only. Thus, reasons like difficulty in monitoring compliance and operational difficulties in Maharashtra and other States accorded for exclusion of smaller Obligated Entities from RPO compliance is not in conformity with the RPO Regulations prevailing in other States.

xiii) If this limit of 5 MW is not reduced, the burden of procuring such costly RE power will be on the Distribution Licensee as the Open Access consumers within the limit of 1 MW and 5 MW will procure only cheaper conventional energy, resulting in an increase in the quantum of Open Access and revenue loss for the Distribution Licensee. Further, the cost of RE is passed on to the consumers, resulting in tariff hike and the tariff of cross-subsidizing consumers of MSEDCL becoming less competitive and prone to Open Access.

xiv) The Commission may amend the provisions of Regulation 5.1 to reduce the minimum limit for Obligated Entities, and to read as follows:

“(a) Any person who owns a grid connected Captive Generating Plant based on conventional fossil fuel with installed capacity of 1 MW and above, or such other capacity as may be stipulated by the State Commission from time to time, and consumes electricity generated from such Plant for his own use shall be subject to RPO to the extent of a percentage of his consumption met through such fossil fuel based captive source.”

“(b) Any person having a Contract Demand of not less than 1 MVA and who consumes electricity procured from conventional fossil fuel based generation through Open Access shall be subject to RPO to the extent of a percentage of his consumption met through such fossil fuel based Open Access source.”

f) Monitoring of non-compliance of RPO targets:

i) As per Clause 11.3 of the Regulations,

“Captive and Open Access Users unable to fulfil Open Access Regulations shall be liable to pay Regulatory Fund Charges.”

ii) In case of Obligated Entities like Distribution Licensees, the Commission undertakes suo-motu proceedings to verify their compliance of RPO targets. As a consequence of non-fulfillment of RPO targets, penalty proceedings can be initiated against the defaulting Distribution Licensees. However, such a process has not been clearly specified in respect of Captive and Open Access Users.

iii) The Commission may provide an appropriate framework to monitor the compliance of RPO targets by Open Access Users and Captive consumers and also provide for suitable penalty provisions in case of non-fulfillment of RPO targets by them.

g) Power to issue Orders:

The Commission has the powers to review or amend the RPO Regulations, 2016 under the following powers vested with it under the Regulations:

“18. Power to Amend

The State Commission may, at any time, vary, modify or amend any provisions of these Regulations, for reasons to be recorded in writing.

“19. Power to Remove Difficulties

If any difficulty arises in giving effect to the provisions of these Regulations, the Commission may, by general or specific order, make such provisions not inconsistent with the provisions of the Act, as may appear to be necessary for removing the difficulty.”

4. In its submission dated 15 October, 2016, the Maharashtra Energy Development Agency (MEDA), which is the State Nodal Agency, has stated as follows:

a) The clubbing of Solar and non-Solar RPO targets for the current Control Period from FY 2016-17 to FY 2019-20 is not practicable for the following reasons:

i) The following decision was taken at the 33rd meeting of Forum of Regulators (FOR) held on 7,8 December, 2012:

“On the issue raised by MERC Chairperson regarding inter changeability of Solar and non-Solar RPO, it was felt that such inter-changeability, especially, compliance of non-Solar RPO by Solar power purchase would not be desirable till Solar power achieves grid parity. At the same time, this might adversely affect promotion of other Renewable energy generation sources.”

- ii) In line with the FOR decision, the Commission, vide its Orders in Case No 109 of 2012 and 84 of 2013 has already clarified that inter-changeability of Solar and non-Solar RPO may not be allowed under RPO Regulations.
 - iii) GoI has set separate capacity addition targets for major RE sources such as Solar, Wind and other RE. The GoM State Solar Policy has set substantial targets which can be achieved by distinguishing the technology-wise RPO targets.
 - iv) GoM has initiated various measures for promotion of energy generation from new RE sources like Rooftop Solar PV and Municipal Solid Waste (MSW) which have significant potential in Maharashtra.
 - v) The Renewable Energy Certificate (REC) market provides enough opportunities to Distribution Licensees and other Obligated Entities to purchase Solar and non-Solar REC's for fulfilling their Solar and non-Solar RPO targets.
 - vi) In case of any difficulty faced by an Obligated Entity in procuring RPO power, the Commission has always come up with solutions or relaxations for them.
- b) On the issue of reducing the 5 MW minimum load, specified in the current Regulations for application of RPO, the Commission may revert to the earlier eligibility criterion of 1 MW specified in the earlier RPO Regulations, 2010 for Captive Power Plant (CPP) and Open Access consumers.
 - c) As regards providing an appropriate mechanism to monitor the compliance of RPO targets by CPP and Open Access consumers, the Commission has already made sufficient provisions to enforce the RPO mechanism and monitor their compliance of RPO targets. For successful implementation of the RPO Regulations, 2016 all Distribution Licensees, the MSLDC and the Chief Electrical Inspector should periodically forward a list of CPP and Open Access consumers respectively to MEDA as per Regulations.
5. At the hearing held on 29 November, 2016, MSEDCL reiterated the issues cited in its Petition, namely
- (i) To review and merge/club the Solar and non-Solar RPO targets
 - (ii) To subject all Obligated Entities with load between 1 MW to 5 MW also to RPO, from which they are currently exempted.
 - (iii) To provide an appropriate mechanism to monitor the compliance of RPO targets by Open Access users and Captive consumers.

The Commission directed to MSEDCL to discuss these issues with other Distribution Licensees and to serve a copy of its Petition to them, viz.

Brihanmumbai Electric Supply and Transport Undertaking (BEST), Tata Power Co. Ltd. (Distribution) (TPC-D), and Reliance Infrastructure Ltd. (Distribution) (RInfra-D). These Licensees may file their submissions within three weeks.

6. The Distribution Licensees submitted their issue-wise Replies, which are summarized as follows:

| Sr. No | Issue | TPC-D Letter dated 23.12.2016 | RInfra-D Letter dated 29.12.2016 | BEST Letter dated 29.12.2016 |
|--------|--|--|--|--|
| 1 | To review and merge/club the Solar and non-Solar RPO targets and specify composite targets | <p>Supported the proposal of MSEDCL, provided that the Commission allows Distribution Licensee to meet the RPO targets by purchase or self-retention of either Solar or Non-Solar RECs.</p> <p>The advantage of merging the targets is that the Licensee will get flexibility in procurement of RE power to fulfil RPO targets, and consequent procurement of cheaper RE power will reduce their power purchase costs and, therefore, their retail tariff.</p> <p>Considering the unavailability of Mini/Micro Hydro power, that sub-target should also be merged with the RPO targets for Solar and non-Solar RE.</p> | <p>Setting separate Solar targets resulted in development of the Solar sector and consequent reduction in its tariff. Hence, there is now an advantage to buying Solar power. The Commission may modify the present RPO target accordingly.</p> <p>However, it is also necessary to promote and protect the existing non-Solar RE.</p> <p>The Commission may consider specifying the non-Solar RPO target within the overall target based on the ratio of Non-Solar energy procured by Distribution Licensees and their Input Energy and allow them to meet the balance RPO target through Solar RE. This will provide flexibility to the Licensee to procure the type of power more suitable to its demand pattern and cost effective to consumers.</p> | Supported merging of the Solar and non-Solar RPO targets. This would better enable Distribution Licensees to purchase cheaper power (Solar or non-Solar) to fulfill their composite RPO targets and will reduce the power purchase cost. |

| | | | | |
|---|---|---|--------------|---|
| 2 | To subject all Obligated Entities having load 1 MW to 5 MW (both CPP and Open Access consumption included) to RPO, from which they are currently exempted | Not supported the proposal of MSEDCL. Further, Open Access consumption is excluded from the Distribution Licensee's consumption, and it is not required to meet the RPO for Open Access consumers. Hence, there is no impact on the Distribution Licensees. | No comments. | Supported MSEDCL's proposal. The current RPO exemption to Obligated Entities with load between 1 MW to 5 MW from RPO may be removed, because the cost of RE is passed on to the consumers, resulting in higher tariff and the tariff of cross subsidizing consumers of Distribution Licensees becoming less competitive and prone to Open Access. |
| 3 | (iii) To provide a mechanism to monitor the compliance of RPO targets by Open Access users and Captive consumers. | No comments. | No comments. | Agrees with the MSEDCL's proposal. Also stated that to provide suitable penalty provisions in case of non-fulfillment of RPO targets. |

7. The proceedings of the 2nd hearing held on 9 March, 2017, are summarized as follows:

- a) MSEDCL stated that, considering the thrust of State as well as Central Government Policies for development of Solar projects, the RPO targets fixed for Solar and non-Solar energy procurement may be clubbed into one composite target by amending the RPO Regulations, 2016. Since a significant increase is expected in Solar capacity and comparatively less is expected in non-Solar generation, the Solar and non-Solar RPO targets are required to be reviewed. The Solar target needs to be increased with a proportionate reduction in the non-Solar target, or both targets should be clubbed. The intention of merging both the targets is also commercial in nature as ample Solar power is available at a comparatively cheaper price. Other Distribution Licensees have also supported the clubbing of the targets.
- b) The Commission asked MSEDCL whether it had considered the impact on non-Solar RE, particularly the generation from new Wind Energy projects which would come up in the near future, and observed that Maharashtra was one of the leading States in Wind Energy potential and capacity.

- c) As regards lowering the RPO threshold for other Obligated Entities, the Commission asked MSEDCL how it affected MSEDCL's own RPO targets. MSEDCL stated that, with smaller consumers being taken out of the ambit of RPO, the onus to purchase RE and fulfill the RPO is on the Distribution Licensees and only a few large CPP users and Open Access consumers. The Commission observed that this justification is not at all in line with the RPO Regulations.
- d) The Commission also observed that, although MSEDCL says it is concerned about the verification of RPO compliance by other such Obligated Entities, MSEDCL itself has not yet submitted its responses to the Commission's queries required for such verification.
- e) RInfracorps-D stated that the reason for setting the Solar RPO targets (0.25% for FY 2010-11 to FY 2012-13 and 0.50% for FY 2013-14 to FY 2015-16) in the earlier RPO Regulations, 2010 was because GoI (through the Jawaharlal Nehru National Solar Mission (JNNSM)) had then set a 3% Solar RPO target by 2022, and that the cost of Solar power was relatively high in comparison to others. Prescribing Solar-specific targets resulted in development of the Solar sector and ultimately a reduction in the tariff. In the earlier Control Period, the preferential tariff for Solar energy was Rs.17.91/Unit, which is now rapidly decreasing every year, whereas the tariff of non-Solar energy was approximately Rs.5 to 6 /Unit. Now Solar power has almost achieved Grid parity and hence has an inherent advantage. At the same time, there is a need to promote and protect the existing non-Solar RE sources of energy. The Commission may specify a non-Solar RPO target based on the ratio of non-Solar RE energy currently being procured by Distribution Licensees and their Input Energy, and allow them to meet the balance RPO target through Solar RE procurement. This would provide flexibility to the Licensee to procure the available modes of power which may be more suited to its demand pattern.
- f) TPC-D stated that, even though now Solar power has operational and commercial benefits, TPC-D has already tied up for non-Solar power as per the targets specified in the RPO Regulations, 2016, and that needs to be taken into account. Regarding Obligated Entities between 1 to 5 MW/MVA and their RPO compliance, their consumption is excluded from the Distribution Licensees' consumption, and it is not required to meet the RPO of these Obligated Entities. Hence, there is no impact on Distribution Licensees.
- g) BEST agreed that the Commission may specify a composite RPO target for both Solar and non-Solar power.
- h) Thane-Belapur Industries Association (TBIA), an Authorised Consumer Representative, stated that, while the Solar RPO may be increased, non-Solar

(specifically Wind) power cannot be ignored, and a balanced view has to be taken while deciding the RPO targets. Moreover, the Distribution Licensees might have already tied up non-Solar power as per the targets specified in the current RPO Regulations, 2016.

- i) Green Energy Association (GEA), through Adv. Ms. Dipali Sheth, mentioned its Application for intervention in this Case. She stated that, if the Solar and non-Solar targets are to be merged, GEA's members, who are engaged in Solar power generation, would be directly affected, and hence GEA may be allowed to intervene. The Commission observed that, considering the prayers of MSEDCL, if the Commission found a prima facie case for amending the RPO Regulations, 2016, it would undertake a separate due process of public consultation in which GEA and other stake-holders would have the opportunity to give their views. Hence, it was not inclined to allow its intervention at this stage.

Commission's Analysis and Ruling

- 8. The basic principle behind specifying source-wise RPO targets (Solar and non-Solar, and a sub-target for Mini/Micro Hydro power) in both the 2010 and the current 2016 RPO Regulations is to promote the respective RE sources considering and taking advantage of their potential in the State. MEDA has referred in this context to the FOR discussions of December, 2012. The Commission also notes that, in Case No. 109 of 2012, RInfra-D had suggested that the Solar and non-Solar RPO targets may be interchangeable. However, in its Order dated 2 January, 2013, the Commission observed that**

“The objective of specifying separate Solar and Non-Solar RPO targets was to facilitate promotion of power procurement from both Solar and Non-Solar RE sources, and such specific requirement cannot be complied by meeting the RPO target on aggregate basis.”

Moreover, the Tariff Policy, 2016 also envisages a separate non-Solar RPO target. In its Statement of Reasons accompanying the RPO Regulations, 2016, the Commission had stated that

“With certain exceptions, the Commission has continued to specify separate Solar and Non-Solar RPO targets, on the same considerations as in the past and in line with the RPO regime envisaged in the Tariff Policy. The MNRE has also set separate RE capacity addition targets.”

In this background, the Commission finds no justification for clubbing the Solar and non-Solar RPO targets except to the extent already provided for in the RPO Regulations, 2016.

9. While seeking clubbing of the Solar and non-Solar RPO targets into a single aggregate target by amending the RPO Regulations, 2016, MSEDCL has clarified that it is in fact proposing that its Solar RPO target be increased and non-Solar target be reduced correspondingly considering the increasing availability and reducing cost of Solar energy and the implications of the GoM Policy for the main sources of non-Solar RE. In the Explanatory Memorandum accompanying the draft of the Regulations, the Commission had set out the basis on which it had proposed the respective RPO targets, which were subsequently notified. The Solar RPO targets specified in the RPO Regulations, 2016 are substantially higher than in the earlier Control Period, and rising from 1% in FY 2016-17 to 2.50% in the final year FY 2019-20. The Tariff Regulations, 2016 envisage a much higher Solar RPO target of 8% two years thereafter, by FY 2021-2022. That would be taken into consideration by the Commission while formulating its RPO Regulations for the next Control Period. However, in the meantime, the Commission recognizes that very substantial and rapid developments are taking place in the Solar energy sector in terms of capacity addition, and in the costs and modes of procurement. The Commission will review these developments, and separately consider whether they call for further increasing the Solar RPO targets by amending the Regulations after public consultation. However, in case of non-Solar RPO, the Commission finds no reason to reduce the targets discussed in its Explanatory Memorandum. Moreover, as MEDA has pointed out, the option of procuring RECs is also available.
10. MSEDCL has sought that the RPO targets should be applied to Obligated Entities with load between 1 MW to 5 MW, as in the earlier RPO Regulations, 2010; and that a suitable mechanism be put in place for monitoring the RPO compliance of other Obligated Entities, as in the case of Distribution Licensees. The Commission notes that, as TPC-D has pointed out, the RPO quantum of a Distribution Licensee is not affected by the RPO compliance or exemption of other Obligated Entities. MSEDCL's claim that, indirectly, this affects it through consumers opting for Open Access has no nexus with the nature of the RPO for Distribution Licensees. In its Statement of Reasons for the RPO Regulations, 2016, the Commission has stated that

“Considering the difficulties experienced in Maharashtra and in other States in monitoring compliance of RPO of a very large number of Obligated Entities, the operational difficulties of smaller Entities and the fact it may be more productive to focus on larger potential contributors to renewable procurement to meet the objective of stipulating a RPO, the Commission has considered it appropriate to increase the minimum limit for fastening such Obligation from 1 MW installed capacity or 1 MVA Contract Demand to 5 MW and 5 MVA, respectively, for the time being, though the option of a different stipulation at a later date would be retained by the Commission.”

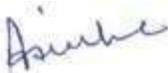
Some of these difficulties and the way forward are reflected in the Commission's Order dated 22 July, 2013 in Case No. 49 of 2013, when the RPO compliance

verification of Captive Users and Open Access consumers for FY 2010-11 and FY 2012-13 could not be finalised. Considering the developments pursuant to that Order, the Commission has initiated proceedings for RPO compliance verification of these Obligated Entities for the period upto FY 2013-14. A Public Hearing has been held, and the Order is being finalised. The Commission notes that, although it has been seeking such verification, MSEDCL provided the details and validations sought from it for this process only after a long delay.

The Petition of Maharashtra State Electricity Distribution Co. Ltd. in Case No.108 of 2016 stands disposed of accordingly.

Sd/-
(Deepak Lad)
Member

Sd/-
(Azeez M. Khan)
Member


(Ashwani Kumar Sinha)
Secretary

