# 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: mercindia@merc.gov.in Website: www.merc.gov.in

#### Case No. 145 of 2021

# Petition for Removal of Difficulties in implementation of MERC (Grid interactive Rooftop Renewable Energy Generating System) Regulations, 2019

Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL)	Petitioner
Maharashtra Energy Development Agency (MEDA)	Respondent
Water Supply and Sanitation Department, GoM	Impleded Respondent No.1
Rural Development and Panchayat Raj, GoM	Impleded Respondent No.2
Urban Development Department, GoM	Impleded Respondent No.3
Udgir Municipal Council	Impleded Respondent No.4
Latur Municipal Corporation	Impleded Respondent No.5
Ahmednagar Municipal Corporation	Impleded Respondent No.6
Beed Municipal Council	Impleded Respondent No.7

# <u>Coram</u> Sanjay Kumar, Chairperson I.M. Bohari, Member Mukesh Khullar, Member

#### Appearances:

For the Petitioner For the Respondent For the Impleded Respondent 5 : Ms. Deepa Chavan (Adv): Mr. Anand Raidurg (Rep): Mr. Mayuresh Shindekar (Rep)

#### ORDER

Date: 07 July 2022

 MSEDCL has filed this Case on 01 November 2021 under Regulations 17, 18 and 19 of MERC (Grid Interactive Rooftop Renewable Energy Generating Systems) Regulations, 2019 (GIRREGS Regulations, 2019) seeking necessary amendment in the GIRREGS Regulations 2019 to make Government owned consumers such as Public Water Works (PWW), streetlight etc. with arrears eligible for availing Rooftop RE generating system under Net Metering/Net Billing Arrangement.

# 2. MSEDCL prayed for following in its Petition:

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- *i.* To admit the Petition as per the provisions of the Regulation 17, 18 and 19 of the MERC (Grid Interactive Rooftop Renewable Energy Generating System) Regulations, 2019;
- *ii.* To provide necessary amendment in the GIRREGS Regulations 2019 by allowing Government owned consumers having arrears Rooftop RE generating system under Net Metering/Net Billing Arrangement under GIRREGS Regulations 2019 if they agree to participate in the MSEDCLs scheme for part payment of arrears.
- *iii.* To pass any other order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.
- *iv.* To condone any error/omission and to give opportunity to rectify the same.
- v. To permit the Petitioner to make further submissions, addition and alteration to this Petition as may be necessary from time to time."

## 3. **MSEDCL in its Petitions has stated as follows:**

- 3.1 MSEDCL has filed the present Petition as per Regulations 17,18 & 19 of the MERC (Grid Interactive Rooftop Renewable Energy Generating Systems) Regulations, 2019 (GIRREGS Regulations, 2019).
- 3.2 Regulation 6.6 of GIRREGS Regulations,2019 stipulate that the consumers with pending arrears with the Distribution Licensee shall not be eligible for Net Metering or Net Billing Arrangement. Accordingly, MSEDCL upgraded its online application portal.
- 3.3 Net Metering arrangement is being adopted by all category consumers including the category of consumers like Public Water Works, Street Light, and consumers under Public Services. Consumers under these categories are generally owned and operated by the local bodies which comes under the State Government.
- 3.4 The Energy Bills of these consumers are paid through the funds received by local bodies from the State Government. Since the process of receipt of fund and its processing for approval at local level usually takes time, these consumers (PWW, Streetlight etc.) often fail to pay their

outstanding energy bills before due date. Hence, such connections are always in arrears.

CATEGORY	LIVE CONSUMERS	SANCTIONED LOAD	LIVE TOTAL ARREARS
	Nos	KW	Rs.
HT-RAILWAY/METRO/MONO	93	89876	20385722
HT-PWW	1024	595573	6369185253
HT-AGRICULTURE	1011	0	791577759
HT-PUBLIC SERGOVT	398	238740	297106728
HT-PUBLIC SEROTHER	1095	710744	273890478
	3621	1634933	7752145940
LT-PWW (URBAN)	987	0	900266611
LT-PWW (RURAL)	55278	0	15153787741
ST.LIGHT	101743	443573	59841026220
LT-PUBLIC SEROTHER	82316	443738	651011578
LT-PUBLIC SERGOVT	47944	100792	331305893
LT Total	288268	988103.28	76877398042
Grand Total	291889	2623036.28	84629543982

3.5 The numbers of consumers with outstanding arrears position under these categories is depicted in table below:

- 3.6 In 2014, Government of India (GoI) under the Solar Mission has fixed a target of 100 GW installed capacity of solar electricity by 2022. Out of which 40 GW is projected to come through grid connected rooftop solar systems. Ministry of New and Renewable Energy, GoI has launched Grid Connected Rooftop Solar Program for achieving targeted capacity.
- 3.7 If these categories of consumers which come under the Government of Maharashtra/Central Government are allowed to install Rooftop Solar Projects in their premises, it will make them partially independent on their energy requirement and lead to reduction in bills and reduce the arrears build up. Further, it will foster renewable energy capacity addition.
- 3.8 Therefore, MSEDCL has proposed following Scheme to allow Government Consumers installation of Rooftop Solar/RE:
  - a. Consumers under these categories will be allowed to apply for Rooftop RE system under Net Metering/Net Billing Arrangement if they agree to pay their Arrears under this scheme.
  - b. This scheme will be applicable only to Government owned consumers having arrears for application of Rooftop RE generating system under Net Metering/Net Billing arrangement under GIRREGS Regulations,2019.
  - c. 30% of arrears amount up to previous months energy bill shall be paid by these consumers for online application of Rooftop RE Generating System. Remaining 70% arrears amount shall be paid by such consumers in six equal monthly instalments.

# 4. MEDA in its Reply dated 1 December 2021 submitted as below:

- 4.1 The GoM and GoI are promoting installation of solar systems for Government offices, Street lights, Public Water Works, Public Health Centers etc.
- 4.2 The installation of Solar systems will make the Government offices and other installations partially independent for the energy requirements and contribute to Renewable energy capacity addition.
- 4.3 It will reduce their monthly energy requirements subsequently reducing monthly energy bills. This will simultaneously reduce the arrears of MSEDCL and help in improving financial health of MSEDCL. This will reduce the cross-subsidy burden and will help in reducing tariff of general & industrial consumers. Government funds required for energy bill be reduced and can be utilised for other development works.
- 4.4 As a result, various departments have been allocating funds for rooftop solar for Govt entities. Funds are also being allocated for this purpose by District Planning Committee.
- 4.5 Government Offices are public service points. Water Supply, Government health Centres & Street lights are part of essential services to be provided to general public. Government grants are utilized for paying energy bills are delayed due to various reasons.
- 4.6 In accordance with Regulation 6.6 of GIRREGS Regulations, the portal developed by MSEDCL does not allow to apply for net metering even for a single day of delay.
- 4.7 The condition of 30% arrears while making application and remaining 70% arrears in six equal monthly instalments will not be fulfilled by any of these proposed participating entities; as the State of Maharashtra will not be able to provide requisite funds. There would be a very little impact of such amendment. MEDA requested to use powers under Regulation No.16 and 18 to exclude Government, Semi Government and Local Government entities from applicability of the Regulation 6.6.

## 5. At first E-Hearing held in this matter on 28 January 2022:

5.1. Advocate of MSEDCL mentioned that as per Regulation 6.6 of GIRREGS Regulations, the consumers with pending arrears are not eligible for Net Metering Arrangement or Net Billing Arrangement. Although intention of this provision is salutary, MSEDCL is facing difficulty for allowing Solar rooftop connections under net metering arrangements to the Public Water Works, Street Lights etc connections of Government/Local Bodies which are in arrears. If

such consumer shifts to Solar rooftop, their dependency on power from the grid will reduce which in turn will help in not building up further arrears for MSEDCL. Hence, through this Petition, MSEDCL is requesting to allow relaxation in above said Regulations to the extent that 30% arrears be paid upfront and balance amount in six equal installments after connection of Solar rooftop. She stated and highlighted that the Commission can allow such relaxation only to Government connections under Section 62 (3) of the Electricity Act, 2003. However, she highlighted that to avoid any technical deficiency on procedural aspect, MSEDCL may be allowed to implead Government/local bodies as parties in this matter.

- 5.2. Representatives of MEDA submitted that for promotion of RE power, Government of India and Government of Maharashtra have taken up several proactive steps. MEDA is the implementing agency for projects of installation of RE based systems catering to PWW, Government building connections etc. MEDA is facing hurdles in roll out of scheme due to outstanding arrears on Government/Local body owned connections. MEDA supported the Prayers of MSEDCL.
- 5.3. Considering the submission on record and the pleadings, the Commission issued following directives:
  - (a) MSEDCL to implead appropriate Government Departments / Local Bodies as party in present matter.
  - (b) MSEDCL to provide last three years arrears position for PWW, Street Lights, Office's connections in the name of Government, Municipal Corporation, Municipal Council and Gram Panchayat. Efforts taken by MSEDCL to recover such arrears shall also be submitted.
  - (c) MSEDCL in consultation with MEDA shall submit broad plan of solarization of these connections and its impact on MSEDCL's sales.
  - (d) In addition to (c) above, MEDA in consultation with MSEDCL shall submit its say on the possibility of behind the meter and/or off-grid Solar PV installation along with its advantages and disadvantages (if any).

## 6. MSEDCL in its additional submission dated 6 May 2022 submitted as follows:

- 6.1 In compliance to Commission's direction in Daily Order dated 28 January 2022, MSEDCL has served a copy of the Petition along with additional submission to the below-mentioned authorities via E-mail:
  - a. Chief Officer, Udgir Municipal Council.

- b. Commissioner, Latur Municipal Corporation
- c. Commissioner, Ahmednagar Municipal Corporation
- d. Chief Officer, Beed Municipal Council.
- e. Department of Water Supply & Sanitation, GoM.
- f. Department of Rural Development, GoM.
- g. Department of Urban Development, GoM.

#### 6.2 <u>Arrears Position</u>:

Arrears position for FY 2018-19, FY 2019-20 and FY 2020-21 is depicted in table below:

	(Amount in Rs. Crores)			
Year	Streetlight	PWW	Public Services	Total
2018-19	4169.87	1944	30.18	6144.05
2019-20	4525.8	2027.46	44.36	6597.62
2020-21	5830.86	2416.37	91.73	8338.96

#### 6.3 Efforts taken by MSEDCL for recovery of Arrears:

- a. MSEDCL has made various representations, in reference to the outstanding electricity bills against various government departments, to the Government of Maharashtra for recovery of arrears.
- b. MSEDCL had arranged various meetings with Dy. Chief Minister and Finance Minister including the Secretaries of Rural Development Department and Urban Development Department on 20 July 2021, 14 October 2021, 10 November 2021 and 21 December 2021 for apprising them of the electricity arrears related to streetlight and public water works and its recovery thereof. MSEDCL efforts have not yielded expected results so far.

## 6.4 Broad plan of solarization of connections and its impact on MSEDCL's sales:

- a. MEDA under the scheme named 'Amrut Yojana' has proposed installation of Rooftop Solar Systems at the premises of various Public Water Works (PWW), Sewage Treatment Plants of Municipal corporations and Nagar Parishad.
- b. MEDA has also undertaken installation of Rooftop Solar at Government institutions like ITI, Ashram School, Government Hostels, Veterinary Clinics, Government Sports Complex/Science center, Offices of panchayat samiti/Nagar Parishad/Tahsil/Welfare Department, Primary Health centers and Rural Hospitals. Funding for the said projects is done through DPDC fund/Social Justice fund/MoP fund/Municipal Council fund/ Government Engineering College fund/Tribal Development Fund/MEDA fund and forest

development fund.

- c. MSEDCL will extend full co-operation to the MEDA in line with the provisions of MERC (Grid Interactive Rooftop Renewable Energy Generating System) Regulations, 2019 for installation of Rooftop RE connections.
- d. Taking into consideration of number of connections proposed by MEDA, the possible impact on MSEDCL's sale is worked out as under:

Tariff Category	Nos of Proposed Rooftop Connections	Total Solar Capacity (KW)	Yearly Solar generation (KWH) @ 17% CUF	Solar generation (MU)	ABR (LT- PWW, FY 22-23) (Rs/kWh)	Revenue Loss per Annum (In Crs).
Public Water Work	14	4000	5956800	5.9568	4.52	2.692

# 6.5 <u>Possibility of behind the meter and/or off-grid Solar PV installation along with its advantages</u> <u>and disadvantages:</u>

- a. In case of Behind the Meter arrangement, the exchange of solar generation with the grid is not expected; it is assumed that the said generation will be entirely consumed by the consumer and no power will be exported to the grid. Even if the power is exported there is no commercial settlement of the same, the power will be treated as lapsed.
- b. In case of Street light connections, the actual usage of power happens in the evening or mostly at night when solar generation is Nil. Thus, the Behind the meter arrangement is not at all beneficial for such connections.
- c. In case of PWW also, the load may occur at any point of time round the clock as per water requirements and it will occur not necessarily only during daytime. Therefore, if the consumer opts for the Behind the meter arrangement and the load occurs at nighttime only, then the generation during daytime if not consumed will get exported to the grid and will get lapsed without any commercial settlement.
- d. Thus, the option of Behind the Meter arrangement will be less beneficial to the consumers than net-metering.

## 7. At the Second E-Hearing in the matter held on 13 May 2022:

7.1. Advocate of MSEDCL re-iterated the issues in recovery of government arrears and if such connections are required to be considered under GIRREGS Regulations then amendment in

Regulations 6.6 is required.

- 7.2. Representative of MEDA submitted that it is executing agency for installation of net metering system on Government buildings/lands. Presently, it has identified 100 such locations for net metering works. Hence, waving off the conditionalities in Regulation 6.6 for Government connections could be an option.
- 7.3. Dy. Commissioner, Latur Municipal Corporation submitted that its connections are not under default for current bills. Arrears are there for past period of way back in 2009. They suggested that for settlement of past arrears they are willing to make an escrow account wherein all realizations on account of energy savings will be deposited.
- 7.4. Taking note of suggestion offered by Latur Municipal Corporation, the Commission directed MSEDCL to file its detailed submission within a week's àtime on such suggested option.
- 8. MSEDCL has not filed any submission as directed in hearing held on 13 May 2022.

# Commission's Analysis and Ruling:

9. MSEDCL has filed the present Petition seeking amendment in Regulation 6.6 of GIRREGS Regulations, 2019. Said Regulations is reproduced below:

"6.6 Consumers with pending arrears with the Distribution Licensee shall not be eligible for Net Metering Arrangement or Net Billing Arrangement under these Regulations."

As per above regulations, consumer having arrears of electricity bill are not eligible for net metering / net billing arrangement for solar rooftop PV plant to be installed in their premises.

- 10. MSEDCL in its Petition has stated that Government connections such as Public Water Works, Street Lights etc. are most of the times are in arrears and hence they are not eligible to install solar rooftop PV plant as per above provisions of GIRREGS Regulations. MSEDCL stated that in case these consumers installed solar rooftop, there electricity consumption from MSEDCL will reduce which will help in reducing the arrears. Hence, MSEDCL proposed a scheme that participating consumer is mandated to settle its 30% of arrears amount (up to previous months energy bill) while applying for Rooftop RE Generating System. Remaining 70% arrears amount shall be paid by such consumers in six equal monthly instalments. MSEDCL requested the Commission to approve above arrangement so that these consumers can avail solar rooftop under net metering / net billing arrangement.
- 11. MEDA in its reply stated that it is implementing solarization of PWW and sewage treatment plants of various Municipal Corporations, Councils, Nagar Parishads under 'Amrut Yojana'.

Many Government departments are interested in taking part in such initiatives. But, condition of upfront payment of 30% arrears proposed by MSEDCL is cumbersome and will hinder the adoption of renewable energy systems. For greater participation, MEDA requested the Commission to relax the Regulation 6.6 for Government connections, without any conditionalities.

12. In view of above submissions, it is important to understand background of introducing such provisions in the Regulations. The Commission notes that genesis of Regulation 6.6 of GIRREGS Regulations, 2019 can be traced back in Explanatory Memorandum published with Draft GIRREGS Regulations, 2019, wherein the Commission noted following:

MSEDCL, in its Petition in Case No. 20 of 2019 prayed that the MERC Net Metering Regulations, 2015 need to be amended for allowing the implementation of Net Metering arrangement only if the arrears with the Distribution Licensee have been paid. There is merit in the submission of MSEDCL in this regard, and Consumers who have pending arrears with the Distribution Licensee should not be able to benefit from the beneficial provisions of the Regulations. Hence, the following clause is proposed to be added:

"6.6. Consumers with pending arrears with the Distribution Licensee shall not be eligible for Net Metering or Net Billing under these Regulations."

Thus, said provision of restricting applicability to only consumers without any arrears has been introduced at the instance of MSEDCL with objective that consumer should clear all its arrears before availing financially beneficial arrangement under the Regulations.

13. In view of above intent of introducing said provision in the Regulations, the Commission cannot accept MEDA's request to completely relax applicability of Regulation 6.6. to Government connections. However, considering increasing arrears against these connections, the Commission is open to constructive suggestions which will allow recovery of arrears in gradual manner and at the same time avoid building up further arrears. MSEDCL's proposal of paying 30% arrears upfront and balance 70% in seven equal installment can help in reducing the arrears but it does not have any mechanism to ensure timely payment of balance 70% arrears once rooftop solar plant is installed after payment of 30% arrears. MSEDCL has not submitted any mechanism in case of default of the balance 70% payment. Also, as per regular practice of MSEDCL, in case any installment is not paid, the consumer is disconnected. In this case, in a similar eventuality, the consumer will be disconnected after capital investment in the roof top solar.

On part of MEDA, except for pleading to relax the Regulation, they have not been able to suggest any constructive mechanism for ensuring that the long-term viability of the proposal.

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They could consider part funding or loans through Green Cess in case they have worked out on the benefits of the proposal and are confident about the financial viability of the same.

- 14. With the aim of finding out viable solution on this issue, the Commission impleaded all the concerned. In present proceedings only representative from Latur Municipal corporation participated along with MEDA. Latur Municipal corporation suggested creation of an escrow account wherein all realizations on account of energy savings will be deposited and MSEDCL's arrears can be settled through it. The Commission enquired with MSEDCL to consider such suggestion and other possible options and submit detailed proposal in this respect. However, unfortunately no submission has been received from MSEDCL. The Commission is concerned about such lackadaisical approach of MSEDCL to find out a viable solution which will not only promote the RE power but would possibly help in reducing the arrears of MSEDCL.
- 15. Based on documents available on records, the Commission is of the opinion that all stakeholders need to work more closely and propose a scheme which has certain component of upfront payment of arrears and balance arrears can be paid through the saving accrued after installation of rooftop solar plant. But it is also important to note that once Solar plant is installed, drawl from MSEDCL will reduce, which will reduce the amount of electricity bill and hence in normal course, the Government could possibly release reduced amount towards electricity expenses to local bodies. Therefore, there will be no fund available for repayment of MSEDCL's arrears. Hence, it is important that Government / local body compute saving in electricity bill on account of Solar Plant and propose a mechanism which guarantees the payment of such saved amount to MSEDCL on monthly basis towards arrears, if any. MSEDCL needs to approach not only local bodies but also appropriate Government Department to frame such scheme. MEDA being implementing agency for rooftop Solar projects, needs to co-ordinate with the Government departments and assist the MSEDCL in this regard. Once a viable scheme is worked out, wherein the installation roof top solar, after being enabled through relation in Regulations or through Powers of the Commission to Relax the Regulation, MSEDCL and MEDA may approach the Commission seeking relaxation from Regulation 6.6. of GIRREGS Regulations, 2019. Till such time a concrete and viable proposal is submitted, time relaxation / amendment sought in Regulation 6.6. cannot be allowed.
- 16. The Commission further directs MSEDCL and MEDA that while submitting the scheme, the options of risk mitigation and the impact in case of lower/no generation due to operational and maintenance issues, needs to be studied for a possibility of solar plant not generating electricity at all or generating electricity at a much lower CUF than that is considered for Cost Benefit Analysis.
- 17. Having ruled as above, the Commission would like to advise MEDA / local bodies that for the financial viability of the scheme, it is important to maintain the project through out its life

for accruing intended benefit. As local bodies do not have required expertise, instead of capex model, RESCO model wherein project developer will maintain the project for tenure of PPA can be considered, in case the same is found to be more suitable.

18. Hence, the following Order.

# <u>ORDER</u>

 The Case No.145 of 2021 is dismissed with liberty to Maharashtra State Electricity Distribution Co. Ltd to file afresh a Petition for relaxation from Regulation 6.6. of MERC (Grid Interactive Rooftop Renewable Energy Generating Systems) Regulations, 2019 once the scheme as indicated in paras 15 and 16 above is framed.

Sd/-(Mukesh Khullar) Member Sd/-(I.M. Bohari) Member Sd/-(Sanjay Kumar) Chairperson

