

No. PP/MERC/RPO Petition/ **24840**

Date: **5 AUG 2016**

To,  
**The Secretary,**  
**Maharashtra Electricity Regulatory Commission,**  
13<sup>th</sup> Floor, Centre No.1, World Trade Centre,  
Cuffe Parade, Colaba,  
Mumbai – 400 005.

**Sub:** Filing of petition for review and merging of solar & non solar RPO targets and to specify a composite RPO target by clubbing both solar & non solar RPO targets and other relevant issues

**Ref:** MERC (Renewable Purchase Obligation, Its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2016

Dear Sir,

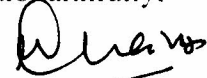
Please find enclosed herewith the MSEDCL's petition for review and merging the solar & non solar RPO targets and to specify a composite RPO target by clubbing both solar & non solar RPO targets and other relevant issues.

The requisite fee is submitted herewith in the form of Demand Draft No. 944790 dated 04.08.2016.

Submitted for your further needful please.

Thanking you,

Yours faithfully,



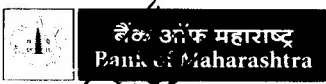
**Chief Engineer (Power Purchase)**

**Copy s.w.r. to:**

- 1) The Director (Operations)/ (Finance), MSEDCL, Mumbai.
- 2) The Executive Director (Commercial), MSEDCL, Mumbai.

**Copy to:**

- 1) Prayas ( Energy Group ),  
Amrita clinic, Athwale Corner, Lakdipool-Karve Road Junction,  
Deccan Gymkhana, Karve Road, Pune – 411 004
- 2) Mumbai Grahak Panchayat,  
Grahak Bhavan, Sant Dnyaneshwar Marg,  
Behind Cooper Hospital, Vile Parle (West), Mumbai – 400 056
- 3) Thane Belapur Industries Association,  
Plot No. P-14, MIDC, Rabale Village, PO Ghansoli, Navi Mumbai - 400 701
- 4) Vidarbha Industries Association,  
1<sup>st</sup> Floor, Udyog Bhavan, Civil lines, Nagpur - 440 001.



DDMMYY 04/03/2018  
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MERC\*\*\*\*\*

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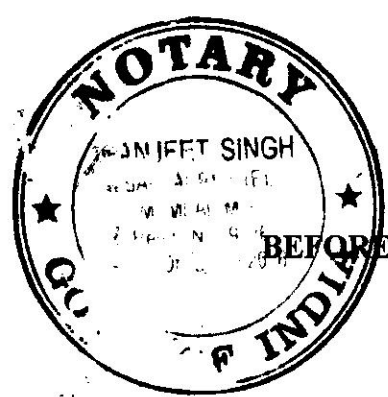
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**BEFORE MAHARASHTRA ELECTRICITY REGULATORY COMMISSION,**

**Case No of 2016**

In the matter of

Review and merge the solar & non solar RPO targets and to specify a composite RPO target by clubbing both solar & non solar RPO targets and other relevant issues and

In the matter of

Regulation 19 of Maharashtra Electricity Regulatory Commission (Renewable Purchase Obligation, Its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2016

Maharashtra State Electricity Distribution Company Limited ..... Petitioner

**Affidavit**

I, Satish V. Chavan, Aged 51 years, having my office at Maharashtra State Electricity Distribution Co. Ltd., Prakashgad, Plot No.G-9, Anant Kanekar Marg, Bandra (East), Mumbai-400 051 do solemnly affirm and say as follows :-

I am the Chief Engineer (Power Purchase) of Maharashtra State Electricity Distribution Co. Ltd., the petitioner in the above matter and am duly authorized to make this affidavit.

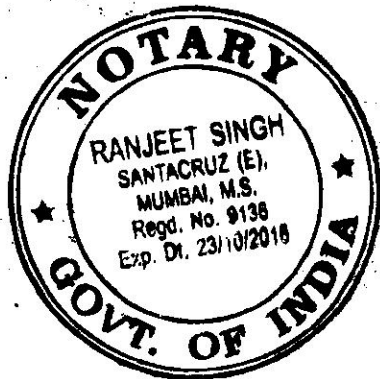
The averments made in the enclosed petition are based on the information received from the concerned officers of the Company and I believe them to be true.

I say that there are no proceedings pending in any court of law/ tribunal or arbitrator or any other authority, wherein the Petitioners are a party and where issues arising and/or reliefs sought are identical or similar to the issues arising in the matter pending before the Commission.


I solemnly affirm at Mumbai on this 05<sup>th</sup> Day of August 2016 that the contents of this affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from.

  
Chief Engineer (Power Purchase)  
MSEDCL

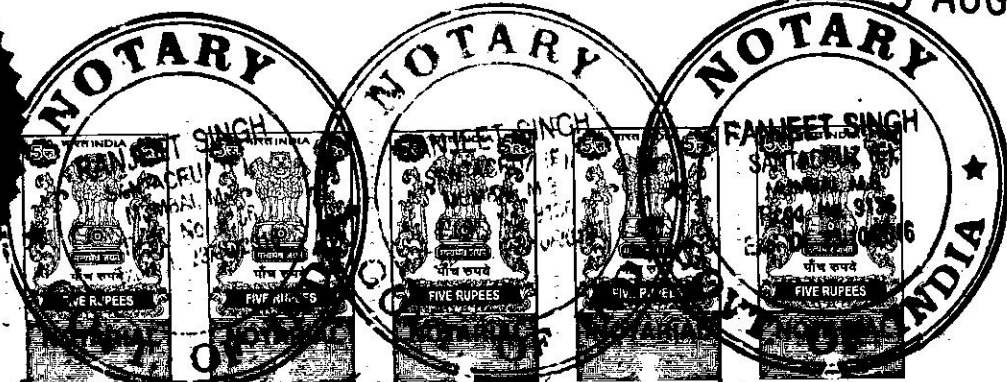
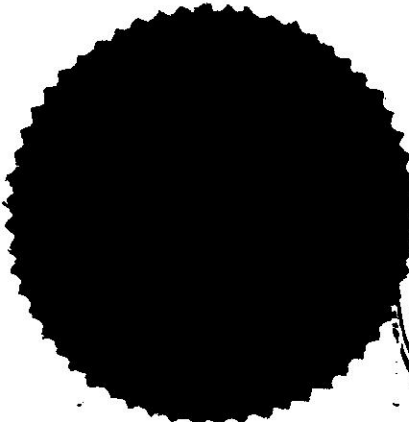
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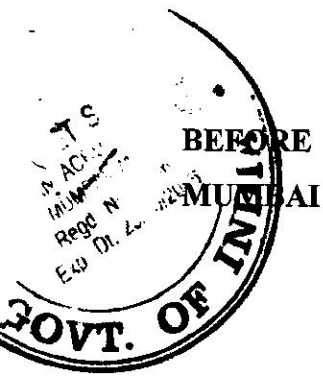


**BEFORE ME**

  
**RANJEET SINGH**  
M.Sc.LL.B  
NOTARY  
MAHARASHTRA  
GOVT OF INDIA

**- 5 AUG 2016**





BEFORE MAHARASHTRA ELECTRICITY REGULATORY COMMISSION,  
MUMBAI

Filing No.: \_\_\_\_\_

Case No.: \_\_\_\_\_

**IN THE MATTER OF**

**REGULATION 19 FOR REMOVAL OF DIFFICULTIES**

**REGULATION 18 TO AMEND THE RPO REGULATIONS**

**REGULATION 5 OBLIGATED ENTITIES**

**AND**

**REGULATION 11 WITH REGARD TO OPEN ACCESS USERS AND CAPTIVE  
CONSUMERS;**

**OF MERC (RENEWABLE PURCHASE OBLIGATION, ITS COMPLIANCE AND  
IMPLEMENTATION OF RENEWABLE ENERGY CERTIFICATE FRAMEWORK)  
REGULATIONS, 2016;**

**AND**

**IN THE MATTER OF**

**MAHARASHTRA STATE ELECTRICITY DISTRIBUTION COMPANY LTD;**

**MAHARASHTRA STATE ELECTRICITY DISTRIBUTION COMPANY LTD.  
RESPECTFULLY SUBMITS:**

**1. Background**

- 1.1. Maharashtra State Electricity Distribution Co. Ltd. (hereinafter to be referred to as "MSEDCL" or "the Petitioner") has been incorporated under Indian Companies Act, 1956 pursuant to decision of Government of Maharashtra to reorganize erstwhile Maharashtra State Electricity Board (herein after referred to as "MSEB").
- 1.2. MSEDCL is a Company constituted under the provisions of Government of Maharashtra, General Resolution No. PLA-1003/C.R.8588/Energy-5 dated 25th January 2005 and is duly registered with the Registrar of Companies, Mumbai on 31st May 2005.



MSEDCL is functioning in accordance with the provisions envisaged in the Electricity Act, 2003 and is engaged, within the framework of the Electricity Act, 2003, in the business of Distribution of Electricity to its consumers situated over the entire State of Maharashtra, except some parts of city of Mumbai.

1.4. In light of the Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework Regulations, 2016, MSEDCL would like to make following submissions to the Hon'ble Commission for its kind consideration and amendment to the aforesaid Regulations. The request for the amendment is based on certain difficulties faced by MSEDCL while fulfilling the provisions as specified in regulations and thus seeking relaxation for the same.

**2. Clubbing of Solar and Non- Solar RPO targets:**

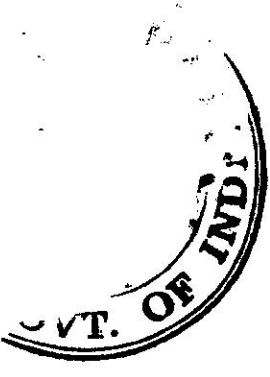
2.1. As per Clause 7.1 of the Regulations, the revised RPO targets are as below:

Year	Quantum of purchase (in %) from RE sources (in terms of energy equivalent in kWh)		
	Solar	Non-Solar (other RE)	Total
	(a)	(b)	(c)
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%

2.2. It is submitted that the Solar RPO target have been trebled from 1% in FY 2016-17 to 3.5% in FY 2019-20. Further, the Non-Solar RPO target has also been increased to the level of 11.5%.

2.3. Current status of the renewable 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
Small Hydro	69 + 185 (MSPGCL) =



<b>Installed Capacity as on March 31, 2016</b>	
<b>Particulars</b>	<b>Current Installed Capacity Contracted with MSEDCL</b>
	254
Municipal Waste	4
<b>Total</b>	<b>5465 MW</b>

2.4. As can be seen from the above table, wind and bagasse based co-gen are the main contributors of MSEDCL RPO compliance.

**2.5. Stagnation of Non Solar Generation capacities:**

It is submitted that the wind capacity additions in future are likely to be lower on account of the following reason:

The Wind Capacity of 1500 MW, envisaged under GoM RE policy 2015, which will be eligible for Purchase by MSEDCL at Feed-in-tariff for meeting its RPO target is almost exhausted in FY 2015-16. There will not be further capacity addition until policy targets are revised.


2.6. It is submitted further that the GoM RE Policy- 2015 target of 1000 MW (in addition to 1000 MW target of 2008 policy) for bagasse based co-gen 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 cogen contribute the most (> 90%) in Non Solar RE segment and hence it will be difficult to meet increased non solar RPO requirements.

2.7. MSEDCL would like to submit that the other non solar RE sectors namely small hydro and biomass segments have not seen much capacity addition in recent past and the same trend is likely to continue.

**2.8. Major thrust on Solar Power by Government:**

The Ministry of New & Renewable Energy (MNRE), GoI has declared an ambitious plan of 175 GW RE generation by 2022, of which biggest share of 100 GW is expected from Solar power. In line with the above, 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 above projects will also be accounted for RPO.



Further, various schemes are being declared by the GoI for development of solar power in the country such as Solar Parks, Rooftop solar on ware houses, Rooftop solar on canals etc.

Also, the GoM RE Policy-2015 dated 20.07.2015 envisages 7500 MW solar capacity addition in the state in coming 5 years. Out of the above, 2500 MW solar power purchase is expected from the projects installed by Mahagenco under PPP mode.

It is submitted further that the MNRE has also announced the Ultra Mega Solar Power Project schemes wherein 3 X 500 MW Solar power projects are proposed to be commissioned in the state.

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 much solar contracted capacity in combination with Rooftop Solar projects as per MNRE target is sufficient to meet solar RPO for FY 2019-20.

The rates of solar power are being rationalized and coming down through Competitive bidding to the level as low as Rs. 4.50 p.u. Thus, now solar power will be available in abundance and at cheaper price than Non Solar power. However, MSEDCL can not purchase solar power beyond Solar RPO target of 3.5 % (FY 2019-20).

It is therefore respectfully submitted that in view of significant rise expected in solar capacity addition and comparably negligible rise expected in Non Solar generation capacities, the Solar & Non Solar RPO targets are required to be reviewed. The solar target needs to be increased with proportionate reduction in Non Solar target OR separate classification of Solar and Non Solar RPO needs to be cancelled and both targets should be clubbed together into a composite target.

2.9. Accordingly, it is submitted that RPO requirement of solar and non-solar RE be clubbed. MSEDCL therefore suggests the Hon'ble Commission to provide a composite RPO target, without bifurcation into solar and Non-Solar, so that procurement of power from any of the renewable source would contribute to the RPO of obligated entities.

**3. Not to exempt obligated entities having load below 5 MW**

3.1. The definition of 'Obligated Entity' as per the captioned regulations is as below:

*"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.

“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.”

*‘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.’*

3.2. In the context of above Regulation, MSEDCL would like to submit that the Electricity Act, 2003 entrusts on the Appropriate Commission the responsibility of promotion of co-generation and generation based on renewable energy sources. The policy framework of the Government of India also stresses on the encouragement of renewable energy sources keeping in view the need for energy security of the country.

3.3. The Electricity Act, 2003 requires the State Commission to specify renewable purchase obligation (RPO) for the obligated entities as per in section 86(1)(e). The relevant provisions are quoted below

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

(a) .....

(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;**

(f) .....

3.4. MSEDCL submits that Development of market with suitable mechanism for promotion of renewable energy 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.



3.5. MSEDCL submits that in the previous RPO regulations, the sphere of the obligated entities was wide as person who owns Captive Generating Plant 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 having 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.

3.6. In the present regulations, the number of obligated entities fulfilling the RPO would be reduced as persons who owns Captive Generating Plant 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 consumes electricity procured from conventional fossil fuel based generation through Open Access have been excluded from fulfillment of RPO. MSEDCL submits that with smaller consumers being taken out of the ambit of RPO fulfillment, the onus to purchase RE & fulfill the RPO is on the DISCOMs and few large entities engaged in captive and open access. This aberration may be rectified.

3.7. At one end, open access and captive consumers with demand less than 5 MW have been excluded and at the other end, the quantum of RPO to be fulfilled by the obligated entities like DISCOMs by FY 2019-20220 has been increased simultaneously to 15% by FY 2020. The exclusion of the small consumers from the RPO indicates a discriminatory approach as compared to the provisions of other SERCs mandating RPO for all open access consumers.

3.8. It is submitted that the RPO obligation mandate in line with the National Tariff Policy is on all the consumption by consumers. Since the consumers of the Distribution licensee are procuring power from the Distribution Licensee, their obligation is indirectly fulfilled by the Distribution licensee. However, the Open Access consumers and captive consumers having load between 1 MW and 5 MW though have an obligation to promote renewable power, the same is not thrust on them by way of this regulations and hence will not require to fulfill the RPO as specified in the National Tariff Policy.

3.9. Hon'ble MERC in the Statement of Reasons have 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.”*

- 3.10. It is submitted that the reason of difficulty in monitoring compliance and operational difficulties is never raised and it is reiterated that there is no operational difficulty in monitoring the compliance of 1 MW & above open access consumers & captive users. As per the directives of this Hon'ble Commission, every 15 min time block wise energy accounting of all Discoms is being carried out by SLDC under FBSM since August 2011. Further, the billing of open access consumer is carried out on 15 min time block basis by Discom. Therefore, with advancement in IT and communication facilities, monitoring of RPO compliance by Open Access consumers on monthly or quarterly basis is not an issue.
- 3.11. The RPO regulations pertaining to applicability in various states is given below. These states have not considered any difficulties in monitoring the compliances and have set the limit in line with the Open Access Regulations or 1 MW.

<b>States</b>	<b>Regulations</b>	<b>CPP</b>	<b>Open Access</b>
<b>Gujarat</b>	GERC (Procurement of energy from renewable sources) Regulations, 2010	Any person consuming electricity from conventional Captive Generation having capacity of above 5 MW	<b>No limit i.e. 1 MW:</b> Any person procuring from conventional generation through open access and third party sale
<b>Delhi</b>	DERC (RPO and REC framework implementation) Regulations, 2012	Any Captive user, using other than renewable energy sources <b>exceeding 1 MW</b>	<b>Any OA consumer</b> with contract demand exceeding 1 MW from sources other than renewable sources of energy

States	Regulations	CPP	Open Access
UP	UPERC (Promotion of Green Energy through Renewable Purchase Obligation) Regulations, 2010.	grid connected captive generating plant having installed capacity of <b>1 MW and above</b>	OA consumer consuming electricity procured from conventional fossil fuel based generation through OA
TN	Procurement from New and Renewable Sources of Energy Regulations, 2008	<b>No minimum capacity:</b> Consumers owning grid connected captive generating plants	<b>No limit i.e. 1 MW:</b> OA consumers in the state of TN
Karnataka	KERC(Procurement of energy from renewable sources)(3 <sup>rd</sup> amendment) regulations, 2015	Any captive consumer consuming electricity from grid connected captive plants including co-generation plants and having <b>total installed capacity above 5 MW</b>	Consumer having <b>contract demand over 5 MW</b> with the distribution licensee and procuring electricity above 1 MW through OA
Rajasthan	RERC(Renewable Energy Obligation) 2007	Captive consumer of a Captive Plant of installed capacity above 1 MW	<b>No limit i.e. 1 MW:</b> All OA consumer
AP	APERC RPO (Compliance by purchase of RE/REC) Regulation, 2012	Consumer owning a Captive generating Plant of installed capacity 1 MW.	<b>No limit i.e. 1 MW:</b> All OA consumer

3.12. MSEDCL would like to point out the RPO regulations prevalent in other States have limit of 1 MW and above for Open Access and Captive consumers except Gujarat and Karnataka states which have a limit of 5 MW and above for Captive Consumers only. Thus, the reasons like difficulty in monitoring compliance and operational difficulties in Maharashtra and other states accorded for exclusions from the obligated entities from RPO compliance does not commensurate with the RPO regulations actually prevailing in other Indian States. On the contrary, it can be seen that the limit for fulfilling the RPO regulations have been kept at a lower level of 1 MW for all the states except for the two instances as mentioned above.

3.13. It is submitted that in case such limit is not reduced, then the burden of procuring such costly renewable power will be on the Distribution licensee as the open access consumers within the limit of 1 MW and 5 MW will procure only the cheaper Conventional Energy resulting in increase in quantum of open access and revenue loss for Distribution Licensee. Further, the cost of RE is passed on to the consumers resulting into tariff hike and the tariff of cross subsidizing consumers of MSEDCL becoming less competitive and prone to open access.

3.14. MSEDCL therefore requests this Hon'ble Commission to amend the regulations by way of reducing the minimum limit for Obligated Entities. Accordingly, Regulation 5(a) should read as follows:

*"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."*

Similarly, Regulation 5(b) may be amended as below:

*"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."*

#### **4. Monitoring of non-compliance with RPO targets**

4.1. 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."

4.2. MSEDCL submits that in case of Obligated Entities like Distribution Licensees, it has been observed that Hon'ble MERC follows a suo-motu proceeding to verify the compliance of RPO targets being fulfilled by the Distribution Licensee. As a consequence of non-fulfillment of RPO targets, penalty proceedings can be initiated against the defaulting distribution licensees. However, such process has not been clearly specified in respect of Captive and Open Access Users.

4.3. Hence, MSEDCL submits to the Hon'ble Commission to provide an appropriate framework to monitor the compliance of RPO targets by Open Access Users and Captive consumers and also provide suitable penalty provisions in case of non-fulfillment of RPO targets.

#### **5. Power to Issue Orders**

5.1. It is humbly requested to Hon'ble Commission to review the RPO Regulations, 2016 and under the powers vested with it under the said regulations. The relevant clauses are reproduced as under:

a. Power to Amend

Regulation 18 allows the State Commission to amend the provisions of this Regulation. The relevant clause is reproduced below for reference:

***"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.***

b. Power to Remove Difficulties

Regulation 19 Power to Remove Difficulties states:

***"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.***

5.2. MSEDCL most respectfully submits further that Hon'ble Commission has sufficient powers to deal with the matter and issue orders on any matter as deemed appropriate.

6. Prayers

In view of the above the Petitioner respectfully prays to the Hon'ble Commission:

- a) To admit the Petition as per the provisions of the Regulation
- b) To review and merge the solar & non solar RPO targets and to specify a composite RPO target by clubbing both solar & 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;
- e) To pass any other order/relief as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice;
- f) Condone any error/omission and to give opportunity to rectify the same;

Chief Engineer (Power Purchase)

Place: Mumbai.

Date:

