

BEFORE THE ELECTRICITY OMBUDSMAN (MUMBAI)

(Appointed by the Maharashtra Electricity Regulatory Commission
under Section 42(6) of the Electricity Act, 2003)

REPRESENTATION NO. 40 OF 2025

In the matter of Demand Penalty for non-intimation of Solar Rooftop Renewable Energy
Generating Systems behind the meter

Epitome Components Pvt. Ltd..... Appellant
(Con. No. 150519006880)

V/s.

Maharashtra State Electricity Distribution Co. Ltd., Ahilya Nagar.Respondent
(MSEDCL)

Appearances:

Appellant : 1. Ajay Rathi, GM
2. Suresh Sancheti, Representative

Respondent : 1. Mangesh Salunke, Executive Engineer, (Admin), A' Nagar Circle
2. Balasaheb Karad, Asst. Law Officer


Coram: Vandana Krishna [IAS (Retd.)]

Date of hearing: 30th July 2025

Date of Order : 1st September 2025.

ORDER

This Representation was filed on 6th June 2025 under Regulation 19.1 of the Maharashtra Electricity Regulatory Commission (Consumer Grievance Redressal Forum and Electricity Ombudsman) Regulations, 2020 (CGRF & EO Regulations 2020) against the order dated 4th April 2025 in Case No. 235 of 2024 passed by the Consumer Grievance Redressal Forum,


(Dilip Dumbre)
Secretary
Electricity Ombudsman Mumbai



Nashik Zone (the Forum). The Forum by its order partly allowed the grievance of the Appellant. The operative part of the order is as below:

2. *Recalculation of assessment as per MERC (Grid Interactive Rooftop Renewable Energy Generating Systems) Regulations, 2019, Section 7.9 shall be done for 2 years period prior to the date of application.*
3. *After Recalculation of assessment, excess payment against assessment issued if any should be adjusted as per Supply Code Regulations 2021 Section 15.6.2 “at a rate equivalent to the Bank Rate of the Reserve Bank of India to the Consumer by adjustment in the subsequent bill”.*

2. Aggrieved by the order of the Forum, the Appellant has filed this Representation. A physical hearing was held on 30th July 2025 where both the parties were heard at length. The Appellant's submissions and arguments are as below. *[The Electricity Ombudsman's observations and comments are recorded under 'Notes' where needed.]*


- (i) The Appellant is an HT consumer (Consumer No. 150519006880) since 06.06.2009. The details of the Appellant's address, sanctioned load, contract demand, date of inspection, demand penalty assessment bill (due to non-intimation of solar system installation), and other relevant particulars are summarized in Table 1.

Table 1:

Name	Consumer No.	Address on bill	S.L./C.D.	Date of Supply	Date of Inspection	Demand Penalty Assessment Bill	Solar System Installation
Epitome Components Pvt. Ltd.	150519006880	Plot No. A-20/1, MIDC Supa, Tal. Parner, Dist: Ahmednagar	4800 KW/ 2500 KVA	06.06.2009	13.12.2023	Rs.76,28,272/- for the period from Jan. 2020 to Nov. 2023 debited in March 2024 bill.	In the year 2017

The Appellant is regular in payment of energy bills of MSEDCL.

- (ii) The Appellant, in accordance with Regulation 3.1(c) of the Maharashtra Electricity Regulatory Commission (Grid Interactive Rooftop Renewable Energy Generating Systems) Regulations, 2019 has installed a Grid-Connected Renewable Energy


(Dilip Dumbre)
Secretary
Electricity Ombudsman Mumbai




Generating System with a capacity of 184 kW in the year 2017, located behind the Appellant's energy billing meter. The Appellant did not go in for Net Metering. The intention is solely to use the solar power generated for self-consumption and not to sell any excess power generated back to MSEDCL. The Regulation 3.1(c) is produced as below:

3. Scope and Applicability

3.1 These Regulations would apply to:

(c) Grid Connected Renewable Energy Generating Systems connected behind the Consumer's meter, who have not opted either for Net Metering Arrangement or Net Billing Arrangement.

- (iii) The Appellant, vide letter dated 2nd Dec. 2023, submitted an application/intimation to the Respondent regarding the installation of a Grid-Connected Renewable Energy Generating System (184 kW capacity) located behind the energy billing meter. In response, the Respondent (MSEDCL) arranged for an inspection of the Appellant's installation. Subsequently, the Executive Engineer (Testing), MSEDCL, Ahmednagar, vide letter dated 13th Dec. 2023, informed the Superintending Engineer, MSEDCL, O&M Circle, Ahmednagar (Respondent) about the said installation.
- (iv) The Respondent, Superintending Engineer, vide letter dated 20th Dec. 2023 stated that the Appellant had installed a Solar Generation System of 184 kW capacity without any prior intimation to the Respondent. The said letter further alleged that the Appellant had neither installed a bi-directional meter nor provided any intimation regarding the installation of the Solar Generation System. Therefore, the Appellant is liable to pay a penalty at twice the rate of Demand Charges, as per Regulation 7.9 of the Grid Interactive Rooftop REGS Regulations 2019, based on the Contract Demand of 184 kVA. The Respondent (MSEDCL) also directed the Appellant to disclose the date of installation and submit the permission obtained from the Electrical Inspector. Subsequently, MSEDCL informed the Appellant that, in accordance with the guidelines stipulated in Circular No. 322 and Circular No. 334 issued by its Head Office, prior intimation is mandatory for the installation of a Grid-Connected Renewable Energy


(Dilip Dumbre)
Secretary
Electricity Ombudsman Mumbai



Generating System behind the energy billing meter. **In the absence of such intimation, the consumer is deemed to be in default and becomes liable to pay Additional Fixed Charges/ Demand Charges at twice the applicable rate.** Accordingly, based on the provisions of the aforesaid Circulars, the Respondent (MSEDCL) has calculated a penalty amounting to Rs.76,28,272/- towards Penal Demand Charges for the period from Jan. 2021 to Nov. 2023.


- (v) The Appellant submits that the Respondent (MSEDCL) appears to have misinterpreted the applicable regulatory provisions. In this context, the Appellant reproduces below Regulation 7.9 of the Grid Interactive Rooftop REGS Regulations 2019.

7.9 Grid Connected Renewable Energy Generating Systems connected behind the Consumer's meter, and not opting for either Net Metering Arrangement or Net Billing Arrangement, shall be allowed only after prior intimation to the respective Distribution Licensee:

Provided that the Consumer shall be responsible for ensuring that all necessary safeguarding measures as specified by Central Electricity Authority (CEA) are taken:

*Provided further that **the Commission may determine additional Fixed Charges or Demand Charges** and any other Charges for such Grid Connected systems excluding non-fossil fuel-based Cogeneration Plants, in the retail Tariff Order; if the Distribution Licensee proposes such additional Fixed Charges or Demand Charges and any other Charges for such systems, in its retail supply Tariff Petition, supported by adequate justification:*

*Provided also that in case the Consumer installs Renewable Energy Generating Systems behind the Consumer's meter without prior intimation to the respective Distribution Licensee, then the total additional liabilities in terms of additional Fixed Charges or Demand Charges and any other Charges for such systems, shall be levied at **twice the determined rate** for such period of default.*


(Dilip Dumbre)
Secretary
Electricity Ombudsman Mumbai




However, **the Commission has not, till date, determined the applicable rate of such Additional Fixed Charges for such consumers.**

- (vi) The Appellant submits that the Respondent (MSEDCL), in its initial Tariff Petition (MERC Case No. 322 of 2019) filed before the Commission for Truing-up of the Aggregate Revenue Requirement (ARR) for FY 2017–18 to FY 2019–20 and for approval of ARR and Tariff for the period FY 2020–21 to FY 2024–25, **had proposed the levy of Additional Fixed Charges or Demand Charges on Renewable Energy Generating Systems connected behind the consumer's meter.** The Commission, in its Order dated 30th March 2020, examined the issue of such a levy and, after considering various aspects, **decided to defer the levy of such charges.**
- (vii) The Appellant reproduces below Paragraphs 8.21.9 to 8.21.12 of the Tariff Order issued by the Commission on 30th March 2020.

8.21.9: The Commission opines that registering the grid connected rooftop solar system installations behind the consumer's meter not availing net metering or net billing arrangement and levy of Additional Demand/Fixed Charges for such installations are two distinct aspects from regulatory governance perspective.

*8.21.10: Registration of such grid connected rooftop solar system installations behind consumer's meter whether or not availing net metering or net billing arrangement is important solely from the point of view of keeping track of their operational status since such systems are synchronised with grid distribution system whether or not they export power to the grid. It is important to ensure operational safety, deployment of adequate protection systems/islanded mode of operation or anti-islanding features etc. as well as keeping record of such generation for RPO compliance purpose whether for credit to Utility or credit to be availed by such consumer if it is an obligated entity. In future, many such systems are expected to proliferate considering conducive policy/regulatory framework and prosumer friendly approach adopted by distribution utilities as per prevalent regulatory regime. It is important to **create a registry of such installations for orderly development of the sector.***



(Dilip Dumbre)
Secretary
Electricity Ombudsman Mumbai



8.21.11 : Many objectors/stakeholders have pointed out during public hearing that there are many such captive installations (conventional generation/co-generation) facilities operating behind the consumer's meter, for which no such charges have been proposed. The Commission would like to highlight that at present, consumers having captive generation facility synchronised with the grid are required to pay standby demand charges subject to stipulated conditions. The Commission has already considered the revision in Standby/Additional Demand Charges for such installations as dealt with under separate section. Even in such cases, revised Standby/Additional Demand charges are linked to a percentage of Demand Charges and not linked to shortfall in recovery of Fixed Cost as proposed by MSEDCL in this case.

8.21.12 : The Commission observes that Regulations for Grid interactive RTPV systems and the Statement of Reasons thereof have clearly specified the rationale for levy of such Additional Demand/Fixed Charges. However, without considering the preparedness, registry and modalities for implementation, the Commission is deferring the levy of such charges at this stage for rooftop PV systems behind the consumer's meter and not availing net metering or net billing arrangement.
.....(Emphasis added).

- (viii) As per the above paragraph, the Commission has expressly deferred the levy of Additional Demand Charges or Fixed Charges on consumers who install Renewable Energy Generating Systems connected behind the consumer's meter. Accordingly, **the Respondent (MSEDCL) is not entitled to levy or recover any penalty at twice the rate of such charges, as no such charges have been determined or made applicable by the Commission.** The Respondent has erroneously treated the existing demand charges as equivalent to the additional demand charges or fixed charges, which is inconsistent with the Commission's Tariff Order.
- (ix) The Appellant filed a grievance application before the Forum on 06.09.2024, seeking withdrawal of the illegal penalty amounting to Rs.76,28,272/-, levied for the period


(Dilip Dumbre)
Secretary
Electricity Ombudsman Mumbai




from January 2020 to November 2023 and debited in the electricity bill for March 2024. The Forum, by its order dated 04.04.2025, partly allowed the grievance of the Appellant by restricting the recovery to a period of two years, in accordance with the provisions of Section 56(2) of the Electricity Act, 2003. However, the Forum failed to appreciate the core issue that, as per Paragraphs 8.21.9 to 8.21.12 of the Tariff Order in Case No. 322 of 2019 issued by the Commission on 30th March 2020, the Commission has not, till date, granted approval for the levy of any Additional Demand Charges on Renewable Energy Generating Systems connected behind the consumer's meter.

- (x) The Commission has explicitly confirmed this position in writing under the Right to Information Act (RTI), vide its letter bearing reference No. 0107 dated 12.02.2025. This communication was duly submitted to the Forum through email dated 14.02.2025. Despite such clear and authoritative confirmation from the Commission, the Forum failed to consider this crucial piece of evidence.
- (xi) Pursuant to the Forum's order, the Appellant has received a refund of Rs.39,76,975.10 in the electricity bill for the month of April 2025. However, the balance amount, along with applicable interest, remains to be refunded to the Appellant.
- (xii) The Appellant prays that the Respondent be directed to refund the balance amount of penal charges with interest.

3. The Respondent's submissions and arguments are as below.

- (i) The Appellant is an HT consumer (Consumer No. 150519006880) since 06.06.2009. The relevant details of consumer are summarized in Table 1.
- (ii) The Appellant applied for grid connectivity of a Renewable Energy (RE) Generating System installed behind the consumer's meter with a total capacity of **184 kW** on **02.12.2023**. Accordingly, the Respondent's Testing Division carried out an inspection on 13.12.2023. During inspection, it was observed that:



(Dilip Dumbre)
Secretary
Electricity Ombudsman Mumbai



1. A 184 kW solar inverter was already installed and operational from 2017 onwards.
2. The consumer was generating energy using MSEDCL's auxiliary supply.
3. No prior intimation or approval was obtained from MSEDCL.
4. Safety norms as prescribed by the Central Electricity Authority (CEA) were not observed.


(iii) Accordingly, the Respondent issued Demand Penalty to the consumer as per the Grid Interactive Rooftop REGS Regulations 2019 for the period from Jan.2020 to Dec. 2023 as below:

Month	Load (KW)	Contract Demand Rate as per Tariff Order (Rs.)	Demand Penalty Rate (Rs.)	Demand Penalty Amount (Rs.)	Month	Load (KW)	Contr. Demand Rate as per Tariff Order (Rs.)	Demand Penalty Rate (Rs.)	Demand Penalty Amount (Rs.)
1	2	3	4=twice of 3	5=2x4	1	2	3	4=twice of 3	5=2x4
Jan-20	184	391	782	143888	Jan-22	184	432	864	158976
Feb-20	184	391	782	143888	Feb-22	184	432	864	158976
Mar-20	184	391	782	143888	Mar-22	184	432	864	158976
Apr-20	184	411	822	151248	Apr-22	184	454	908	167072
May-20	184	411	822	151248	May-22	184	454	908	167072
Jun-20	184	411	822	151248	Jun-22	184	454	908	167072
Jul-20	184	411	822	151248	Jul-22	184	454	908	167072
Aug-20	184	411	822	151248	Aug-22	184	454	908	167072
Sep-20	184	411	822	151248	Sep-22	184	454	908	167072
Oct-20	184	411	822	151248	Oct-22	184	454	908	167072
Nov-20	184	411	822	151248	Nov-22	184	454	908	167072
Dec-20	184	411	822	151248	Dec-22	184	454	908	167072
Jan-21	184	411	822	151248	Jan-23	184	454	908	167072
Feb-21	184	411	822	151248	Feb-23	184	454	908	167072
Mar-21	184	411	822	151248	Mar-23	184	454	908	167072
Apr-21	184	432	864	158976	Apr-23	184	499	998	183632
May-21	184	432	864	158976	May-23	184	499	998	183632
Jun-21	184	432	864	158976	Jun-23	184	499	998	183632
Jul-21	184	432	864	158976	Jul-23	184	499	998	183632
Aug-21	184	432	864	158976	Aug-23	184	499	998	183632
Sep-21	184	432	864	158976	Sep-23	184	499	998	183632
Oct-21	184	432	864	158976	Oct-23	184	499	998	183632
Nov-21	184	432	864	158976	Nov-23	184	499	998	183632
Dec-21	184	432	864	158976	Total Demand Penalty (Jan.'20 to Nov.'23)				36,77,424


 (Dilip Dumbre)
 Secretary
 Electricity Ombudsman Mumbai




- (iv) Regulation 7.9 of the Grid Interactive Rooftop REGS Regulations 2019 categorically provides that *Grid Connected Renewable Energy Generating Systems connected behind the consumer's meter & not opting for either Net metering Arrangement or Net Billing Arrangement, shall be allowed only after prior intimation to the respective Distribution Licensee.*
- (v) The Commission has recorded the rationale behind mandatory permission/registration of such grid connected rooftop solar system installations behind the consumer's meter, whether or not availing net metering or net billing arrangement. As such systems are synchronized with the grid, it is necessary to keep track of their operational status & also it is important to ensure operational safety, deployment of adequate protection systems/islanded mode of operation or anti-islanding features etc.
- (vi) Regulation 7.9 provides that the consumer shall be responsible for ensuring that all necessary safeguarding measures as specified by Central Electricity Authority (CEA) are taken. Needless to state that, if appropriate arrangement is not provided, reverse power can flow to a dead electricity network, which might have been kept dead due to planned outage, which may lead to fatal/non-fatal accidents.
- (vii) Considering the importance of permission/registration with the Distribution Licensee, the Commission under Regulation 7.9 has provided for penalty for installation of RE Generating system behind the meter without prior permission of the Licensee.
- (viii) Vide communication dated 20.12.2023, the consumer was called upon to submit charging permission obtained from the Electrical Inspector & supporting documents to ascertain the date of installation. The consumer failed to offer any justification for the utter violation of MERC Regulations concerned with grid safety standards. In the hearing dated 27.11.2024, the consumer representative conceded that, the solar system was installed in 2017 itself.
- (ix) Observations of the Commission in case No 322 of 2019 are totally misconceived by the consumer. Reliance placed on observation at Clause No 8.21.12 of the Order in respect of deferring the levy of Additional Demand/Fixed charges is misplaced.


(Dilip Dumbre)
Secretary
Electricity Ombudsman Mumbai



- (x) It must not be overlooked that, in its opening Clause 8.21.9 of the said Order itself, The Commission in its wisdom has clarified that, registering the grid connected rooftop solar system installations behind the consumer's meter not availing net metering or net billing arrangement and levy of Additional Demand/Fixed Charges for such installations are two distinct aspects, from a regulatory governance perspective.
- (xi) In a subsequent Clause No 8.21.10, the Commission has reiterated the importance of registration/prior permission for installation of Solar Generation System behind the meter. **It is the levy of Additional Charge that is deferred, & not the liability/penalty for violation of Regulation 7.9 of the Grid Interactive Rooftop REGS Regulations 2019.** The third Proviso to Regulation 7.9 providing for additional liabilities in case the Consumer installs Renewable Energy Generating Systems behind the Consumer's meter without prior intimation to the respective Distribution Licensee, is a distinct proviso that relates to registration/prior permission. Whereas the second proviso is distinct, and relates to Additional Charges, & not liability for any violation. Additional charges for installation of such Grid Connected System in retail Tariff Order Case No 322 of 2019 were proposed by the MSEDCL, but the same are not allowed. Penalty levied to the consumer in the present case is in accordance with the third proviso to Regulation 7.9 which provides for liability for violation of Regulation. Liability/penalty is provided in the very same Regulation itself. **A separate proposal in this behalf from Distribution Licensee is not at all indicated for liability/penalty.**
- (xii) The Respondent already implemented the order of the Forum, and given credit of ₹39,76,975.10 in the electricity bill for the month of April 2025.
- (xiii) MSEDCL issued Commercial Circular No. 322 dated 21.01.2020, regarding connectivity to the Distribution Network of MSEDCL for eligible consumers installing Rooftop Renewable Energy Generating Systems under the MERC (Grid Interactive Rooftop Renewable Energy Generating Systems) Regulations, 2019. The Circular lays down the procedure for application, methodology for metering and billing, and other related provisions. Thereafter, MSEDCL issued Commercial Circular No. 334 dated 17.03.2022. This circular provides modified **guidelines for Renewable Energy (RE)**


(Dilip Dumbre)
Secretary
Electricity Ombudsman Mumbai



generators who intend to connect their power plants under the provisions of MERC's *Grid Interactive Rooftop Renewable Energy Generating Systems Regulations, 2019*. It particularly addresses "behind-the-meter" installations. It outlines the **procedures, approvals, metering, and billing protocols** for rooftop or distributed renewable energy systems connected directly to the consumer premises ("behind-the-meter"). It is issued in line with the Grid Interactive Rooftop REGS Regulations 2019 which govern how rooftop and distributed generators feed into the distribution network. The circular covers the following guidelines.

- Specific eligibility or technical criteria,
- Application steps or documentation requirements,
- Definitions of "behind-the-meter" under the regulations,
- Billing adjustments or net metering treatment, etc.

The circular also stated issued the following clarification.

a) Prior Intimation & Sanction of application:

As per the above Clause 7.9, the consumer is permitted to install and connect the RE generation system behind the meter only after giving prior intimation to the host Distribution Licensee.Online application shall be treated as prior intimation. No separate sanction is required.


Online application will be considered and processed further in IT billing system for proper tagging of the consumer.

b) Safety Norms specified by the CEA:

As per the regulatory provisions, the consumer shall ensure that all the safety norms specified by the CEA are adhered to and followed.

Therefore the consumer should be asked to obtain charging permission/certificate about compliance of safety norms from the concerned Electrical Inspector office and upload the same while submitting online application.

(xiii) The Respondent prays that the representation of the Appellant be rejected.


(Dilip Dumbre)
Secretary
Electricity Ombudsman Mumbai



4. After the hearing held on 30.07.2025, the Respondent was directed to submit, within one week, a clarification on the following issue:


Whether the Maharashtra Electricity Regulatory Commission (MERC) has, till date, determined the rate as contemplated under Regulation 7.9 of the MERC (Grid Interactive Rooftop Renewable Energy Generating Systems) Regulations, 2019.

However, the Respondent failed to furnish further information on the subject matter. However, it was independently confirmed from the Commission office that such rate has not yet been determined.

Analysis and Ruling:

5. Heard the parties and perused the documents on record. The contentions of both the parties are already recorded above.

6. The Appellant contended that he, in accordance with Regulation 3.1(c) of the MERC (Grid Interactive Rooftop Renewable Energy Generating Systems) Regulations, 2019, installed a 184 kW Solar Generating System behind its billing meter in 2017. The Appellant intimated the Respondent on 02.12.2023 regarding the installation. The Respondent contended that the Appellant installed the system without prior intimation or a bi-directional meter, and levied penal demand charges of Rs.76,28,272/- under Regulation 7.9. The Appellant argues that the Respondent has misapplied Regulation 7.9. The Commission, in its Tariff Order dated 30.03.2020 in Case No. 322 of 2019 (Paras 8.21.9–8.21.12), has **deferred levy of Additional Demand/Fixed Charges** on such installations. Therefore, no “determined” rate exists for imposing penalty. Further, the Commission has confirmed under RTI dated 12.02.2025 that no such charges have been determined till date. Despite this, the Forum wrongly upheld part recovery of the penal demand charges of two years. The Appellant has received partial refund of Rs.39,76,975.10, but the balance amount with interest is still due. The Appellant prays for full refund of the illegally levied penal charges, along with applicable interest.


(Dilip Dumbre)
Secretary
Electricity Ombudsman Mumbai




7. The Respondent contended that the Appellant belatedly intimated on 02.12.2023 for grid connectivity of a 184 kW Solar RE System installed behind its meter. Inspection on 13.12.2023 revealed that:

- a) A 184 kW solar inverter had been installed and operational since 2017.
- b) Power was being generated using MSEDCL's auxiliary supply.
- c) No prior intimation/approval was obtained.
- d) CEA safety norms were not followed.

Based on these findings, the Respondent levied a penalty for the period Jan. 2020 to Dec. 2023 under Regulation 7.9 of the Grid Interactive Rooftop REGS Regulations, 2019. The Regulation 7.9 requires prior intimation to the Distribution Licensee and compliance with CEA safety norms. It further provides that in case of installation without prior intimation, additional liabilities in terms of Demand/Fixed Charges shall be levied at twice the determined rate for the default period. The Respondent maintains that Regulation 7.9 clearly distinguishes between (a) registration/permission and (b) levy of additional charges. The Commission's observations in Case No. 322 of 2019 only deferred levy of additional charges, but did not waive liability/penalty for violation of prior intimation and safety compliance. The consumer failed to justify non-compliance, and admitted during the hearing on 27.11.2024 that the system was operational since 2017 without permission. MSEDCL Circulars No. 322 (21.01.2020) and 334 (17.03.2022) reiterate that:

- Online application is treated as prior intimation (no separate sanction required).
- Consumers must obtain Electrical Inspector's charging permission and upload compliance certificate regarding CEA safety norms.

8. The MERC (Grid Interactive Rooftop RE Generating Systems) Regulations, 2019 were amended by the First Amendment in 2023 and the Second Amendment in 2024. Key amendments include increasing the net metering capacity to 5 MW (or Contract Demand, whichever is lower), introducing new concepts like gross metering, virtual net metering, and


(Dilip Dumbre)
Secretary
Electricity Ombudsman Mumbai



net billing, and removing Grid Support Charges until a certain deployment threshold is reached.

9. The relevant provisions of the Maharashtra Electricity Regulatory Commission (Grid Interactive Rooftop Renewable Energy Generating Systems) Regulations, 2019, stipulate specific requirements with respect to safety aspects.

7: Inter-connection with the Distribution Network / Grid, Standards and Safety:

7.4 The Distribution Licensee shall have the right to disconnect the Renewable Energy Generating System from its network at any time in the event of any threat of accident or damage from such System to its distribution system so as to avoid any accident or damage to it:

Provided that the Distribution Licensee, considering the criticality, may call upon the Consumer to rectify the defect within a reasonable time.

.....

Annexure – 3: Model Net Metering Connection Agreement


3 : Safety

3.1 : The equipment connected to the Licensee's distribution System shall be compliant with relevant International (IEEE/IEC) or Indian standards (BIS), as the case may be, and the installation of electrical equipment shall comply with the requirements specified by the Central Electricity Authority regarding safety and electricity supply.

3.2 : The design, installation, maintenance and operation of the Renewable Energy Generating System shall be undertaken in a manner conducive to the safety of the Renewable Energy Generating System as well as the Licensee's Network.

3.3: If, at any time, the Licensee determines that the Eligible Consumer's Renewable Energy Generating System is causing or may cause damage to and/or results in the Licensee's other consumers or its assets, the Eligible Consumer shall disconnect the Renewable Energy Generating System from the distribution Network upon direction from the Licensee, and shall undertake corrective measures at his own expense prior to reconnection.

3.4: The Licensee shall not be responsible for any accident resulting in injury to human beings or animals or damage to property that may occur due to back-feeding from the Renewable Energy Generating System when the grid supply is off. The Licensee may disconnect the installation at any time in the event of such exigencies to prevent such accident.


(Dilip Dumbre)
Secretary
Electricity Ombudsman Mumbai



...

7.10: The model Form, for intimating installation of Renewable Energy Generator behind the meter by the Eligible Consumer to the concerned Licensee, is set out at Annexure 5 of these Regulations.


10. Central Electricity Authority (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations, 2013 stipulate that Rooftop systems must include **anti-islanding protection**—automatically disconnecting from the grid when supply fails—to ensure safety during outages. They must minimize **Total Harmonic Distortion (THD)** as per IEEE, BIS, or equivalent standards. Systems need **synchronization capability**, such as grid-frequency synchronization devices.

Power quality thresholds include: Voltage should remain within 80–110% of nominal; systems must disconnect if beyond limits after 2 seconds. Frequency deviations (e.g., beyond 50.5 Hz or 47.5 Hz) must trigger protective disconnection within 0.2 seconds. **DC injection** into grid must remain below 0.5% of full rated output or 1% of inverter current. The inverter must support a **lagging power factor** of at least 0.9 when output is over 50%. Inverter must shut down on **overload or overheat** and restart once conditions stabilize. **Paralleling devices** should withstand up to 220% of normal interconnection voltage.

11. Considering the factors of safety and CEA norms, the consumer is no doubt expected to declare its installing capacity of solar rooftop Renewable Energy Generating System, in advance.

The Regulation 7.9 stipulates as under:

7.9 Grid Connected Renewable Energy Generating Systems connected behind the Consumer's meter, and not opting for either Net Metering Arrangement or Net Billing Arrangement, shall be allowed only after prior intimation to the respective Distribution Licensee:


(Dilip Dumbre)
Secretary
Electricity Ombudsman Mumbai




1st Proviso : -Provided that the Consumer shall be responsible for ensuring that all necessary safeguarding measures as specified by Central Electricity Authority (CEA) are taken:

2nd Proviso : Provided further that the Commission may determine additional Fixed Charges or Demand Charges and any other Charges for such Grid Connected systems excluding Non-fossil fuel-based Cogeneration Plants, in the retail Tariff Order, if the Distribution Licensee proposes such additional Fixed Charges or Demand Charges and any other Charges for such systems, in its retail supply Tariff Petition, supported by adequate justification: (Note:- These additional demand charges are not determined yet, and are deferred till a certain minimum solar capacity is installed in the state as a whole).

*3rd Proviso : Provided also that in case the Consumer installs Renewable Energy Generating Systems behind the Consumer's meter without prior intimation to the respective Distribution Licensee, then the total additional liabilities in terms of additional Fixed Charges or Demand Charges and any other Charges for such systems, **shall be levied at twice the determined rate for such period of default.***

12. The main issue of contention in this case is the different interpretation of the above clause "twice the determined rate". The Applicant contends that since the basic rate of additional Fixed / Demand charges has not been determined by MERC, the penal rate of "twice the determined rate" also automatically remains un-determined. Until such a penal rate is specifically approved by the Commission, it can not be levied unilaterally by the Respondent.


(Dilip Dumbre)
Secretary
Electricity Ombudsman Mumbai



The Respondent on the other hand argues that the 2nd and 3rd provisos are independent. Even if the rate has not been determined under the 2nd proviso, the penal rate can still be levied under the 3rd Proviso, in the interest of safety concerns.

We find that no doubt safety concerns are valid. But as to the amount of penal rates, it can only be determined by the Commission. It is up to MSEDCL to propose penal rates (for installation of solar power without prior intimation), independent of additional demand charges, to the Commission. It can not decide such rates suo-moto. In other words, we find merit in the Appellant arguments. Since the current intention of the Commission is to encourage installation of solar power, we suggest that the Respondent may presently propose low or nominal penal rates, till such time as the additional demand charges are determined. It should levy such penal rates only after the Commission's specific (and not implied) approval.


13. In brief, the documents on record clearly indicate that the *additional Fixed Charges* have not yet been determined. Accordingly, there is no question of levying twice the determined rate as penalty.

14. In light of the above, the Forum's order is hereby set aside and the Representation is allowed. Consequently:

- The Respondent is directed to refund the demand penalty recovered from the Appellant, together with interest at the prevailing RBI rate, through adjustment in the ensuing bill of the Appellant.
- The Respondent shall submit a Compliance Report within a period of two months.

15. The Representation is disposed of accordingly.

Sd/
(Vandana Krishna)
Electricity Ombudsman (Mumbai)


(Dilip Dumbre)
Secretary
Electricity Ombudsman Mumbai

