

RAJASTHAN ELECTRICITY REGULATORY COMMISSION, JAIPUR

In the matter of the RERC (Grid Interactive Distributed Renewable Energy Generating Systems) Regulations, 2021

Coram:

- 1. Shri Shreemat Pandey, Chairman**
- 2. Shri S. C. Dinkar, Member**
- 3. Shri Prithvi Raj, Member**

Date of hearing: 02.03.2021, 04.03.2021, 05.03.2021, 08.03.2021, 12.03.2021 (Video Conferencing)

Date of Order: 08.04.2021

Memo on Statement of objects & reasons and consideration of Comments/ Suggestions, received from various stakeholders

Background:

- 1 The Rajasthan Electricity Regulatory Commission (RERC or Commission), in exercise of powers conferred under Section 181 read with Sections 61, 66, 86(1)(e) of the Electricity Act, 2003 (Act 36 of 2003) and all other provisions enabling it in this behalf, framed the following Draft Regulations:

“Rajasthan Electricity Regulatory Commission (Grid Interactive Distributed Renewable Energy Generating Systems) Regulations, 2020”

- 2 These Draft Regulations along with the Explanatory Memorandum and Public Notice were placed on the website of the Commission for inviting public comments. Comments from the stakeholders were also invited through Public Notice published in the following newspapers, on the date indicated against each:

| | | |
|-----------------------|---|------------|
| (1) Dainik Bhaskar | : | 23.12.2020 |
| (2) Rajasthan Patrika | : | 23.12.2020 |
| (3) Times of India | : | 24.12.2020 |

- 3 The last date for submission of comments/suggestions by the stakeholders/public was 15.01.2021. The last date was extended to 21.01.2021 and thereafter up to 28.01.2021. The list of 168 numbers of stakeholders who offered their

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comments/suggestions on the Draft Regulations and Explanatory Memorandum, which have been considered by the Commission while finalising the Regulations, is placed at **Annexure-I**.

- 4 Public Hearing was conducted through Video Conferencing during the period from 02.03.2021 to 12.03.2021.
- 5 The main comments and views expressed by the stakeholders through their written submissions as well as during the Public Hearing, and the Commission's views/Decision thereon have been summarized in the following paragraphs. It may be noted that all the suggestions given by the stakeholders have been considered, and the Commission has attempted to elaborate all the suggestions as well as the Commission's views/decisions on each suggestion in the Statement of Reasons. However, in case any suggestion is not specifically elaborated, it does not mean that the same has not been considered. Further, Syntax/phrase/addition of word(s)/rewording related changes have been suitably incorporated, wherever necessary. Also, it may be noted that all headings and the clause numbers given in this Statement of Reasons are related to those mentioned in the Draft RERC (Grid Interactive Distributed Renewable Energy Generating Systems) Regulations, 2020(herein after referred to as Draft Regulations).

Part I

Preliminary

6 Regulation 1: Short title, Extent and commencement

Commission's Proposal:

"1.4 These Regulations shall remain in force along with the Rajasthan Electricity Regulatory Commission (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015 and subsequent amendments thereof:

Provided that Rooftop and Small Solar Grid Interactive Systems commissioned under Net Metering agreements up to 31st March 2021 shall be governed as per the Rajasthan Electricity Regulatory Commission (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015 and subsequent amendments thereof."

Stakeholders' Comments/Suggestions:

- 6.1 Shri Alok Singh along with other stakeholders commented that since 1 MW project requires at least 4-5 months to be commissioned, the projects whose construction started in December, 2020 will not be able to be commissioned. Therefore, the stakeholders suggested the Commission to provide sufficient time before changing the Regulations.

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- 6.2 Federation of Rajasthan Trade & Industry and few other stakeholders suggested that a project completion period of minimum 6 months may be provided to complete the ongoing projects, post issuance of the final Regulations.
- 6.3 Stockwell Solar Services Private Limited and few other stakeholders suggested that the above-mentioned clause may be relaxed for the ongoing projects which are finalized, applied for Net Metering or material supplied on or before the issuance of the final Regulations, same as decided by UPERC in its Order dated 01.08.2019, i.e., the consumers who have applied to Discom for Net Metering or who have placed Order or signed PPA with developers under RESCO prior to the notification of RSPV Regulations, 2019 will be covered under earlier RSPV Regulations and will be eligible for net metering.
- 6.4 Ecomitram Sustainable Solutions Private Limited with regard to Clause 1.4 suggested that the Commission may change the provision as under:

"1.4 Provided that Rooftop and Small Solar Grid Interactive Systems commissioned under Net Metering agreements up to 31st March 2021 or till date these Regulations come into force as per Clause 1.3 herein whichever is later, shall be governed as per the Rajasthan Electricity Regulatory Commission (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015 and subsequent amendments thereof.

Provided that any extensions / updates to such systems commissioned, shall either be governed by these Regulations or Rajasthan Electricity Regulatory Commission (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015 and subsequent amendments thereof, as agreed between Eligible Consumer and Distribution Licensee."

Commission's Views/Decision:

- 6.5 The Commission, after considering the suggestions of the stakeholders, has issued an Order dated 24.03.2021, which clarifies the applicability of the Regulations in case of the ongoing projects, which are yet to be commissioned. The relevant extract of the Order are as follows:

"...

Meanwhile, to bring regulatory certainty it is clarified that Rooftop and Small Solar Grid Interactive Systems commissioned under Net Metering agreements upto 30.06.2021, shall continue to operate under the Net Metering arrangement till the period of Connection Agreement, as per the provisions of the Rajasthan Electricity Regulatory Commission (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015 and subsequent amendments thereof.

..."

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- 6.6 The terms and conditions applicable for these projects will be as mentioned in their Connection Agreements and further the terms and conditions which are not mentioned in their PPAs, will be governed by the RERC (Grid Interactive Distributed Renewable Energy Generating Systems) Regulations, 2021.
- 6.7 Hence, the modified provisions in line with the above Commission Order are as follows:

“1. Short title, Extent and commencement

1.1 These Regulations shall be called the Rajasthan Electricity Regulatory Commission (Grid Interactive Distributed Renewable Energy Generating Systems) Regulations, 2021.

1.2 These Regulations shall extend to the whole State of Rajasthan.

1.3 These Regulations shall come into force from the date of their publication in the Official Gazette.

1.4 These Regulations shall remain in force along with the Rajasthan Electricity Regulatory Commission (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015 and subsequent amendments thereof:

Provided that Rooftop and Small Solar Grid Interactive Systems commissioned under Net Metering agreements up to 30th June 2021 shall be governed as per the Rajasthan Electricity Regulatory Commission (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015 and subsequent amendments thereof.”

7 Regulation No. 2.1(c): Check meter

Commission’s Proposal:

“2.1 (c) “Check meter” means meter used for accounting and billing of electricity in case of failure of Net Meter or RE Generation Meter;”

Stakeholders’ Comments/Suggestions:

- 7.1 Shri G.L. Sharma suggested that Clause 2.1 (c) definition of “check meter” should be in accordance with CEA (Installation and operation of Meters) Regulations, 2006 as below:

“‘Check Meter’ means a meter, which shall be connected to the same core of the Current Transformer (CT) and Voltage Transformer (VT) to which main meter is connected and shall be used for accounting and billing of electricity in case of failure or becoming defective the main net meter or RE Generation Meter.”

Commission’s Views/Decision:

- 7.2 The Commission has decided to modify the definition of Check Meter for better clarity in line with CEA (Installation and operation of Meters) Regulations, 2006. Therefore, the Commission has revised the definition as below:

"2.1 (c) "Check meter" means a meter, which shall be connected to the same core of the Current Transformer (CT) and Voltage Transformer (VT) to which main meter is connected and shall be used for accounting and billing of electricity in case of failure of the main Net Meter or RE Generation Meter;"

8 Regulation No. 2.1(e): Connected Load

Commission's Proposal:

"2.1(e) "Connected Load" shall mean the sum of rated capacities of all the electricity energy consuming devices on the consumer's premises, which can be operated simultaneously. For the purpose of levy of any charges and for deciding the supply voltage, the Connected Load shall be determined as per method prescribed in the Rajasthan Electricity Regulatory Commission (Electricity Supply Code and Connected Matters) Regulations, 2004 and subsequent amendments thereto;

Commission's Views/Decision:

- 8.1 The Commission has published Rajasthan Electricity Regulatory Commission (Electricity Supply Code and Connected Matters) Regulations, 2021 on 17.02.2021. Therefore, the Commission has decided to modify the definition of Connected Load as below:

"2.1 (e) "Connected Load" shall mean the sum of rated capacities of all the electricity energy consuming devices on the consumer's premises, which can be operated simultaneously. For the purpose of levy of any charges and for deciding the supply voltage, the Connected Load shall be determined as per method prescribed in the Rajasthan Electricity Regulatory Commission (Electricity Supply Code and Connected Matters) Regulations, 2021 and subsequent amendments thereto;

9 Regulation No. 2.1(g): Contract Demand

Commission's Proposal:

"2.1 (g) "Contract Demand" means the demand in kilowatt ('kW') or kilovolt ampere ('kVA') or Horsepower ('HP'), as mutually agreed between the Distribution Licensee and the consumer, and as entered into in an agreement in which the Distribution Licensee makes a commitment to supply in accordance with the terms and conditions contained therein or equal to the Sanctioned Load, where the Contract Demand has not been provided in such agreement;

Stakeholders' Comments/Suggestions:

- 9.1 UltraTech Cement Limited suggested that Clause 2.1 (g) definition of "Contract Demand" should be aligned with the definition as per the Rajasthan Solar Policy 2019, as under:

"4(9) Contract Demand means regular contract demand plus standby contract demand if any, of the consumer with Discoms."

Commission's Views/Decision:

- 9.2 The Commission has aligned the definition of contract demand with the Supply Code Regulations and Commission is of the view that no other change is required.

10 Regulation No. 2.1(h): Distribution Licensee or Licensee

Commission's Proposal:

"2.1 (h) "Distribution Licensee" or "Licensee" means a person granted a licence under Section 14 of the Act or deemed Licensee as per Section 14 of the Act authorizing him to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply;"

Stakeholders' Comments/Suggestions:

- 10.1 Ecomitram Sustainable Solutions Private Limited suggested that Clause 2.1 (h) definition of "Distribution Licensee" or "Licensee" may be changed as suggested below:

"Distribution Licensee" or "Licensee" shall mean and include all person (s) or any entity (Government or Private) possessing a licence under Section 14 of the Act or deemed Licensee as per Section 14 of the Act authorizing him / it to create, operate and maintain an Electricity distribution system for supplying electricity to the consumers in his / its area of supply;"

Commission's Views/Decision:

- 10.2 The Commission is of the view that there is no need for any modification to the definition. Hence, the definition proposed in the Draft Regulations has been retained.

11 Regulation No. 2.1(i): Electricity Supply Code

Commission's Proposal:

"2.1 (i) "Electricity Supply Code" means the Electricity Supply Code specified under Section 50 of the Act and subsequent amendments thereof;"

Stakeholders' Comments/Suggestions:

- 11.1 Shri G.L. Sharma suggested to modify the definition under Clause 2.1 (i) of "Electricity Supply Code" as follows:

"'Electricity Supply Code' means The Rajasthan Electricity Regulatory Commission (Electricity supply Code and connected Meters) Regulations,2004 and subsequent amendments thereto."

Commission's Views/Decision:

- 11.2 The Commission is of the view that there is no need for any modification to the definition. Hence, the definition proposed in the Draft Regulations has been retained.

12 Regulation No. 2.1(j): Eligible Consumer

Commission's Proposal:

"2.1 (j) "Eligible Consumer "means a consumer of electricity in the area of supply of the Distribution Licensee, who uses or proposes to use a Renewable Energy generating system installed in the consumer premises, to offset all or part or no part of the consumer's own electrical requirements, given that such systems may be owned and/or operated by such consumer or Distribution Licensee or RESCO"

Stakeholders' Comments/Suggestions:

- 12.1 Shri G.L. Sharma commented that in Clause 2.1 (j), when Renewable Energy Generating System is installed to offset no part of the consumer's own electrical requirements, then it clearly means that such installation of generating capacity/system is basically acting/to be termed as a generating plant for supply of power to the Distribution Licensee and thus, not covered under the proposed Regulations.
- 12.2 Ecomitram Sustainable Solutions Private Limited with regards to Clause 2.1 (j) definition of "Eligible Consumer" suggested that the Commission may change the provision as suggested below:

"Eligible Consumer" shall mean and include all person (s) or any entity (Government or Private) who is / are currently consuming Electricity OR propose to consume Electricity, located in the Licensed area of Distribution Licensee and has entered into a Connection Agreement or proposes to enter into a Connection Agreement with Licensee;

Provided that such "Eligible Consumer" may install on its own or cause to install a Renewable Energy Generating System whether on its own or someone else's premises to source Electricity to offset all or part of its Electrical Requirements;

Provided that such Renewable Energy Generating Systems may be owned / operated/ maintained by Eligible Consumer or Distribution Licensee or RESCO or Project Developer or any similar entity or person(s);

Commission's Views/Decision:

- 12.3 The Commission has noted the comments of the stakeholders and clarifies that the Commission in the Draft Regulations has proposed "Net Billing

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Arrangement" in which energy generated by the Renewable Energy Generating system is purchased by the Distribution Licensee and the Distribution Licensee raises the bills on the consumer for his consumption at the approved retail supply tariff, after giving credit for total generated electricity at the applicable Tariff. The reference to "no part of the consumer's own electrical requirements" is in the context of consumers setting up Renewable Energy Generating system under the "Net Billing Arrangement", wherein the consumer does not intend to offset his consumption against the RE generation.

- 12.4 The Commission is of the view that there is no need for any modification to the definition and the definition proposed in the Draft Regulations has been retained.

13 Regulation No. 2.1(I): Interconnection Point

Commission's Proposal:

"2.1 (I) "Interconnection Point" means interface of Renewable Energy generating system with distribution system of the Distribution Licensee, where the electricity produced from Renewable Energy generating system is injected into grid:

Provided that, in case of an Eligible Consumer connected at the High Tension (HT) level, the "Interconnection Point" shall mean the interface of the Renewable Energy generating system with the outgoing terminals of the Distribution Licensees' metering cubicle placed before such consumer's apparatus;

Stakeholders' Comments/Suggestions:

- 13.1 Amplus Energy Solutions Pvt. Ltd. and few other stakeholders as regards Clause 2.1 (I) definition of *Interconnection Point* commented that aforementioned definition introduced in the Draft Regulation contradicts the existing definition of *Interconnection Point* as per *RERC Net Metering Regulations, 2015*. The stakeholders further commented that this creates regulatory uncertainty as which definition holds true as Clause 1.4 of the Draft Regulations says that the Draft Regulations will be in force along with the existing RERC (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015.

Commission's Views/Decision:

- 13.2 The Commission is of the view that there is a modification required in the proposed definition of Interconnection Point.
- 13.3 The Commission also clarifies that the new definition is applicable for the projects commissioned after the notification of the Regulations.

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- 13.4 Hence, the Commission decides to modify the definition of Interconnection point in line with FOR Model Regulations as under:

"2.1(l) "Interconnection Point" means interface of Renewable Energy generating system with the outgoing terminals of the meter/Distribution Licensee's cut-outs/switchgear fixed in the premises of the Eligible Consumer:

Provided that, in case of an Eligible Consumer connected at the High Tension (HT) level, the "Interconnection Point" shall mean the interface of the Renewable Energy Generating System with the outgoing terminals of the Distribution Licensees' metering cubicle placed before such consumer's apparatus;"

14 Regulation No. 2.1(q): Net Billing

Commission's Proposal:

"2.1 (q) "Net Billing" means an arrangement under which energy generated by the Renewable Energy Generating system is purchased by the Distribution Licensee and the Distribution Licensee raises the bills on the consumer for his consumption at the approved retail supply tariff, after giving credit for total generated electricity at the applicable Tariff;

Stakeholders' Comments/Suggestions:

- 14.1 Shri Shanti Prasad and few other stakeholders commented that Clause 2.1 (q) definition of Net Billing if read together with Regulation 12.5.1 of RERC (Grid Interactive Distributed Renewable Energy Generating Systems) Regulations, 2020, permits captive use and also permits surplus energy injection into the grid/distribution system. Therefore, the stakeholder suggested either to amend the definitions of Net Billing or to permit separate installations for captive use and Net Billing.

Commission's Views/Decision:

- 14.2 The Commission clarifies that Net Billing is the provision under which the consumer will generate RE power for sale to Distribution Licensee at applicable tariff and Distribution Licensee will raise bill for energy consumed by consumer after giving credit for total generated electricity at the applicable Tariff.
- 14.3 The Commission, for providing better clarity in the provisions of the Net Billing arrangement, has modified the provisions proposed in the draft Regulations in Clause 12.5.1. Under Net Billing arrangement, the Renewable Energy generating system shall be connected on Distribution Licensee side of the consumer meter and the power generated will be sold to the Distribution Licensee at the tariff agreed in the Connection Agreement with the Distribution Licensee, and the amount payable by the Distribution Licensee shall be

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reduced from the amount payable by the consumer for electricity supplied by the Distribution Licensee.

14.4 Further, it is clarified that both “Net Billing” and “Gross Metering” arrangement are the same. Since, the term “Net Billing” has been used in the Draft Regulations and FOR Model Regulations, the Commission has retained the same term.

14.5 Hence, the Commission decide to retain the definition proposed in the Draft Regulations.

15 Regulation No. 2.1(r): Net Meter

Commission’s Proposal:

“2.1(r) “Net meter” means a bi-directional energy meter capable of recording both import and export of electricity or a pair of meters one each for recording the import and export of electricity, as the case may be;

Stakeholders’ Comments/Suggestions:

15.1 Auroville Consulting suggested to modify the definition in Clause 2.1 (r) “Net Meter” as below:

“Net Meter” is a bidirectional energy meter used for the Net Metering and Net feed-in arrangement.”

Commission’s Views/Decision:

15.2 The Commission is of the view that there is no need for modification to the definition and the definition proposed in the Draft Regulations has been retained.

16 Regulation No. 2.1(s): Net Metering Arrangement

Commission’s Proposal:

“2.1 (s) “Net Metering Arrangement” means an arrangement under which a Renewable Energy Generating System with Net Meter installed at an Eligible Consumer’s premises, delivers surplus electricity, if any, to the Distribution Licensee after setting off the quantum of electricity supplied by such Licensee during the applicable Billing Period;”

Stakeholders’ Comments/Suggestions:

16.1 Auroville Consulting suggested to modify the definition in Clause 2.1 (s) “Net Metering Arrangement” as below:

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"Net Metering arrangement" means an arrangement whereby exported energy is deducted from imported energy in energy units (kWh) to arrive at the net imported / exported energy. The net energy import (or export) is billed (or credited / carried-over) on the basis of the consumer tariff. A single bidirectional energy meter shall be used for net-metering at the point of supply. "

Commission's Views/Decision:

- 16.2 The Commission is of the view that there is no need for modification to the definition and the definition proposed in the Draft Regulations has been retained.

17 Regulation No. 2.1(bb): Storage

Commission's Proposal:

"2.1 (bb) 'Storage' means energy storage system utilizing methods and technologies like, Solid State Batteries, Flow Batteries, Pumped Storage, Compressed Air, fuel cells, hydrogen storage or any other technology, to store various forms of energy and to deliver the stored energy in the form of electricity."

Stakeholders' Comments/Suggestions:

- 17.1 Shri Shanti Prasad commented that Clause 2.1 (bb) definition of Storage should also include liquid electrolyte storage batteries like Li-ion, Lead acid or alkaline batteries, etc.

Commission's Views/Decision:

- 17.2 The Commission is of the view that no change is required in existing Draft Regulations as the definition is in line with RERC RE Tariff Regulations, 2020.

18 New Definition: RESCO

Stakeholders' Comments/Suggestions:

- 18.1 Shri G.L. Sharma commented that the word "RESCO" has not been defined in the definitions.

Commission's Views/Decision:

- 18.2 The Commission has accepted the suggestion of the stakeholder and decides to define "RESCO" as under:

"2.1 (y) "RESCO" means Renewable Energy Service Company, which owns a Renewable Energy System and provides renewable energy to the consumer:

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Provided that the Distribution Licensee may act as a RESCO. However, this business shall be treated as other business of the Distribution Licensee;

19 Suggestion for New Definitions:

Stakeholders' Comments/Suggestions:

19.1 Auroville Consulting suggested to add the following definitions:

***"Bidirectional energy meter"** means an energy meter capable of recording both import and export of electricity;*

***"Consumption Meter"** means the energy meter used to measure energy import / consumption from the grid in the case of the Gross Feed-in arrangement;*

***"Gross feed-in"** means an arrangement whereby the consumer exports all generated renewable energy to the grid and receives payment (or credit in the electricity bill) for such exported energy from the Distribution Licensee.*

***"Gross feed-in meter"** means an energy meter that measures the quantum of energy fed into the grid of Distribution Licensee.*

***"Net feed-in"** means an arrangement whereby imported and exported energy are valued at two different tariffs. The monetary value of the imported energy is based on the applicable consumer tariff. The monetary value of the exported energy is based on a feed-in tariff. The monetary value of the exported energy is deducted from the monetary value of the imported energy to arrive at the net amount to be billed (or credited / carried-over). A single bidirectional energy meter shall be used for net feed-in at the point of supply.*

Commission's Views/Decision:

19.2 The Commission is of the view that there is no requirement of including the above definitions at this instance in the new Regulations.

20 Regulation 3: Scope and Applicability

Commission's Proposal:

"3.2 These Regulations shall apply to:

(a) Net Metering arrangements;

(b) Net Billing arrangements;

(c) Grid Interactive Distributed Renewable Energy generating systems connected behind the meter and operating in parallel with Distribution Licensees' grid and who have not opted either for Net Metering arrangement or Net Billing arrangement;

Provided that, Net Metering arrangement under these Regulations shall be allowed to LT Domestic consumers, LT Agriculture consumers and LT Public Street Lighting Service category only;

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Provided further that, the Net Metering arrangement for LT-Domestic, LT Agriculture consumers and Public Street Light consumers shall be allowed subject to technical feasibility:

Provided also that, co-located Renewable Energy based captive power plants up to one mega-watt installed capacity may opt to be set up under these Regulations or the Rajasthan Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020:

Provided also that such option, once exercised, cannot be changed.

3.4 These Regulations shall be applicable to all Grid Interactive Distributed Renewable Energy generating systems that are commissioned on or after April 1st, 2021:

Provided that, Rooftop and Small Solar Grid Interactive Systems commissioned under Net Metering agreements up to 31st March 2021, shall continue to operate under the Net Metering arrangement till the period of Connection Agreement, as per the provisions of the Rajasthan Electricity Regulatory Commission (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015 and subsequent amendments thereof:

Provided further that, the consumer, who has opted for Net Metering arrangement prior to or after notification of these Regulations, shall be allowed to enter into Net Billing arrangement only after termination of existing Connection Agreement under Net Metering arrangement."

Stakeholders' Comments/Suggestions:

- 20.1 Vareyn Solar Pvt. Ltd. and various other stakeholders commented that the Net Metering arrangement under these Regulations should be allowed to all types of consumers of Rajasthan and not be limited to LT Domestic consumers, LT Agriculture consumers and Public Street Light consumers category. They also commented that ending Net-Metering arrangement option for a major chunk of consumers will create loss of business and overall loss of jobs for the youth of the State as well.
- 20.2 Stockwell Solar Services Private Limited and few other stakeholders with regard to Clause 3.2(c) suggested that the same may also be extended to social sector / Non-Profit Organization and Government sector consumers like it has been done in the State of Uttar Pradesh.

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- 20.3 Ajmer Vidyut Vitran Nigam Ltd. (AVVNL) and Jodhpur Vidyut Vitran Nigam Ltd. (JDVVNL) commented that in order to clear any ambiguity arising out of the interpretation of Clause 3.2 and 3.4 together, the Commission should make suitable modification to the Regulations such that the following may be ensured:
- a) A consumer, who has opted for Net Metering arrangement before or after the notification of the new Regulations and has wished to avail Net Billing arrangement under the new Regulations, should not be allowed to switch back to Net Metering arrangement in the future.
 - b) A consumer who has opted for Net Billing arrangement under the new Regulations should not be allowed to opt for Net Metering arrangement in the future.
- 20.4 Arkaa Grenergy Consulting Pvt. Ltd. and few other stakeholders have suggested that more time is required to adopt new Regulations as opting for solar for Commercial & Industrial (C&I) consumer is a capital-intensive decision, which cannot be taken in any haste. The stakeholders also commented that due to COVID-19 situation, there is a serious supply chain disruption and shortage of raw material, which has impacted the manufacturing as well as imports.
- 20.5 Shree Cements Ltd. with regard to Clause 3.2(c) commented that restricting capacity of captive power plant is not in line with the Electricity Act, 2003. This is against Section-9 (Captive Generation) of Electricity Act, 2003, which has delicensed captive power generation and permits a person to construct, maintain and operate a captive generating power plant without requiring a licence. Therefore, no capacity restriction should be applied on setting up of renewable based captive generation behind the meter.
- 20.6 Shri G.L. Sharma with regard to Clause 3.2 suggested that the Commission may mention that the Net Metering is applicable only on LT Agriculture Metered supply category consumers and not on Flat rate category of consumers, as under LT Agriculture consumer category there is Flat Rate category where there will not be any set off with actual consumption. Hence, it is necessary to mention the specific applicability. Further, the stakeholder suggested to remove public street light category from these Regulations as there is un-metered supply as well in case of public street light category.
- 20.7 Rudraksh Energy with regard to Clause 3.2(c) suggested that for clarity purposes, the maximum installed capacity in kW/HP may also be specified for Net Metering, which was earlier applicable for Solar Projects up to 1 MW.
- 20.8 Rajasthan Renewable Energy Corporation Limited (RREC) and Rajasthan Electronics & Instruments Limited, with regard to Clause 3.2(c), commented that Clause 7.1 (i) and Clause 7.1 (vi) in Rajasthan Solar Energy Policy, 2019 provide Net Metering arrangement for all type of consumers (Domestic and

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non-Domestic category). However, Draft Regulations restrict the Eligible Consumers of other categories such as Industries, Government buildings, commercial organisations and all type of HT consumers from Net Metering arrangements. This provision will also affect the existing progress of implementation of Rooftop Projects on Government Buildings under RESCO Mode. Rooftop Projects covered under MNRE Subsidy Scheme for Group Housing Societies/ Residential Welfare Associations may also be restricted as most of them are having HT connection. in view of the above, the stakeholders requested the Commission to continue the Net Metering arrangement for all category customers.

- 20.9 Auroville Consulting suggested the modification in following Regulation in Clause 3.2:

“(a) Net Metering arrangements;

(b) Net Feed-in arrangements;

(c) Gross Feed-in arrangements

(d) Grid Interactive Distributed Renewable Energy generating systems connected behind the meter and operating in parallel with Distribution Licensees' grid without a Net Metering, Net Feed-in or Gross Feed-in arrangement (paralleling only).

Provided that the Net Metering arrangement under these Regulations shall be allowed to LT Domestic consumers, LT Agriculture consumers and LT Public Street Lighting Service category only, subject to technical feasibility;

Provided that all other Consumers at all voltage levels (LT and HT) shall be provided the Net Feed-in or Gross feed-in arrangement as per the choice of the Consumer;

Provided also that, co-located Renewable Energy based captive power plants up to one mega-watt installed capacity may opt to be set up under these Regulations or the Rajasthan Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020;

Provided also that such option, once exercised, cannot be changed.

The Eligible Consumer may install the Renewable Energy generating system under the Net feed-in arrangement, Net Metering arrangement or Gross feed in arrangement.”

- 20.10 Vareyn Solar Pvt. Ltd. commented that if the current provision to forgo the right to Net Metering and adopt Net Billing for future investment is mandated, then the quantum of investment, which is currently growing at 88%+, will be reduced to zero, which will further lead to job losses and over all curtailment of investment in State-owned schemes. Therefore, the stakeholder suggested

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with regard to Clause 3.4, that the existing consumers under Net-Metering Arrangement should not be mandated to switch to Net-Billing Mechanism if they increase their investment in their RE assets.

- 20.11 Shri Shanti Prasad along with various other stakeholders commented that Ministry of Power has notified Electricity (Rights of consumers) Rules, 2020 on 31.12.2020. Its Rule 11(4) (reproduced below) refers to Net Metering system and Gross Metering system. Gross Metering system is that, which is defined vide Regulation 3.2(b) as Net Billing in this Regulations. So, with binding nature of Rules, vide Section 181(1) of the Electricity Act 2003, the Commission may review the term of "Net Billing" instead of "Gross Metering", permitting (new) roof top installations beyond 10 kW, option of installation of meters by the consumer, Discom's reporting on website, timeline of testing and commissioning after submission of installation certificate, etc., considering provisions of Rule 11.

"11 (4) The regulations on Grid Interactive Roof Top Solar PV system and its related matters shall provide for net metering for loads up to ten kW and for gross metering for loads above ten kW."

Commission's Views/Decision:

- 20.12 As regards the concerns raised by Discoms, the Commission clarifies that there is provision for the consumer who has opted for Net Metering arrangement prior to or after notification of these Regulations to enter into Net Billing arrangement after termination of existing Connection Agreement under Net Metering arrangement. Further, the Commission also clarifies that the consumer can change their arrangement only once.
- 20.13 The Commission has noted that during the process of inviting comments/suggestions of Draft Regulations, the Ministry of Power has notified the Electricity (Rights of consumers) Rules, 2020 on 31.12.2020. Further, the provisions related to the eligibility of Net Metering arrangement in the Electricity (Rights of consumers) Rules, 2020 are as follows:

"11 (4) The regulations on Grid Interactive Roof Top Solar PV system and its related matters shall provide for net metering for loads up to ten kW and for gross metering for loads above ten kW."

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- 20.14 It has been brought into notice of the Commission by MNRE that the above provisions are under review by the Ministry of Power. It has also come to notice that in reply to Rajya Sabha question, Hon'ble Power Minister has informed that they have received representation on the provisions related to Rooftop Solar PV System and it has been decided to carry out amendments in these Rules. The amendments will be made in the Electricity (Right of Consumers) Rules, 2020 after following the laid down procedure.
- 20.15 Looking to above, it would not be appropriate to specify any limit for eligibility for Net Metering Regulations in accordance with present provision of the Electricity (Right of Consumer) Rules, 2020 as the same is under review. Accordingly, the Commission has appropriately amended the relevant provision of the Draft Regulations.
- 20.16 The Commission clarifies that both the Gross Metering and Net Billing arrangements are same. Since, the term "Net Billing" has been used in the Draft Regulations and FOR Model Regulations, the Commission has decided to retain the same term.
- 20.17 The modified provisions of the Regulations are as follows:

"3. Scope and Applicability

3.1 *These Regulations shall apply to the Distribution Licensee and consumers availing supply from such Distribution Licensee, in its area of supply in the State of Rajasthan.*

3.2 *These Regulations shall apply to:*

- (a) Net Metering arrangements.*
- (b) Net Billing arrangements.*
- (c) Grid Interactive Distributed Renewable Energy generating systems connected behind the meter and operating in parallel with Distribution Licensees' grid and who have not opted either for Net Metering arrangement or Net Billing arrangement:*

Provided that, the eligibility for Net Metering arrangement shall be as stipulated under the Electricity (Rights of Consumers) Rules, 2020, as amended from time to time:

Provided further that, for the purpose of implementation of the Electricity (Rights of Consumers) Rules, 2020 the Commission may issue necessary directions or orders, if need be, as and when required.

Provided also that, the Net Metering arrangement for the eligible consumers shall be allowed subject to technical feasibility:

Provided also that, co-located Renewable Energy based captive power plants up to one mega-watt installed capacity may opt to be set up under these

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Regulations or the Rajasthan Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020:

Provided also that such option, once exercised, cannot be changed.

3.3 The Eligible Consumer may install the Renewable Energy generating system under the Net Billing arrangement or Net Metering arrangement, subject to the proviso under Regulation 3.2 which,

- (a) shall be within the permissible technical limits as defined under these Regulations;*
- (b) shall be located in the consumer premises;*
- (c) shall interconnect at the same interconnection point of consumer premises and operate safely in parallel with the Distribution Licensee's network.*

3.4 These Regulations shall be applicable to all Grid interactive Distributed Renewable Energy generating systems that are commissioned on or after 1st July 2021:

Provided that, Rooftop and Small Solar Grid Interactive Systems commissioned under Net Metering agreements up to 30th June 2021, shall continue to operate under the Net Metering arrangement till the period of Connection Agreement, as per the provisions of the Rajasthan Electricity Regulatory Commission (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015 and subsequent amendments thereof:

Provided further that, the consumer, who has opted for Net Metering arrangement prior to or after notification of these Regulations, shall be allowed to enter into Net Billing arrangement only after termination of existing Connection Agreement under Net Metering arrangement.

3.5 These Regulations do not preclude the right of State Nodal Agency or Distribution Licensee of the State to undertake Renewable Energy generating system of one mega-watt and above capacity through alternative mechanisms."

21 Regulation 4: General Principles

Commission's Proposal:

"4.1 The Distribution Licensee shall offer the provision of Net Billing arrangement or Net Metering arrangement to the Eligible Consumer, who intends to install Grid Interactive Distributed Renewable Energy generating system in its area of supply on non- discriminatory and 'first come first serve' basis:

Provided that, the Consumer is eligible to install the Grid Interactive Distributed Renewable Energy generating systems subject to the technical limitations as specified under these Regulations:

Provided further that, the interconnection of such system with the grid is undertaken as specified under these Regulations and in compliance with the

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Central Electricity Authority (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations, 2013, as amended from time to time.

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

Stakeholders' Comments/Suggestions:

- 21.1 Shree Cements Ltd. requested the Commission to change the above-mentioned Regulation asunder:

"The Distribution Licensee shall offer the provision of Net feed-in arrangement, Net Metering arrangement or Gross Feed-in arrangement to the Eligible Consumer, who intends to install Grid Interactive Distributed Renewable Energy generating system in its area of supply on non-discriminatory and 'first come first serve' basis."

- 21.2 Bask Research Foundation suggested that in case arrears are disputed, the applicant may be granted permission on basis of merit of dispute, especially wherein pendency of arrears is not because of wilful default, the applicant may also be given the option for immediate settlement of arrears. The process of handling such cases should be automated within the application process.

- 21.3 Sun Source Energy Pvt. Ltd. submitted that online tracking of applications whether it is connected with the grid or availing any such Net Metering or Net Billing services, shall be handled online with the DISCOM website providing information on how much capacity of solar Net Metering application has been filed, at which Distribution Transformer level, else such provision is nothing but to allow discretion to DISCOM. The stakeholder further requested the Commission to include the following modified provision:

"4.2 A consumer applying for net metering or net billing arrangement under these regulations to the Distribution Licensee shall settle all dues of the Distribution Licensee prior to their respective applications.

Provided that, where there is a dispute between the Distribution Licensee and the Consumer, relating to any change for electricity or some other charge for electricity such consumers shall be allowed net metering or net billing arrangement pending such resolution of such dispute upon deposit of the disputed amount with the Distribution Licensee in accordance with section 56 of the act.

Provided that the Distribution Licensee shall pay interest at a rate equivalent to the bank rate of the Reserve Bank of India for the amount of deposit that is returned to the consumer upon resolution of the dispute."

Commission's Views/Decision:

- 21.4 The Commission has accepted the suggestion of the stakeholders for including the provision of Net Metering or Net Billing arrangement in case there is dispute between the Distribution Licensee and the Consumer, with the necessary safeguards.
- 21.5 Further, the Commission has also decided to include the provisions of online application tracking system, which has been elaborated in the upcoming section – Procedure of Application.
- 21.6 The modified Regulations are as follows:

“4. General Principles

4.1 The Distribution Licensee shall offer the provision of Net Billing arrangement or Net Metering arrangement to the Eligible Consumer, who intends to install Grid Interactive Distributed Renewable Energy generating system in its area of supply on non-discriminatory and 'first come first serve' basis:

Provided that, the Consumer is eligible to install the Grid Interactive Distributed Renewable Energy generating systems subject to the technical limitations as specified under these Regulations:

Provided further that, the interconnection of such system with the grid is undertaken as specified under these Regulations and in compliance with the Central Electricity Authority (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations, 2013, as amended from time to time.

4.2 Consumers having pending arrears with the Distribution Licensee shall not be eligible for Net Billing arrangement or Net Metering arrangement under these Regulations:

Provided that, where there is a dispute between the Distribution Licensee and the consumer, relating to any charge for electricity, such consumers shall be allowed Net Metering or Net Billing arrangement pending such resolution of such dispute upon deposit of the disputed amount with the Distribution Licensee in accordance with Section 56 of the Act.”

22 Regulation 5: Grid interactive Distributed Renewable Energy generating systems set up by RESCO

Commission's Proposal:

“5.1As per the provisions of the Electricity Act, 2003, the sale of electricity to individual consumers is only permitted by Distribution Licensee, Trading Licensee or through Open Access. However, in order to promote RE Generation, the Net Billing arrangement through Renewable Energy Service Company (RESCO) owned Renewable Energy generating system shall be permitted:

Provided that, the Eligible Consumer may lease out / rent the Rooftop Space/ Land/ Water bodies to a RESCO on a mutual commercial arrangement for setting up Renewable Energy generating system under Net Billing arrangement. Under Net Billing Arrangement, RESCO shall enter into a direct agreement with

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consumer as regards its payment after deducting agreed amount by the consumer from tariff applicable for Net Billing Arrangement as per Regulation 12.5."

"5.2 All provisions under these Regulations shall be applicable for Renewable Energy generating system set up by a RESCO."

Stakeholders' Comments/Suggestions:

- 22.1 Rajasthan Renewable Energy Corporation Limited (RREC) and various other stakeholders with regard to Clause 5.1 commented that RESCO model is a mechanism to use solar power by a consumer without capital investment by consumer. Rajasthan Solar Energy Policy, 2019 provides Net Billing scheme as well as Net Metering Scheme. It is optional to the consumer to choose any one as per their need; therefore, RESCO model should not be restricted only for the Net Billing Arrangement (Net Billing) since it is violating Clause 7.1 (ii) and 7.2 of Rajasthan Solar Energy Policy, 2019.
- 22.2 Federation of Rajasthan Trade & Industry commented that in the draft Regulations, the Commission has clarified on Net Billing under RESCO, however, the Commission has not clarified regarding RE generating systems behind the meter under RESCO, which has been left to the DISCOM.
- 22.3 Ultratech Cement Limited with regard to Clause 5.1 suggested that Grid Interactive Distributed Renewable Energy generating systems connected behind the meter and operating in parallel with Distribution Licensees' grid and who have not opted either for Net Metering arrangement or Net Billing arrangement, shall also be allowed to set up the project through Renewable Energy Service Company (RESCO) or as per the definition of "Captive Generating plant" as per the Electricity Act, 2003 and Rules. Such consumers are substituting their own thermal generation. Hence, it should be clarified that such consumers can set up the Renewable Generating Plant under RESCO or as per the definition of "Captive Generating plant" as per Electricity Act and Rules. The stakeholder suggested that Commission may change Regulation 5.1 as under:

"5.1 As per the provisions of the Electricity Act, 2003, the sale of electricity to individual consumers is only permitted by Distribution Licensee, Trading Licensee or through Open Access. However, in order to promote RE Generation, the Net Billing arrangement or Grid Interactive Distributed Renewable Energy generating systems connected behind the meter and operating in parallel with Distribution Licensees' grid and who have not opted either for Net Metering arrangement or Net Billing arrangement through Renewable Energy Service Company (RESCO) owned Renewable Energy generating system or as per the definition of "Captive Generating plant" as per Electricity Act and Rules shall be permitted."

Commission's Views/Decision:

- 22.4 The Commission has noted the suggestions of the stakeholders and is of the view that in order to promote RE Generation, the Net Metering and Net Billing arrangement through Renewable Energy Service Company (RESCO) owned Renewable Energy generating system may be permitted. Accordingly, the relevant provision of the draft Regulations has been amended.

The Commission clarifies that the Eligible Consumer may lease out / rent the Rooftop Space/ Land/ Water bodies to a RESCO on a mutual commercial arrangement for setting up Renewable Energy generating system under Net Billing arrangement or Net Metering arrangement. Further, under the Net Metering and Net Billing arrangement, RESCO shall enter into a direct agreement with consumer as regards its payment. The Commission has clarified that there will be no tripartite agreement between RESCO, consumer and Distribution licensee. Even in case of RESCO, the Net Metering/ Net Billing agreement shall be entered into between the Distribution Licensee and eligible consumer. Further the dispute between the consumer and the RESCO arising out of their contractual obligation under the direct agreement shall be settled mutually by them and shall not be adjudicated by the Commission or Distribution Licensee. The Distribution Licensee shall not be the party for such dispute and shall not disconnect such consumer on the ground arising out of such dispute between consumer and the RESCO. Accordingly, the draft Regulations have been modified.

- 22.5 The modified provisions are as follows:

"5.1 As per the provisions of the Electricity Act, 2003, the sale of electricity to individual consumers is only permitted by Distribution Licensee, Trading Licensee or through Open Access. However, in order to promote RE Generation, the Net Metering and Net Billing arrangement through Renewable Energy Service Company (RESCO) owned Renewable Energy generating system shall be permitted:

Provided that, the Eligible Consumer may lease out / rent the Rooftop Space/ Land/ Water bodies to a RESCO on a mutual commercial arrangement for setting up Renewable Energy generating system under Net Billing arrangement or Net Metering arrangement:

Provided further that, under Net Metering and Net Billing Arrangement, RESCO shall enter into a direct agreement with consumer as regards its payment. There will be no tripartite agreement between RESCO, consumer and Distribution Licensee. Even in case of RESCO, the Net Metering/ Net Billing agreement shall be entered into between Distribution Licensee and eligible consumer:

Provided also that, the dispute between the consumer and the RESCO arising out of contractual obligations under the direct agreement shall be settled mutually by them and shall not be adjudicated by the Commission or Distribution Licensee. The Distribution Licensee shall not be the party to such dispute and shall not disconnect such consumer on the ground arising out of such dispute between consumer and the RESCO.

5.2 All provisions under these Regulations shall be applicable for Renewable Energy generating system set up by a RESCO."

23 Regulation 6: Connectivity of Renewable Energy generating system

Commission's Proposal:

"6.1 The cumulative capacity of Renewable Energy generating system to be allowed at a particular distribution transformer shall not exceed 50% of the capacity of such distribution transformer or such limit as may be stipulated by the Commission from time to time:

Provided that, in case of HT consumers where the distribution transformer has been installed by the consumer, the limit of 50% of distribution transformer capacity shall not be applicable. The total allowable solar installation capacity for such consumers shall be as per Regulation 7.2 of these Regulations."

"6.2 The Distribution Licensee shall update the information about distribution transformer level capacity available for connecting Renewable Energy generating system under Net Billing arrangement or Net Metering arrangement on yearly basis and shall provide the information on its website."

Stakeholders' Comments/Suggestions:

- 23.1 Sun Alpha Energy Group and few other stakeholders commented that limiting the cumulative capacity of Renewable Energy generating systems to 50% of the distribution transformer capacity restricts the benefits that Distribution Licensees gain on account of distributed generation (such as voltage improvements, reduction on cost of supply and deterring infrastructure upgradation). The stakeholder suggested that the Commission may, therefore, consider permitting cumulative capacity of RE generating systems of up to 100% of distribution transformer rating.
- 23.2 Shri G.L. Sharma with regard to Clause 6.1 commented that the RERC (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations 2015, Sub Regulation 5(1), specifies that the cumulative capacity to be allowed at a particular distribution transformer shall not exceed 30% of the capacity of the distribution transformer, whereas in the proposed Regulation- Sub Regulation 6.1, it is specified as 50%, i.e., on higher side without any proper justification. The stakeholder further commented that both the

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Regulations, i.e., RERC (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015, and proposed Regulations are to remain in force together and having two different capacities is not reasonable. Hence, it should be limited to 30% as specified in the RERC (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015.

- 23.3 Bask Research Foundation commented that the penetration of rooftop solar in Rajasthan (and India) is extremely low. Hence, FOR made special recommendations for promoting rooftop solar. Further, it is well established that typically, transformers do not have any issues for managing reverse currents as they are bi-directional in nature. Hence, in concurrence with global trends and practices adopted across other States in India, transformer capacity utilization up to 80% should be allowed. This is also the normative limit for loading of transformer. It may also be noted that probability of high-capacity utilization in case of LT consumers is very low because of space availability and adoption constraints. If the above suggestion is accepted, the provision for HT consumers shall become redundant as allowable limit of 80% of transformed capacity shall apply to them also. Suitable limits may be applied to EHT consumers to avoid back-feed to substations.
- 23.4 Ecomitram Sustainable Solutions Private Limited with 1 other stakeholder with regard to Clause 6.2 commented that the update shall be done on real time basis, with a lag of not more than 30 days. Availability of transformer capacity shall be intimated along with the online application process itself. DISCOM shall be responsible for maintaining records for capacity approved and capacity installed. The system shall be automated and integrated with consumer service platforms. DISCOM shall ensure privacy of consumer details during approval process to ensure consumers are not harassed for unauthorised payments.

Commission's Views/Decision:

- 23.5 As detailed in the Explanatory Memorandum, considering the operational issues and supply quality issues on account of reverse flow and meshed network at Distribution level, the Commission is of the view that the limit of 50% of the distribution transformer capacity is appropriate, and there is no requirement to modify the provisions proposed in the Draft Regulations, and the same has been retained.
- 23.6 Further, the Commission clarifies that for this aspect, the provisions of new Regulations will only be applicable after publication of the Regulations and hence, the issue of contradiction with RERC Net Metering Regulations, 2015 is not relevant. Accordingly, no change is required in existing Draft Regulations.

24 Regulation 7: Eligible Consumer and Individual Project Capacity

Commission's Proposal:

"7.1 All Eligible Consumers of electricity in the area of supply of the Distribution Licensee having or proposing to install a Renewable Energy generating system may opt for grid connectivity under the Net Billing arrangement or Net Metering arrangement in accordance with these Regulations."

7.2 The maximum Renewable Energy generating system capacity to be installed at any Eligible Consumer's premises shall not exceed 100% of the Sanctioned Load/Contract Demand of the consumer:

Provided that, the capacity of the Renewable Energy generating system shall be in conformity with the provisions relating to the Sanctioned Load or Contract Demand permissible under the Rajasthan Electricity Regulatory Commission (Electricity Supply Code and Connected Matters) Regulations, 2004 and subsequent amendments thereto.

7.3 The capacity of Renewable Energy generating system to be installed at the premises of any Eligible Consumer shall be more than one kilo watt under Net Billing arrangement or Net Metering arrangement subject to the condition as specified in Regulation 7.2:

Provided that, the capacity of Renewable Energy generating system to be installed at the premises of any Eligible Consumer shall be up to one mega-watt under Net Metering arrangement or Net Billing arrangement:

Provided further that, in case the Eligible Consumer intends to install Renewable Energy generating system having capacity of more than one mega-watt, terms and conditions of such arrangement shall be governed as per the Rajasthan Electricity Regulatory Commission (Terms and Conditions for tariff determination from Renewable Energy Sources) Regulations, 2020 and subsequent amendments thereof.

7.5 HT (11 kV and above) Consumers may install and connect Renewable Energy generating system at their LT Bus Bar System:

Provided that, in such cases, the RE Generation Meter or Net Meter shall be installed on the HT side of the Consumer's Transformer.

7.6 An Eligible Consumer may install or enhance the capacity of, or upgrade the Renewable Energy generating systems at different locations within the same premises:

Provided that, the total capacity of such systems within the same premises shall not exceed the capacity limits specified in these Regulations."

Stakeholders' Comments/Suggestions:

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- 24.1 RREC and other stakeholders commented that any consumer of power opting for solar energy plants to fulfil his/her power needs, aims to have a sound plan of return on investment and hence, to keep the investment of the consumer safe, flexibility in installed capacity is mandatory and therefore, stakeholders suggested that the ceiling limit of solar power project up to contract demand should be reconsidered. RREC also commented that in order to use more and more solar power through rooftop solar, Gujarat Electricity Regulatory Commission (Net Metering Rooftop Solar PV Grid Interactive Systems) (Second Amendment) Regulations, 2020 in Regulation 5 provides that *"The maximum Rooftop Solar PV System capacity to be installed at any Eligible Consumer's premises in case of Residential Consumers (including connections for common utilities such as water works, elevators, common passage lights, street lights, garden, gym, swimming pool etc. which are being charged residential tariff) and MSME (Manufacturing) Enterprise, the Rooftop Solar PV System capacity shall be irrespective of their sanctioned load/contract demand. Recently, Gujarat State has issued Solar Power Policy, 2021 wherein the upper ceiling of solar projects up to contract demand has been removed. Rajasthan State has high level of solar radiation and to harness more and more solar power and looking to the above fact, the stakeholders suggested that the Commission should reconsider the ceiling limit of solar power project up to Contract Demand.*
- 24.2 Shree Cements Ltd. with respect to Clause 7.2 and Clause 7.3 commented that the Contract Demand should include both Regular as well as standby demand as provided under Rajasthan Solar Policy, 2019 issued by Government of Rajasthan.
- 24.3 Auroville Consulting suggested that in light of the earlier comments provided by them, the Commission may change Clause 7.1 and all other relevant Clauses to include net metering, net feed-in and gross feed-in.
- 24.4 Ecomitram Sustainable Solutions Private Limited with regard to Clause 7.2 suggested that the Commission may change it as suggested below:
- "7.2 The maximum Renewable Energy generating system capacity to be installed at any Eligible Consumer's premises shall not exceed the limits of the Distribution Transformer as per Clause 6.1 herein;"*
- 24.5 Bask Research Foundation with regard to Clause 7.2 commented that the LT consumer with demand less than 5kW does not have a fixed sanctioned load as per existing tariff regime. Therefore, it is recommended that capacity equivalent to average consumption in last 6 months may be allowed in such cases.

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- 24.6 Shri G.L. Sharma with regard to Clause 7.2 commented that in RERC (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015, (Sub Reg.6(2)), the limit is 80% of the sanctioned load/contract demand of the consumer. However, in draft Regulations, it has been increased without providing any justification. The stakeholder suggested that it may be mentioned that if 100% sanctioned load/contract demand load has been allowed, it would mean that the transformer capacity is being loaded beyond its capacity. This has not been justified and should be fully clarified during personal hearing as well.
- 24.7 Ultratech Cement Limited with regard to Clause 7.2 suggested that the cap of capacity up to 100% of contract demand should not be applicable in case of Grid Interactive Distributed Renewable Energy generating systems connected behind the meter and operating in parallel with Distribution Licensees' grid and who have not opted either for Net Metering arrangement or Net Billing arrangement. Such consumers are substituting their own thermal generation. There is no export of power to grid in case of behind the meter project, hence, no relevance of open access. Further, as per the Electricity Act, 2003, the consumers can install their Captive Generating Plant and there is no such restriction whether it is a thermal power plant or RE plant. Hence, for Grid Interactive Distributed Renewable Energy generating systems connected behind the meter, imposing condition for capacity cap up to contract demand is unjust and violating the Electricity Act, 2003 and Rules. The stakeholder suggested that Commission may change Section 7.2 to:

"7.2 The maximum Renewable Energy generating system capacity to be installed at any Eligible Consumer's premises shall not exceed 100% of the Sanctioned Load/Contract Demand of the consumer.

Provided that, the capacity of the Renewable Energy generating system shall be in conformity with the provisions relating to the Sanctioned Load or Contract Demand permissible under the Rajasthan Electricity Regulatory Commission (Electricity Supply Code and Connected Matters) Regulations, 2004 and subsequent amendments thereto.

Provided further that, this provision shall not be applicable in case of Grid Interactive Distributed Renewable Energy generating systems connected behind the meter and operating in parallel with Distribution Licensees' grid and who have not opted either for Net Metering arrangement or Net Billing arrangement."

- 24.8 Cleanmax Enviro Energy Solution Pvt Ltd with regard to Clause 7.3 requested the Commission to clarify that even a plant of 1 kW-1000 kWp can be installed under behind the meter arrangement and need not necessarily be more than 1000 kW.

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- 24.9 Amplus Energy Solutions Pvt Ltd and other stakeholder with regard to Clause 7.3 commented that capping the capacity to 1 MW will discourage the consumer who are obligated under Section 86(e) of the Electricity Act, 2003 from fulfilling their RPO. The stakeholder suggested that the Commission should specify capacity limit up to sanctioned load of the consumer.
- 24.10 Rural Anant Energy Development Society and few other stakeholders with regard to Clause 7.5 commented that this is technically infeasible. If RE Generation Meter is on the HT side, connecting on LT side will make the arrangement as Net Meter.

Commission's Views/Decision:

- 24.11 The Commission feels that there should not be any restriction up to Sanctioned Load (in kW) or Contract Demand (in kVA) considering the desire to promote Grid Interactive Distributed Renewable Energy Generating System in the State. Therefore, the Commission decides to retain the provision of 100% of the Sanctioned Load (in kW) or Contract Demand (in kVA) of the Eligible Consumer proposed in the Draft Regulations and the same limit shall also apply to the behind the meter plants.
- 24.12 As regards the capping of the system capacity, the Commission clarifies that the Commission is only providing capping of 1 MW for installation of Distributed Renewable Energy generating system for all the eligible consumers under the Net Metering and Net Billing/Net Billing arrangements. Further, it is also clarified that in case the Eligible Consumer intends to install Renewable Energy generating system having capacity above one mega-watt, the terms and conditions of such arrangement shall be governed as per the Rajasthan Electricity Regulatory Commission (Terms and Conditions for tariff determination from Renewable Energy Sources) Regulations, 2020.
- 24.13 The Commission has decided to clarify that the Eligible Consumer may install or enhance the capacity of, or upgrade the Renewable Energy generating systems at different locations within the same premises after following due procedure and intimating the concerned Distribution Licensee. Further, as discussed in the previous section, the Commission has issued Rajasthan Electricity Regulatory Commission (Electricity Supply Code and Connected Matters) Regulations, 2021 on 17.02.2021. Accordingly, the modified Regulations are as follows:

" 7.2 The maximum Renewable Energy generating system capacity to be installed at any Eligible Consumer's premises shall not exceed 100% of the Sanctioned Load/Contract Demand of the consumer:

Provided that, the capacity of the Renewable Energy generating system shall be in conformity with the provisions relating to the Sanctioned Load or

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Contract Demand permissible under the Rajasthan Electricity Regulatory Commission (Electricity Supply Code and Connected Matters) Regulations, 2021 and subsequent amendments thereto.

.....

7.6 An Eligible Consumer may install or enhance the capacity of, or upgrade the Renewable Energy generating systems at different locations within the same premises after following due procedure and intimating the concerned Distribution Licensee:

Provided that, the total capacity of such systems within the same premises shall not exceed the capacity limits specified in these Regulations. "

25 Regulation 8: Procedure for application

Commission's Proposal:

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*8.2 The Eligible Consumer who proposes to install a Renewable Energy generating system in his premises shall apply in the application form (**Annexure – II**), which the Distribution Licensee shall notify on its website along with the application fees as specified in the schedule (**Annexure-III**) of these Regulations.*

"8.3 The Consumer shall compulsorily provide details of e-mail address and mobile number, along with the application."

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"8.10 The Eligible Consumer shall install the Renewable Energy generating system within one hundred and eighty (180) days of receiving the LoA, as per the Standards/Codes specified under these Regulations or such extended period as may be agreed to by the Distribution Licensee:

Provided that, if the Eligible Consumer fails to set up the installation within the above stated period, then the approval shall be deemed to be cancelled, and the Eligible Consumer shall have to apply afresh."

Stakeholders' Comments/Suggestions:

- 25.1 Bask Research Foundation with regard to Clause 8.2 commented that in accordance with Section 47(1) of the Electricity Act, 2003, a security deposit is required in lieu of supply of electricity supplied or when any electric line, electric plant or electricity meter is to be provided by the Distribution Licensee. Hence, when check meter, RE generation meter, Gross meter, or Net meter is procured by the consumer, there is no reason for levying a security amount on the consumer. When such equipment is provided by the DISCOM, suitable

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security deposit may be levied which is proportional to the cost of equipment. The current recommendations for levying security deposit should be deleted.

Further, according to Section 47(4) of the Electricity Act, 2003 the Distribution Licensee shall be required to pay interest equivalent to bank rate or more, as determined by the Commission. Hence, the provision for non-interest-bearing security is in violation of the Electricity Act, 2003.

25.2 Bask Research Foundation with regard to Clause 8.2 provided some general comments along with the following suggestions to improve consumer experience, efficiency in processing applications and transparency in handling applications.

- The online platform for submitting applications shall be integrated with Consumer Management System to be provided by Distribution Licensee as per the mandate of RERC and Electricity (Right of Consumers) Rules 2020.
- Transformer capacity utilization through RE for all consumers in Tier I and Tier II cities should be available online. The application portal shall display RE capacity installed, RE capacity applications under process, and RE capacity available.
- Applications shall be processed on first come first serve basis only, unless any legitimate discrepancy is notified.
- The application portal shall provide a detailed list of documents and fee for the application process.
- The application portal shall also provide steps for procurement and testing of check meters, net meters, and RE generation meters.
- The process for submission of documents for testing and installation of equipment post installation of RE shall be made online and automated.
- Equipment for testing may be dispatched or delivered to address provided by Distribution Licensee as per guidelines provided.
- Any delay in processing and testing beyond reasonable period should be compensated, and Standards of Performance shall be defined for same within the scope of these regulations.

25.3 Ecomitram Sustainable Solutions Private Limited with regard to Clause 8.3 and Clause 8.10 suggested modification as follows:

"8.3 The Consumer shall compulsorily provide details of e-mail address and mobile number, along with the application. Licensee, shall display prominently, the details of e-mail address, mobile numbers, Names & Designations of concerned Officers who should be contacted during processing of Applications."

"8.10 The Eligible Consumer shall install the Renewable Energy generating system within one hundred and eighty (180) days of receiving the LOA, as per the Standards/Codes" specified under these Regulations or such extended period as may be agreed to by the Distribution Licensee, subject to force majeure conditions."

Commission's Views/Decision:

- 25.4 The Commission has accepted the suggestions of the stakeholders regarding the inclusion of the provision of creating web portal and mobile application for submission of online application. Further, the Commission decides to include the provision of development of online application tracking system and app-based technology to enhance the processing speed of the applications.
- 25.5 Further, the Commission has also decided to include the provisions of providing basic details regarding detailed procedure for grant of new arrangement, address and telephone numbers of offices where filled-up application forms can be submitted, address of website for online submission of application form, complete list of copies of the documents required to be attached with the application, and all applicable charges to be deposited by the applicant on the Discom website.
- 25.6 The Commission also clarifies that the consumer shall submit the installation certificate to the Distribution Licensee after installation of the Solar PV system and the licensee shall complete signing of connection agreement, installation of meter and successful commissioning of the solar PV system within the timelines specified by the Commission, which shall not be more than thirty days from the date of submission of the installation certificate. Further, the Distribution Licensee should place formats of contract agreement and installation certificate on web-portal.
- 25.7 The Commission also clarifies that the Consumer shall have the option of purchasing the requisite meter himself which shall be tested and installed by the Distribution Licensee.
- 25.8 In view of the above discussion the Commission has suitably modified the clause.

26 Regulation 9: Connection Agreement

Commission's Proposal:

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9.3 The Distribution Licensee shall make available the Agreement formats on its website, along with the applicable procedure and Application and other relevant forms, within two months of notification of these Regulations."

"9.4 The Connection Agreement shall remain in force for twenty-five (25) years:

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Provided that, the Connection Agreement entered under Net Metering arrangement prior to notification of these Regulations shall be valid for the period as stipulated in the said Connection Agreement:

Provided further that, the Agreement may be terminated at any time by mutual consent."

Stakeholders' Comments/Suggestions:

- 26.1 AVVNL and JDVNL with regard to Clause 9.3 commented that the Net Metered consumers, prior to release of the new Regulations, shall be guided by RERC (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015. In the said Regulations, the period of validity of agreement for net metered consumers is not provided. The stakeholder requests the Commission to specify the period of validity for agreements executed prior to the notification of new Regulations.
- 26.2 Bask Research Foundation with regard to Clause 9.3 suggested that the process of Agreement between the Distribution Licensee and the prosumer should be made online. The stakeholder with regard to Clause 9.4 suggested that since the consumer is the prime stakeholder of the RE generating system, by natural principle, only the consent and willingness of the prosumer is paramount. Prosumer may be mandated to intimate the Distribution Licensee within 15 to 30 days prior to termination of the agreement. Further, while the term of connection agreement is defined as 25 years, it may be provided that the consumer may pursue renewal of agreement as per the prevalent regulatory provisions at the time. Solar PV systems have useful life beyond 25 years of service and forced disconnection shall be counterproductive to the interest of the consumers and the environment.
- 26.3 Shri Shanti Prasad suggested that termination of connection agreement for rooftop installations at residential premises may be permitted by notice from the consumer only.

Commission's Views/Decision:

- 26.4 The Commission has noted the concerns of the Discoms for projects which are guided by the RERC Net Metering Regulations, 2015 where validity of the Connection Agreement has not been provided and decides to include the provision on the same for a period of 25 years from the date of Connection Agreement.
- 26.5 The Commission has also clarified that as mentioned in Explanatory Memorandum, the termination of the Agreement at any time may be done by mutual consent of the Consumer and Distribution Licensee and is subject

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to the condition that Renewable Energy generating system should be disconnected from the Distribution Licensee's Network.

26.6 The modified Regulations are as follows:

“9. Connection Agreement

9.1 The Distribution Licensee and Eligible Consumer shall enter into a Connection Agreement for Net Billing arrangement or Net Metering arrangement, after approval of connectivity of Renewable Energy generating system with the distribution network, but before the start of actual generation from the System.

9.2 A model Net Billing Connection Agreement and Net Metering Connection Agreement is provided at Annexure - IV-A and Annexure - IV-B, which the Distribution Licensee may modify suitably, subject to consistency with these Regulations.

9.3 The Distribution Licensee shall make available the Agreement formats on its website, along with the applicable procedure and Application and other relevant forms, within two months of notification of these Regulations.

9.4 The Connection Agreement shall remain in force for twenty-five (25) years:

Provided that, the Connection Agreement entered under Net Metering arrangement prior to notification of these Regulations shall be valid for the period as stipulated in the said Connection Agreement:

Provided further that, for the Connection Agreement entered under Net Metering arrangement prior to notification of these Regulations, where the validity of the period is not provided in the Connection Agreement, the Net Metering arrangement shall be valid for twenty-five (25) years from the date of entering into the Connection Agreement:

Provided also that, the Agreement may be terminated at any time by mutual consent.

9.5 The Eligible Consumer shall, upon termination of the Agreement, disconnect forthwith its Renewable Energy generating system from the Distribution Licensee's Network.”

27 Regulation 10: Interconnection with the Grid: Standards and Safety

Commission's Proposal:

“10.2 The consumer shall get the equipment installed at his/her premises by the representative of the supplier to confirm satisfactory working:

Provided that, the equipment of Renewable Energy generating system shall be pre-tested by the supplier and a test certificate for the concerned equipment shall be provided to the consumer:

Provided further that, the tests as per applicable standards shall be done to ensure the quality of power generated from the Renewable Energy generating system.”

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"10.4 The consumer, who installs Renewable Energy generating system, shall be responsible for the safe operation, maintenance and rectification of defect of its system up to the Interconnection Point beyond which, the responsibility of safe operation, maintenance and rectification of any defect in the system including metering arrangement shall rest with the Distribution Licensee:

Provided that, the Distribution Licensee may call upon the Renewable Energy generating system to rectify the defect within a reasonable time."

"10.5 The Eligible Consumer shall be solely responsible for any incident (fatal/non-fatal/departmental/non-departmental) that may occur due to back feeding from the Renewable Energy generating system when the grid supply is off:

Provided that, the Distribution Licensee reserves the right to disconnect the consumer's installation at any time in the event of such exigencies to prevent incident or damage to man and material."

"10.7The Distribution Licensee shall have the right to disconnect the Renewable Energy generating system from its system at any time in the following conditions:

- (a) Emergencies or maintenance requirement on the Distribution Licensee's electric system;*
- (b) Hazardous condition existing on the Distribution Licensee's system due to operation of Renewable Energy generating system or protective equipment as determined by the Distribution Licensee/Transmission Licensee/SLDC;*
- (c) Adverse electrical effects, such as power quality problems, on the electrical equipment of the other consumers of the Distribution Licensee caused by Renewable Energy generation as determined by the Distribution Licensee. "*

"10.8 The tests as per EN 50160 and as per Distribution Licensee's standards shall be done to ensure the quality of power generated from the Renewable Energy generating system."

"10.11 After considering the maintenance and safety procedures, the Distribution Licensee may require a Renewable Energy generating system to provide a manually operated isolating switch between the Renewable Energy generating system and the electricity system, which shall meet following requirements:

- (a) Allow visible verification that separation has been accomplished;*
- (b) Include indications to clearly show open and closed positions;*
- (c) Be capable of being reached quickly and conveniently twenty-four hours a day by Licensee's personnel without requiring clearance from the applicant;*
- (d) Be capable of being locked in the open position; and*
- (e) May neither be rated for load break nor may have feature of over-current protection."*

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"10.12 Prior to synchronization of the Renewable Energy generating system for the first time with the electricity system, the applicant and the Licensee shall agree on the protection features and control diagrams."

"10.14 Renewable Energy generating system connected behind the Consumer's Meter

"10.14.1 Renewable Energy generating system connected behind the Consumer's meter, operating in parallel with the Distribution Licensee's Grid, and not opting either for Net Billing arrangement or Net Metering 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 CEA are taken:

Provided further that, in case the Consumer installs Renewable Energy generating system behind the Consumer's meter without prior intimation to the respective Distribution Licensee, then the additional liabilities shall be levied at the rate of fixed charges for one month, applicable as per the Tariff Order of Discoms for the relevant consumer category."

"10.14.2 The maximum permissible capacity of an eligible individual Renewable Energy generating system installed behind Consumer's meter shall be limited to 100% of Contract Demand as specified in these Regulations."

"10.14.3 The maximum permissible energy that can be consumed from Renewable Energy generating system installed behind Consumer's meter shall be limited to the energy corresponding to the minimum Capacity Utilisation Factor/Plant Load Factor in percent as applicable for respective technology as specified in the Rajasthan Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020 plus 5 percent."

"10.14.4 The Consumer shall ensure that no energy is injected into the grid from such Renewable Energy generating system installed behind the Consumer's meter:

Provided that, any quantum of energy injected by such Renewable Energy generating system connected behind the Consumer's meter shall be considered as inadvertent injection and shall neither be paid for nor settled by the Distribution Licensee.

"10.14.5 The Commission may determine additional Parallel Operation Charges in the form of Fixed Charges or Demand Charges and any other Charges for such systems installed behind the consumer's meter, 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."

"10.14.6 The Consumers, who have connected Solar Rooftop PV systems behind the Consumer's meter and not opted for Net Metering arrangement under RERC (Connectivity and Net Metering for Rooftop and Small Solar Grid

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Interactive Systems) Regulations, 2015 and subsequent amendments thereof, shall intimate the Distribution Licensee such details in Model Form within three (3) months from the notification of these Regulations:

Provided that, if consumer fails to intimate the details of Solar Rooftop PV system behind the Consumer's meter to the Distribution Licensee within the specified time, the additional liabilities may be levied at the rate of fixed charges for one month, applicable as per the tariff order of Discoms for the relevant consumer category for such period of delay."

Stakeholders' Comments/Suggestions:

- 27.1 Bask Research Foundation with regard to Clause 10.2 suggested that to avoid confusion, the Commission should explicitly define responsibility for testing and liability of charges incurred. Further, the Commission may also notify the charges to be borne for such test if the same are to be borne by the prosumer. It may be noted that it may not be viable for prosumers with small systems to bear such costs.
- 27.2 Bask Research Foundation with regard to Clause 10.4 commented that it may be noted that the rectification of RE Generating system is typically not in control of the prosumer, as s/he is dependent on the service provider, Solar EPC contractor or RESCO company. Depending on the fault, rectification time may vary significantly. The same is also dependent on the service commitment of the contractor. The stakeholder suggested that a maximum time limit may be provided for rectification of different faults by the concerned entity, and any failure to meet the timelines may be penalized by blacklisting the concerned entity from providing services in the area of Distribution Licensee.
- 27.3 Bask Research Foundation with regard to Clause 10.5 commented that liability of the prosumer be explicitly defined. The stakeholder also suggested that the Commission may notify a model agreement between the prosumer and the RE project developer or RESCO entity in a manner that appropriate liabilities are passed on to the latter in a fair manner. Further, the stakeholder also suggested that prosumer is advised to obtain suitable insurance to protect itself from possible liabilities.
- 27.4 Bask Research Foundation with regard to Clause 10.7 commented that:
- (a) Standards of Performance for restoration of connection of RE Generation System should be defined. Same may be linked to provisions of the Electricity Supply Code to be notified by the Commission.
 - (b) To prevent forced curtailment of power, cases and protocols for disconnection should be appropriately defined. Distribution Licensee should also be made liable to provide proof of existence of hazardous conditions, action plan for resolving the issues and timeline for resolution of the issues in writing.

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- (c) In case of adverse electrical effects, Distribution Licensee should again be made responsible for providing proof of same. The Licensee should also advise the prosumer on rectification of the issue.
 - (d) For HT and EHT consumers, tariff penalties may also be levied for injection of harmonics or impact on voltage profile or power factor beyond the specified limit.
- 27.5 Bask Research Foundation with regard to Clause 10.8 commented that the Authority for carrying out the tests should be explicitly defined. Further, it should be clarified whether costs for such tests shall be borne by the prosumer or the Distribution Licensee.
- 27.6 Bask Research Foundation with regard to Clause 10.11(e) commented that the isolating switch must be rated for load break else its accidental use without de-energizing the system may pose a fire risk.
- 27.7 Bask Research Foundation with regard to Clause 10.12 commented that Standardised system circuits and protection layouts should be provided by Distribution Licensee based on system size and other parameters.
- 27.8 Bask Research Foundation with regard to Clause 10.14.1 commented that the process and protocols for prior intimation to Distribution Licensee should also be made online. Further, the stakeholder requested the Commission to clarify the framework for applicability of charges in case consumer installs RE generating system behind the meter without prior intimation. As per the provisions of the Draft Regulations, it is not clear whether charges are equivalent to one month's fixed charges or one month's fixed charge is the pro-rata framework for calculation charges. In the latter case, it may be deduced that the actual charge is a multiple of one month's fixed charge and delay period.
- 27.9 UltraTech Cement Limited with regard to Clause 10.14.1 commented that It should be clarified that Renewable Energy generating system connected behind the Consumer's meter can be set up under both RESCO model or as a Captive Generating Plant as per the Electricity Act and Rules. Also, as only intimation is required, hence, there should be no capacity restriction for Grid Interactive Distributed Renewable Energy generating systems connected behind the meter. The stakeholder suggested that Commission may change Section 10.14.1 to:
- "10.14.1 Renewable Energy generating system connected behind the Consumer's meter (either set up under RESCO model or as a Captive Generating Plant as per Electricity Act and Rules), operating in parallel with the Distribution Licensee's Grid, and not opting either for Net Billing arrangement or Net Metering arrangement, shall be allowed only after prior intimation to the respective Distribution Licensee:"*

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- 27.10 Bhiwadi Manufacturers Association and few other stakeholders with respect to Clause 10.14.1 suggested that to avoid ambiguity/hassle to the developer/consumer, the following may also be specified:

"The quantum of electricity generated from the Renewable Energy generating system under Behind the meter arrangement, whether self-owned or RESCO-owned installed on eligible consumer premises, shall be exempted from banking charges, wheeling charges, cross subsidy surcharges, and additional surcharge at least up to 1MW."

- 27.11 Auroville Consulting suggested that to balance the interest of the consumers and the Discoms, the Commission may change Clause 10.14.1 to:

"10.14.1 Renewable Energy generating system connected behind the Consumer's meter, operating in parallel with the Distribution Licensee's Grid, and not opting either for Net feed-in arrangement or Net Metering arrangement, shall be allowed only after prior intimation to the respective Distribution Licensee via self-declaration (physical/ online) that will be granted deemed approval subject to the technical guidelines mentioned in this order:

Provided that, the Consumer shall be responsible for ensuring that all necessary safeguarding measures as specified by CEA are taken:

Provided further that, in case the Consumer installs Renewable Energy generating system behind the Consumer's meter without prior intimation to the respective Distribution Licensee, then the additional liabilities shall be levied at the rate of fixed charges for one month, applicable as per the Tariff Order of Discoms for the relevant consumer category for such period of delay."

- 27.12 UltraTech Cement Limited with regard to Clause 10.14.2 commented that the cap of capacity up to 100% of contract demand should not be applicable in case of Grid Interactive Distributed Renewable Energy generating systems connected behind the meter and operating in parallel with Distribution Licensees' grid and who have not opted either for Net Metering arrangement or Net Billing arrangement. Such consumers are substituting their own thermal generation. There is no export of power in grid in case of behind the meter project, hence, there is no use of open access. Further, as per the Electricity Act, 2003, Consumers can install their Captive Generating Plant and there is no such restriction whether it is a thermal power plant or renewable energy plant. Hence, for Grid Interactive Distributed Renewable Energy generating systems connected behind the meter, imposing condition of capacity cap up to contract demand is unjust and violating the Electricity Act and Rules. If Contract Demand is required for setting up Grid Interactive Distributed

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Renewable Energy generating systems connected behind the meter - Considering CUF of 20%, 1 MW solar will generate around 16 lakh units p.a. and if Contract Demand Charges of Rs. 270/KVA/month is levied then it comes to Rs. 32,40,000/- p.a., i.e., ~ Rs. 2 / kWh which is unviable for renewable power. The stakeholder suggested that this clause should be removed.

- 27.13 UltraTech Cement Limited and other stakeholder with regard to Clause 10.14.3 commented that preferably there should not be any restriction on consumption from Renewable Energy generating system installed behind Consumer's meter. This restriction can lead to non-optimum utilisation of capacity in some situation. RE Power is infirm power and generation can vary due to various factors like seasons and weather conditions, which cannot be predicted. Even if the restriction is being placed, at least 15% margin should be kept so that there is no loss of power due to non-utilisation. The stakeholder suggested that Commission may change Clause 10.14.3 to:

"10.14.3 The maximum permissible energy that can be consumed from Renewable Energy generating system installed behind Consumer's meter shall be limited to the energy corresponding to the minimum Capacity Utilisation Factor/Plant Load Factor in percent as applicable for respective technology as specified in the Rajasthan Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020 plus 15 percent."

- 27.14 AVVNL and JDVNL with regard to Clause 10.14.3 commented that in the Draft Regulations, the clause in the first amendment to RERC (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015 of capping of maximum allowable generation is not present. The stakeholder suggested that the Commission should set the capping on maximum energy that can be consumed from the RE system for all types of consumers covered under these Regulations (i.e., including consumers with Net Metering or Net Billing arrangements). Further, stakeholders commented that the CUF of Solar PV for the purpose of determination of tariff, as per RERC RE Tariff Regulations, 2020 is 20%. The stakeholder has however, observed that the actual CUF of solar plants is <20% in the previous year. Thus, the stakeholder requested the following change in the capping criteria for maximum generation in Clause 10.14.3:

"10.14.3 The maximum permissible energy that can be consumed from Renewable Energy generating system installed behind Consumer's meter shall be limited to the energy corresponding to the minimum Capacity Utilisation Factor/Plant Load Factor in percent as applicable for respective technology as specified in the Rajasthan Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020"

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- 27.15 UltraTech Cement Limited commented that in Clause 10.14.4, no penalty should be levied for inadvertent injection. The stakeholder suggested that Commission may change Clause 10.14.4 to:

"10.14.4 The Consumer shall ensure that no energy is injected into the grid from such Renewable Energy generating system installed behind the Consumer's meter:

Provided that, any quantum of energy injected by such Renewable Energy generating system connected behind the Consumer's meter shall be considered as inadvertent injection and shall neither be paid for nor settled by the Distribution Licensee and no penalty shall be levied on such inadvertent injection."

- 27.16 REAR Renewable Association with 2 other stakeholders with regards to Clause 10.14.5, submitted that Parallel Operation Charges (POC) is set aside even for CPP by APTEL. Hence, POC should not be levied on Renewable energy-based plants installed behind the meter. Fixed charges in the form of transmission charges and wheeling charges are already recovered for providing such usage of Grid, hence, levy of additional charges in the form of POC is not justifiable. The Stakeholder suggested that the framework for such charges should be defined in a fair and transparent manner and included in the scope of these Regulations itself.
- 27.17 UltraTech Cement Limited commented with regard to Clause 10.14.6 that the levy of penalty on Solar Rooftop PV systems behind the Consumer's meter which have already been approved under previous policies and also commissioned is unjust and not correct. No penalty should be levied on such plants merely because of the fact that they have not intimated within the prescribed time. The stakeholder suggested that this clause be removed.
- 27.18 AVVNL and JDVNL with regard to Clause 10.14.6, commented that this is the welcome step, however, there is a possibility that the consumer delays the payment of fixed charges even after intimation of levy of such charges by the DISCOMs. Further, the consumer may have installed the RE system well before the same has been identified by the DISCOM. In such a case, the DISCOM would have lost its prudent cost recovery for the entire period for which the consumer has installed the RE system. Hence, the stakeholders requested the Commission to levy fixed charges for such consumers for the entire period, from the date of installation of RE system, as identified by the DISCOM, till the date of payment of such charges by the consumer. Further, for such consumers who do not pay the fixed charges after one month of intimation of payment by DISCOM, a late payment surcharge should be applicable on the outstanding dues at LPS specified in RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019 and subsequent amendments thereof.

The stakeholders have further commented that consumers who install RE generating systems behind the meter without availing Net Metering/Net Billing arrangement are similar to captive power plants in nature. Since the installation of such systems shall entail reduction of energy consumption from the grid, the recovery of fixed costs from the energy charges of such consumers shall not be possible. Further, since such consumers do not inject energy into the grid, the DISCOMs shall not be eligible for any benefits in term of RPO compliance. Thus, such consumers should be treated at par with captive open access consumers and an additional charge should be levied on them in order to recover the revenue corresponding to fixed costs from the energy charges lost due to reduced energy consumption.

27.19 Shri Alok Singh commented that limiting the energy consumed to CUF/PLF +5% will reduce the utilisation of latest technology panels, which will affect the industry adversely. Therefore, he suggested that CUF/PLF restriction should not be there.

27.20 Ecomitram Sustainable Solutions Private Limited with regard to Clause 10 suggested that the Commission may add an additional Clause 10.15 as suggested below:

"10.15 Distribution Licensee shall ensure that no damage is caused to Renewable Energy Generating System as a whole or to any of its Components, arising out of its Grid / Electricity Supply, due to following issues: -

- a. Power Quality viz., Harmonics & Frequency Variations beyond limits specified by relevant provisions;*
- b. Under / Over Voltages, Voltage Spikes & Transients;*
- c. Short Circuits, Current Transients & Lightning Impulses;*
- d. Adverse Electrical Effects caused by Equipment installed by other Consumers of the connected common Grid;"*

Commission's Views/Decision:

27.21 The Commission has noted the comments of the stakeholders. The Commission has included the provision signifying the responsibility for testing and liability of charges incurred in Clause No.: 11 Metering Arrangement, along with the detailing of cost to be borne by Distribution Licensee of prosumer. Further, with regard to inclusion of provision of rectification of problems in RE Generating system, the Commission is of the view that reasonable time has to be agreed between Distribution Licensee and prosumer considering various aspects. The time period for rectification cannot be specified in Regulations.

27.22 As regards the comments submitted by the stakeholder on the right of the Distribution Licensee to disconnect the RE generating system from its system

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during conditions specified in the Regulations and Standardised system circuits and protection layouts, the Commission is of the view that the guiding principles associated with the same are specified in the Regulations and the detailed modalities are to be agreed between RE Generating Station and Distribution Licensee.

- 27.23 The Commission decides to include the provision regarding the applicability of charges, which shall be levied after three (3) months from the notification of the Regulations in case consumer installs RE generating system behind the meter without prior intimation at the rate of fixed charges, applicable as per the tariff order of Distribution Licensees for the relevant consumer category for such period of delay. Further, the additional liabilities shall be levied at the rate of fixed charges for the period of installation of such system till it comes to notice of Distribution Licensee that such system is installed by the Consumer.
- 27.24 The Commission also clarifies that any quantum of energy injected by such RE Generating System connected behind the Consumer's meter shall be considered as inadvertent injection and penalty shall be levied on such inadvertent injection as per the applicable relevant Regulations in force.
- 27.25 As regards the comments on the provisions for RE generating system behind the meter, the Commission is of the view that there is no change required in the provisions proposed in the Draft Regulations.
- 27.26 As regards the applicability of additional charges on the Renewable Energy-based plants installed behind the meter, the Commission is of the view that no change is required in the provisions proposed in the Draft Regulations as the Discoms are already incurring additional expenses due to behind the meter consumers. Further, the installation of such facility may reduce the utilization of Distribution Network and thereby such consumer may pay lower charges for such network setup earlier for it. Such unrecovered part of expenses is then loaded on other consumers of the Distribution Licensee. Hence, apart from Parallel Operation Charges, the Commission decides to include an enabling provision for levy of additional Parallel Operation Charges in the form of Fixed Charges or Demand Charges and any other Charges for such systems, provided that the Distribution Licensee shall propose such additional Parallel Operation Charges such as Fixed Charges or Demand Charges and any other Charges for such systems, in its retail supply Tariff Petition, supported by adequate justification.
- 27.27 Further, as discussed in the previous section, the Commission has issued Rajasthan Electricity Regulatory Commission (Electricity Supply Code and Connected Matters) Regulations, 2021 on 17.02.2021. Accordingly, the Commission has suitably modified Regulations after considering the comments and suggestions of the stakeholders.

28 Regulation 11: Metering arrangement

Commission's Proposal:

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11.3 Under Net Billing arrangement, the Renewable Energy generating system shall be connected on Distribution Licensee side or consumer side of the consumer meter:

Provided that, in case the Renewable Energy generating system is connected on consumer side of the consumer meter, the existing Meter in the premises of the Eligible Consumer shall be replaced by the Net Meter at the cost of the Consumer, in accordance with the provisions of the Electricity Supply Code, as amended from time to time.

"11.4 The Net Metering arrangement shall include a single-phase or a three-phase Net Meter, as may be required, located at the point of inter-connection as ascertained by the Distribution Licensee:

Provided that, the Renewable Energy generating system under Net Metering arrangement shall be connected on consumer side of the consumer meter.

"11.5 The Eligible Consumer shall install, at his own cost, a RE Generation Meter conforming to the applicable CEA Regulations at the Interconnection Point of Renewable Energy generating system, to measure the energy generated from such system.

"11.6 The Distribution Licensee shall be responsible for the testing, installation, and maintenance of the metering equipment, and its adherence to the applicable standards and specifications.

"11.7 The RE Generation Meter shall be maintained by the Distribution Licensee.

"11.11 A consumer, at his own cost, shall also install a Check Meter of appropriate class for the RE Generation Meter:

Provided that, such Check meter shall be used for billing and commercial settlement, in the absence of readings from RE Generation meter on account of defective/failure/burnt condition."

Stakeholders' Comments/Suggestions:

- 28.1 Secure Meters Ltd. commented that all meters shall have the facility to read meter locally through CMR equivalent device and also have capability of remote meter reading through suitable communication module installed at the meter. Meters must comply to CEA Regulations and BIS standards.
- 28.2 Auroville Consulting suggested that in light of the earlier comments, the Commission may change Clauses 11.3 to 11.6 as per suggestions below:

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"Under the Net Metering and Net feed-in arrangement, the AC output of the Renewable Energy generating system shall be connected to the main switch board or any (sub-) distribution board of the consumer's electrical installation:

The Net Metering and Net feed-in arrangement shall include a single-phase or a three-phase Net Meter, as may be required, located at the point of inter-connection as ascertained by the Distribution Licensee.

If the existing service connection meter is not a bidirectional meter, the service connection in the premises of the Eligible Consumer shall be replaced with a Net Meter at the cost of the Consumer, in accordance with the provisions of the Electricity Supply Code, as amended from time to time.

Under the Gross feed-in arrangement, the AC output of the Renewable Energy generating system shall be connected to a Gross feed-in meter located at the point of inter-connection as ascertained by the Distribution Licensee.

Provided that, the Renewable Energy generating system under Gross feed-in metering shall be connected to the consumer side of Gross feed-in meter.

Provided that the Gross feed-in meter shall be a bidirectional energy meter so that import from the grid, if any, is also recorded.

The Distribution Licensee shall be responsible for the testing, installation, and maintenance of the metering equipment, and its adherence to the applicable standards and specifications. The location of meters shall be decided jointly by the consumer and the Distribution Licensee and shall not result in additional wiring costs for the consumer."

- 28.3 Secure Meters Ltd. with regard to Clause 11.5 commented that in addition to net meter at the interconnection point, the eligible consumer should install, at his own cost, an additional RE generation meter conforming to the applicable CEA Regulations at the interconnection point of RE generating system to measure total energy generated from such a RE system.
- 28.4 Bask Research Foundation commented that Clause 11.7 is a repetition of Clause 11.6, and hence, may be deleted.
- 28.5 Bask Research Foundation with regard to Clause 11.11 commented that the RE generation meter provides redundancy to net meter or gross meter. Further, generation readings are also available from solar inverters. Mandate for an additional check meter shall unnecessarily increase the overall cost of the system, and its impact can be significant for small rooftop systems. Check meters may be recommended for RE generating systems above 50kW capacity.
- 28.6 RREC with regard to Clause 11.11 suggested that during installation of solar rooftop at consumer premise, while replacing old existing meter by net meter, existing meter may be used as Solar Meter. It will help to prevent wastage of

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meter. Even the LT Consumer should be exempted from installation of Check meter as it is not required in case of general consumer of electricity.

- 28.7 Bask Research Foundation with regard to Clause 11 suggested that the Commission should provide a framework for estimation of energy generated and settlement of dues in the event that all the metering equipment are defective or dysfunctional. The Commission may also suggest the timeline and responsibility for replacement of meters in such cases.
- 28.8 Shri Surendra Jhalora with regard to Clause 11.11 commented that the Commission may provide further explanation on whether there is any limit of kW for these meters to be installed or mandatory for every consumer opting for RE generation. The stakeholder further sought details regarding the modifications in the additional requirement of check meters.

Commission's Views/Decision:

- 28.9 The Commission in line with the FOR Model Regulations decides to modify the provisions of Renewable Energy generating system under Net Billing arrangement, and has specified that the Renewable Energy generating system shall be connected on Distribution Licensee side of the consumer meter.
- 28.10 The Commission has noted the suggestions of the stakeholders. The Commission decides to include the provision regarding the bearing of the costs associated with the testing, installation, and maintenance of the metering equipment by the Consumer.
- 28.11 The Commission also clarifies that the consumer at his own cost, shall also install a Check Meter of appropriate class for the RE Generation Meter which shall be used for billing and commercial settlement, in the absence of readings from RE Generation meter on account of defective/failure/burnt condition.
- 28.12 The modified Regulations are as follows:

"11. Metering arrangement

11.1 All meters installed at the Renewable Energy generating system shall comply with the CEA (Installation and Operation of Meters) Regulations, 2006 and subsequent amendments thereof.

11.2 All meters shall have Advanced Metering Infrastructure (AMI) facility with RS 485 (or higher) communication port or any other advance communication facility.

*11.3 Under Net Billing arrangement, the Renewable Energy generating system shall be **connected on Distribution Licensee side of the consumer meter:***

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11.4 The Net Metering arrangement shall include a single-phase or a three-phase Net Meter, as may be required, located at the point of inter-connection as ascertained by the Distribution Licensee:

Provided that, the Renewable Energy generating system under Net Metering arrangement shall be connected on consumer side of the consumer meter.

11.5 The Eligible Consumer shall install, at his own cost, a RE Generation Meter conforming to the applicable CEA Regulations at the Interconnection Point of Renewable Energy generating system, to measure the energy generated from such system.

11.6 The Distribution Licensee shall be responsible for the testing, installation, and maintenance of the metering equipment, and its adherence to the applicable standards and specifications:

Provided that, the Consumer shall bear the costs associated with the testing, installation, and maintenance of the metering equipment.

11.7 The meters shall be installed as would enable easy access to the Distribution Licensee for meter reading.

11.8 The meters installed shall be jointly inspected and sealed on behalf of both the Parties and shall be tested or checked only in the presence of the representatives of the consumer and Distribution Licensee or as per the Supply Code specified by the Commission:

Provided that, the Eligible Consumer shall follow the metering specifications and provisions for placement of meter as developed by the Distribution Licensee from time to time and as per the Supply Code.

11.9 The meter readings taken by the Distribution Licensee shall form the basis of billing and commercial settlement.

11.10 A consumer, at his own cost, shall also install a Check Meter of appropriate class for the RE Generation Meter:

Provided that, such Check meter shall be used for billing and commercial settlement, in the absence of readings from RE Generation meter on account of defective/failure/burnt condition.

11.11 In case of defective/failure/burnt condition of any meter, the Consumer shall report the failure to the Distribution Licensee in the specified format of Distribution Licensee:

Provided that the Distribution Licensee shall replace the meter as specified in the Supply Code, as amended from time to time."

29 Regulation 12: Energy Accounting and Settlement

Commission's Proposal:

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12.3 Meter readings shall be taken monthly or as per the billing cycle specified under the applicable Supply Code:

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Provided that, in case of defective/failure/burnt condition of the meter, the electricity generated by Renewable Energy generating system during the period in which the meter is defective, shall be taken from the Check meter:

Provided further that, in case meter readings are not available from the Check meter, the electricity generated by Renewable Energy generating system during the period in which RE Generation Meter as well as Check Meter are defective, shall be as per provisions specified in Electricity Supply Code.

12.4 For each billing period, the Licensee shall show separately the following information on its bill to the Eligible Consumer:

- a) Quantum of Energy generation recorded in the RE Generation Meter, including opening and closing balance;
- b) Quantum of electricity units consumed by the Consumer in the billing period, including opening and closing balance;
- c) Amount of billing credit, if any, in the billing period, including opening and closing balance;
- d) The generation units used by the Distribution Licensee for RPO compliance.

12.5 Net Billing Arrangement

12.5.1 Net Billing is the arrangement, where the Renewable Energy generating system is:

- (a) Installed to serve a specific consumer;
- (b) Connected on the Distribution Licensee side or consumer side of the consumer meter;
- (c) Selling entire power generated to the Distribution Licensee under the Connection Agreement;
- (d) Entire power is consumed by the consumer:"

12.5.2 The Distribution Licensee shall enter into Connection Agreement at the weighted average tariff of large-scale solar projects of 5 MW and more, discovered through Competitive Bidding in previous Financial Year and adopted by the Commission, plus an incentive of 25%. In case no bidding is done in previous Financial Year, then the latest tariff discovered through competitive bidding plus an incentive of 25% shall be applicable:

Provided that, the above Tariff shall be applicable for the entire duration of the Agreement."

"12.5.3The Distribution Licensee shall raise bill on the Consumer in accordance with the following equation:

Energy Bill of consumer = Fixed Charges + other applicable charges and levies + (EDL x TRST) - (ERE * TPPA) – Billing Credit;

Where:

- (a) Fixed Charges means the Fixed/Demand Charges as applicable to the consumer category as per the applicable retail supply Tariff Order;

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(b) Other charges and levies mean any other charges such as duties and taxes, cess, etc.;

(c) EDL means the energy units supplied (i.e., Gross Electricity Consumption by the Consumer) by the Distribution Licensee as recorded by the consumer meter for the billing period;

(d) TRST means the applicable retail supply tariff of the concerned consumer category as per the applicable retail supply Tariff Order of the Commission;

(e) ERE means the energy units recorded for the billing period by the RE Generation Meter;

(f) TPPA means the Tariff as per the Connection Agreement signed between the Consumer and Distribution Licensee, in accordance with Regulation 12.5.2;

(g) Billing Credit is the cumulative opening credit for a month, if any. “

12.5.4 If the value of Renewable Energy generation in a month is more than the value of all other components of consumer bill, then the billing credit shall be provided by Distribution Licensee in the electricity bill for such month:

Provided that, such billing credit shall be carried forward to next month and shall be adjusted as specified in Regulation 12.5.3:

Provided further that, the billing credit at the end of Settlement Period shall be paid by the Distribution Licensee to Eligible Consumer latest by the fifteenth of May of the next Financial Year.

12.5.5 When an Eligible Consumer leaves the system, the available billing credit shall lapse, and no payments shall be made.

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12.6.1 The energy accounting and settlement under Net Metering arrangement shall be as under:

- a) If the quantum of electricity exported exceeds the quantum imported during the Billing Period, the excess quantum exported shall be purchased by the Distribution Licensee at the weighted average tariff of large-scale solar projects of 5 MW and more, discovered through Competitive Bidding in last Financial Year, and adopted by the Commission. In case no bidding is done in previous Financial Year, then the latest tariff discovered through competitive bidding shall be applicable. The total amount arrived for excess energy injected shall be adjusted in the form of credit equivalent to such amount payable in the immediately succeeding billing cycle:

Provided that, even in case of LT Domestic consumers having existing Net Metering installations governed as per the Rajasthan Electricity Regulatory Commission (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015 and subsequent amendments thereof, the excess quantum exported shall be purchased by the Distribution Licensee at the weighted average tariff of large scale solar projects of 5 MW and more, discovered

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through Competitive Bidding in last Financial Year, and adopted by the Commission. In case no bidding is done in previous Financial Year, then the latest tariff discovered through competitive bidding shall be applicable. The total amount arrived for excess energy injected shall be adjusted in the form of credit equivalent to such amount payable in the immediately succeeding billing cycle:

Provided further that, for LT Agriculture consumers and Public Street Light consumers in rural area covered under specific Central and/or State Government Schemes, such as PM KUSUM, quantum of energy and rate of purchase by Discoms shall be as per Order issued by the Commission in this regard:"

12.7 In case of any dispute in billing, it would be settled by the Consumer Grievance Redressal Forum and if issue still remains unresolved, the consumer may approach the Ombudsman."

Stakeholders' Comments/Suggestions:

29.1 Shri Shanti Prasad with regard to Clause 12.3 commented that Clause 29.1 of the Supply Code provides for assessment of electricity consumption in case of stopped or stolen or lost meter and not for assessing generation. Even, for defective meter, Clause 30.2 of the Supply Code provides for the consumption assessment within 6 months of the removal of meter for testing. Thus, neither this Regulation nor Supply Code provide for assessment of generation. Assessment of RE generation may also be on the same principles but considering seasonal variation of solar / wind/hydro generation. That is, for stopped or stolen or lost meter, it can be as per the corresponding period of the previous year and where it is not possible due to previous year generation not being available, it may be based on similar installation in neighbourhood or past /next 3 month's average, etc. For defective meter, it is to be based on the error detected as per testing.

29.2 Auroville Consulting suggested that in light of the earlier comments, the Commission may change Clause 12.4 as per suggestions below:

"For each billing period, the Licensee shall show separately the following information on its bill to the Eligible Consumer:

In the case of Net Metering:

(a) Quantum of Energy imported from the grid during the billing period as recorded by the import register of the Net Meter, including opening and closing balance;

(b) Quantum of Energy exported to the grid during the billing period as recorded by the export register of the Net Meter, including opening and closing balance;

(c) Net imported / exported energy, in the billing period, including opening

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and closing balance;

(d) Net imported energy considered for billing purposes;

(e) Net energy credit carried-over to the next billing cycle.

In the case of Net feed-in:

(a) Quantum of Energy imported from the grid during the billing period as recorded by the import register of the Net Meter, including opening and closing balance;

(b) Quantum of Energy exported to the grid during the billing period as recorded by the export register of the Net Meter, including opening and closing balance;

(c) Monetary value of imported energy;

(d) Fixed charges;

(e) Monetary value of exported energy

(f) Net bill amount to be paid / carried-over

In the case of Gross Feed-in

(a) Quantum of Energy imported from the grid during the billing period as recorded by the Consumption Meter, including opening and closing balance;

(b) Quantum of Energy exported to the grid during the billing period as recorded by the Gross Feed-in meter, including opening and closing balance;

(c) Monetary value of imported energy;

(d) Fixed charges;

(e) Monetary value of exported energy

(f) Net bill amount to be paid / carried-over

Net feed-in Arrangement

The energy accounting and settlement under the Net feed-in arrangement shall be as under:

(a) *The energy generated by the Renewable Energy is self-consumed with the surplus energy, if any, being exported to the grid of Distribution Licensee;*

(b) *The AC output of the Renewable Energy Generation System is connected to the consumer side of the Net Meter at the Interconnection Point;*

(c) *The consumer pays for the imported energy as per the applicable consumer tariff and gets compensated for the exported energy as per the applicable feed-in tariff.*

(d) *The feed-in tariff shall be arrived at on the basis of an LCOE (levelized cost of energy calculation) that is based on parameters that are relevant to consumer category solar PV systems. “*

29.3 REAR Renewable Association with regard to Clause 12.5.1 commented that as per “REPORT ON METERING REGULATION AND ACCOUNTING FRAMEWORKFOR

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GRID CONNECTED ROOFTOP SOLAR PV IN INDIA" by Forum of Regulators (FOR), Net Billing is the arrangement where DRE plant is:

- a. Installed to serve a specific consumer,
- b. Connected on the utility side on the consumer meter,
- c. Selling power to a Distribution Licensee under Power Purchase Agreement, and
- d. Entire power is consumed by the consumer.

The Commission has specified that the system could be connected to Distribution Licensee side or consumer side and to support the same point it has mentioned in Clause 11.3 as under:

"Under Net Billing arrangement, the Renewable Energy generating system shall be connected on Distribution Licensee side or consumer side of the consumer meter:

Provided that, in case the Renewable Energy generating system is connected on consumer side of the consumer meter, the existing Meter in the premises of the Eligible Consumer shall be replaced by the Net Meter at the cost of the Consumer, in accordance with the provisions of the Electricity Supply Code, as amended from time to time."

As per FOR report, under Net Billing arrangement, two meters should be installed, viz., one to measure RE generation and other to measure Gross consumption, and both the meters would be uni-directional. However, RERC has specified that in case the RE generating system is connected on consumer side of the consumer meter, the existing meter shall be replaced with net meter and net-meter is a bidirectional meter as defined in the Draft Regulations.

The stakeholder thus sought clarity that in case the RE generating system is connected on consumer side of the meter, the existing meter shall be replaced with net meter and since the power is terminated on the consumer panel, the billing would be done as below: -

Electricity bill= [Fixed Charges+ (Import X Retail Tariff) - (Export X Gross Tariff) + other applicable charges and levies] – Billing Credit

- 29.4 Vareyn Solar Pvt. Ltd and few other stakeholders with respect to Clause 12.5.2 commented that the rate of Net Billing is same for a consumer who is installing a 1 kW system and a consumer installing a 1MW system, however, the L1 rate discovered through competitive bidding for a large scale 5 MW cannot be applied to a consumer installing a 1 kW system. Even the mentioned 25% incentive is very less and not practical. The stakeholder suggested that the tariff should be linked to the tariff consumer is paying for the power purchased through the Discom, and the tariff applicable at the time at which the agreement between the Distribution Licensee and the consumer is signed should be honoured for the entire tenure of the Connection Agreement and should not be changing every year.

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- 29.5 Shri Shanti Prasad with respect to Clause 12.5.2 commented that the tariff discovered in latest competitive bidding for Rajasthan has been Rs.2.00 per kWh, hence, tariff for Net Billing will be Rs.2.50 per kWh and in future it may be even lower. This will not induce setting up of a power plant for supply of entire generation to Discom and as such captive use needs to be permitted with Net Billing.
- 29.6 Bask Research Foundation with regard to Clause 12.5.2 commented that the framework for feed-in-tariff determination proposed by the Commission is likely to be highly unfavourable for small projects. It must be noted that solar rooftop projects enjoy a significant economy of scale, as their prices drop with increase in size of the project. The stakeholder suggested that the Commission should determine benchmark price of following project sizes and design feed-in-tariffs in a manner, which ensures at least 15% return on investment in line with regulated tariff for generation projects. Feed-in-tariffs for domestic category may account for GST, whereas determination of tariffs for mixed load and industrial categories may be done without considering GST since it is likely to be adjusted as input cost.
- 29.7 REAR Renewable Association with regard to Clause 12.5.2 commented that Ministry of Power notification on Electricity (Rights of Consumers) Rules, 2020 has changed the status of consumer to prosumer but not to the developer or producer. He is the one whose motive, approach and mindset behind installing solar project are totally different from that of developer. Developer's main business is Solar and he can take risks and justify the tariff even below Rs. 2/kWh but the consumer or prosumer has totally different objective of installing solar project and there is a huge difference in project sizes as well. So, the consumer will never opt for Net Billing arrangement because of lower return and 3-4 times increase in payback period. The stakeholder suggested that the only reason behind the non-acceptance or opposition to Net Billing is the unviable tariff structure and the Commission should re-think and redesign the tariff structure, which could actually be win-win for all and the solar industry could flourish.
- 29.8 Vareyn Solar Pvt. Ltd. with respect to Clause 12.5.3 commented that the quantum of energy generated by the consumer should not be liable for payment of Taxes and Levies, as per Net Billing Mechanism. If 100 units are generated and 100 units are consumed by a consumer, then the consumer ends up paying the taxes and duties on the 100 units consumed at retail supply tariff, whereas the 100 units generated are taken by the Government tax free. Therefore, the stakeholder suggested that the (quantum of energy consumed – quantum of energy generated), only shall be liable for any tax or levies rather than the entire quantum of energy generated by the consumer.

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29.9 Shri Surendra Jhalora with regard to Clause 12.5.3 commented that the Commission may provide further explanation on how EDL would be computed or measured for HT consumers.

29.10 Shri Alok Singh commented that if the quantum of electricity exported exceeds the quantum imported during the billing period, the excess quantum exported should be purchased by the Distribution Licensee at the rate of grid tariff. He also suggested that since solar power is infirm source of energy, and also there are seasonal industries in the State, so settlement of excess energy injected should be done annually.

29.11 Auroville Consulting suggested that in light of the earlier comments, the Commission may change Clause 12.5.4 as per suggestions below:

'If the value of Renewable Energy generation in a month is more than the value of all other components of consumer bill, then the billing credit shall be provided by Distribution Licensee in the electricity bill for such month:

Provided that, such billing credit shall be carried forward to next month and shall be adjusted as specified in Regulation 12.5.3:

Provided further that, the billing credit at the end of Settlement Period shall be paid by the Distribution Licensee to Eligible Consumer latest by the fifteenth of April of the next Financial Year."

29.12 Auroville Consulting suggested that the Commission may change Clause 12.5.5 as per suggestions below:

"When an Eligible Consumer leaves the system, the available billing credit shall be paid to the consumer."

29.13 RREC with regard to Clause 12.6.1 suggested that 25% incentive should be also given in Net Metering arrangement for surplus energy. The stakeholder commented that final settlement on account of surplus energy at the end of Financial Year is not mentioned.

29.14 Sun source Energy Pvt Ltd commented that the proposed provision is contradictory to the RERC Net Metering (Amendment) Regulations, 2018 issued in year 2019. The stakeholder further commented that the Draft Regulations do not propose any such limit of surplus energy to be carried forward to next billing cycles.

29.15 Auroville Consulting suggested that in light of the earlier comments, the Commission may change Clauses 12.6 and 12.7 as under:

"Net Metering Arrangement

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The energy accounting and settlement under Net Metering arrangement shall be as under:

- (a) The energy generated by the Renewable Energy is self-consumed with the surplus energy, if any, being exported to the grid of Distribution Licensee;
- (b) The AC output of the Renewable Energy Generation System is connected to the consumer side of the Net meter at the Interconnection Point;
- (c) The exported energy is deducted from the imported energy in energy units (kWh) to arrive at the net imported (or exported) energy for the purpose of energy billing.
- (d) The consumer pays for the net-imported energy as per the applicable consumer tariff.
- (e) If the quantum of electricity exported exceeds the quantum imported during the Billing Period, the excess quantum exported shall be carried-over to the next billing cycles.
- (f) If the quantum of electricity exported exceeds the quantum imported at the end of the Settlement Period, the cumulative excess quantum exported shall be paid for at the feed-in tariff that is used for the Net feed-in arrangement.
- (g) If the quantum of electricity Units imported by the Eligible Consumer during any Billing Period exceeds the quantum exported, the Distribution Licensee shall raise its bill for the net electricity consumption after adjusting the credited Units.

The Distribution Licensee shall raise bill on the Consumer in accordance with the following equation:

Energy Bill of consumer = Fixed Charges + other applicable charges and levies +
(NE x TRST).

Where:

- (a) Fixed Charges means the Fixed/Demand Charges as applicable to the consumer category as per the applicable retail supply Tariff Order;
- (b) Other charges and levies mean any other charges such as duties and taxes, cess, etc.;
- (c) NE means the net energy imported by the Consumer from the grid of the Distribution Licensee as recorded by the Net Meter minus energy credits carried over from previous billing cycles, if any;
- (d) TRST means the applicable retail supply tariff of the concerned consumer category as per the applicable retail supply Tariff Order of the Commission;

Gross feed-in Arrangement

The energy accounting and settlement under Gross Feed-in metering arrangement shall be as under:

- (a) The energy generated by the Renewable Energy is exported to the to the

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grid of Distribution Licensee (no self-consumption);

(b) The AC output of the Renewable Energy Generation System is connected to the consumer side of the Gross feed-in meter at the Interconnection Point;

(c) The consumer pays for the imported energy as recorded by the Consumption Meter and as per the applicable consumer tariff.

(d) The Consumer gets compensated for the exported energy as per the applicable feed-in tariff.

The Distribution Licensee shall raise bills on the Consumer in accordance with the

following equation:

Energy Bill of consumer = Fixed Charges + other applicable charges and levies +

(EDL x TRST) - (ERE * TPPA) – Billing Credit;

Where:

(a) Fixed Charges means the Fixed/Demand Charges as applicable to the consumer category as per the applicable retail supply Tariff Order;

(b) Other charges and levies mean any other charges such as duties and taxes, cess, etc.;

(c) EDL means the energy units imported by the Consumer from the grid of the Distribution Licensee as recorded by the Consumption Meter;

(d) TRST means the applicable retail supply tariff of the concerned consumer category as per the applicable retail supply Tariff Order of the Commission;

(e) ERE means the energy units exported by the Consumer to the grid of the Distribution Licensee as recorded by the Gross feed-in meter;

(f) TPPA means the feed-in tariff as per the Connection Agreement signed between the Consumer and Distribution Licensee;

(g) Billing Credit is the cumulative opening credit for a month, if any.

If the value of exported energy in a month is more than the value of all other components of consumer bill, then billing credit shall be provided by Distribution Licensee in the electricity bill for such month:

For the Net feed-in and Gross Feed-in arrangement, the feed-in tariff shall be arrived at on the basis of an LCOE (levelized cost of energy) calculation that is based on parameters that are relevant to consumer category solar PV systems.

Provided that the above feed-in tariff shall be applicable for the entire duration of the Agreement."

29.16 DISCOMS with regard to Energy Accounting/bill adjustment for Net Metered consumers commented that the primary objective of Net Metering is to provide benefit to the consumer in terms of reduced total electricity bill. However, this benefit should not be passed on to such consumers at a cost to

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DISCOM, which is socialized on to other consumers through tariffs. In order to ensure a fair energy accounting practice, the following change is proposed:

"For net metered consumers, the net imported energy (gross import-allowable solar generation) from the grid shall be billed accordingly to the highest slab as per the gross import from the grid."

Commission's Views/Decision:

29.17 The Commission for providing better clarification in the provisions of the Net Billing arrangement decides to modify the provisions proposed in the draft Regulations. Under Net Billing arrangement, the Renewable Energy generating system shall be connected on Distribution Licensee side of the consumer meter and the power generated will be sold to the Distribution Licensee at the tariff agreed in the Connection Agreement with the Distribution Licensee, and the amount payable by the Distribution Licensee is reduced from the amount payable by the consumer for electricity supplied by the Distribution Licensee.

29.18 The Commission clarifies that the electricity generated by RE generating system during the period in which RE Generation Meter as well as Check Meter are defective, shall be as per provisions specified in Electricity Supply Code. Further, as regards the provision on the placement of meter, the Commission for clarity decides that Renewable Energy generating system shall be connected on the Distribution Licensee side of the Consumer meter. Accordingly, the Draft Regulations have been amended.

29.19 The Commission has noted the comments of the stakeholders with regard to the applicable tariff for Net Billing System. The Commission decides to modify the same by considering the weighted average tariff discovered through Competitive Bidding for respective technology in previous Financial Year and adopted by the Commission, plus an incentive of 25% rather than that of large-scale solar projects of 5 MW and more in previous Financial Year and adopted by the Commission, plus an incentive of 25%. In case, if the tariff is not available for that particular technology, the weighted average tariff discovered through Competitive Bidding for large-scale solar projects of 5 MW and above in previous Financial Year and adopted by the Commission, plus an incentive of 25% will be considered.

Further, the Commission is of the view that the linking of the tariff for the energy injected into the grid with respect to the latest Competitive Bidding will be reflecting the market driven rates, hence, will be more beneficial for the project developer as well as Discoms. The intention of the Commission is to balance the interests of the eligible consumers installing RE generation facilities, the Distribution Licensee, and the other consumers of the Distribution Licensee.

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- 29.20 The Commission also clarifies that under Net Billing arrangement, the maximum permissible energy that can be generated from Renewable Energy generating system installed shall be limited to the energy corresponding to the minimum Capacity Utilisation Factor/Plant Load Factor in percent as applicable for respective technology as specified in the Rajasthan Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020 plus 5 percent.
- 29.21 The Commission has accepted the comments of RREC for Net Metering System. The Commission decides to include the provision for treatment of unadjusted net credited Units of electricity at the end of each financial year, which shall be purchased by the Distribution Licensee within the first month of the following year and clarifies that unadjusted net credited Units of electricity as at the end of each financial year only for the domestic category consumer shall be purchased by the Distribution Licensee at the same rate as mentioned in 12.6.1 (a), and will be credited in the account of the consumer within the first month of the following year. This benefit has been provided only to the Domestic consumers, in order to achieve the targeted capacity addition and also to enable usage of maximum rooftops space available for harnessing the solar energy in the State. Further, the provisions are also in line with the provisions in the first amendment of Rajasthan Electricity Regulatory Commission (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015.
- 29.22 The Commission also clarifies that under Net Metering arrangement, in case of consumers other than domestic category, including those having existing Net Metering installations governed as per the Rajasthan Electricity Regulatory Commission (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015 and subsequent amendments thereof, the net surplus electricity remaining available at the end of billing period of the respective category shall lapse and no payment shall be made for the same.
- 29.23 As regards the DISCOMS submission regarding Energy accounting and bill settlement on highest slab, the Commission accepts the reasoning given by DISCOMS and accordingly suitable provision has been incorporated in the Regulations.

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- 29.24 The Commission also clarifies that for consumers covered under specific Central and/or State Government Schemes, such as PM KUSUM, quantum of energy and rate of purchase by Distribution Licensees shall be as per Order issued by the Commission in this regard.
- 29.25 As mentioned earlier the Commission clarifies that the provisions related to the eligibility of Net Metering arrangement have been modified in line with the relevant provisions in the Electricity (Rights of consumers) Rules, 2020.
- 29.26 The modified Regulations are as follows:

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12.5 Net Billing Arrangement

12.5.1 Net Billing is the arrangement, where the Renewable Energy generating system is:

- (a) Installed to serve a specific consumer;
- (b) Connected on the Distribution Licensee side of the consumer meter;
- (c) Selling entire power generated to the Distribution Licensee under the Connection Agreement at the tariff agreed in the Connection Agreement with the Distribution Licensee, and the amount payable by the Distribution Licensee is reduced from the amount payable by the consumer for electricity supplied by the Distribution Licensee.

12.5.2 The Distribution Licensee shall enter into Connection Agreement at the weighted average tariff discovered through Competitive Bidding for respective technology in previous Financial Year and adopted by the Commission, plus an incentive of 25%. In case no bidding is done in previous Financial Year, then the latest tariff discovered through competitive bidding plus an incentive of 25% shall be applicable:

Provided that, in case no bidding is done for respective technology, the latest weighted average tariff of large-scale solar projects of 5 MW and more, discovered through Competitive Bidding and adopted by the Commission, plus an incentive of 25% shall be applicable:

Provided further that, the above Tariff shall be applicable for the entire duration of the Agreement.

12.5.3 The Distribution Licensee shall raise bill on the Consumer in accordance with the following equation:

Energy Bill of consumer = Fixed Charges + other applicable charges and levies + (EDL x TRST) - (ERE * TPPA) – Billing Credit;

Where:

- (a) Fixed Charges means the Fixed/Demand Charges as applicable to the consumer category as per the applicable retail supply Tariff Order;

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- (b) Other charges and levies mean any other charges such as duties and taxes, cess, etc.;
- (c) EDL means the energy units supplied (i.e., Gross Electricity Consumption by the Consumer) by the Distribution Licensee as recorded by the consumer meter for the billing period;
- (d) TRST means the applicable retail supply tariff of the concerned consumer category as per the applicable retail supply Tariff Order of the Commission;
- (e) ERE means the energy units recorded for the billing period by the RE Generation Meter;
- (f) TPPA means the Tariff as per the Connection Agreement signed between the Consumer and Distribution Licensee, in accordance with Regulation 12.5.2;
- (g) Billing Credit is the cumulative opening credit for a month, if any.

12.5.4 If the value of Renewable Energy generation in a month is more than the value of all other components of consumer bill, then the billing credit shall be provided by Distribution Licensee in the electricity bill for such month:

Provided that, such billing credit shall be carried forward to next month and shall be adjusted as specified in Regulation 12.5.3:

Provided further that, the billing credit at the end of Settlement Period shall be paid by the Distribution Licensee to Eligible Consumer latest by the fifteenth of May of the next Financial Year.

12.5.5 When an Eligible Consumer leaves the system, the available billing credit shall lapse, and no payments shall be made.

12.5.6 The maximum permissible energy that can be generated from Renewable Energy generating system installed under the Net Billing Arrangement shall be limited to the energy corresponding to the minimum Capacity Utilisation Factor/Plant Load Factor in percent as applicable for respective technology as specified in the Rajasthan Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020 plus 5 percent.

12.5.7 For consumers covered under specific Central and/or State Government Schemes, such as PM KUSUM, quantum of energy and rate of purchase by Distribution Licensees shall be as per Order issued by the Commission in this regard."

12.6 Net Metering Arrangement

12.6.1 The energy accounting and settlement under Net Metering arrangement shall be as under:

- a) If the quantum of electricity exported by a domestic category consumer exceeds the quantum imported during the Billing Period, the excess

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quantum exported by such domestic consumer shall be purchased by the Distribution Licensee at the weighted average tariff of large-scale solar projects of 5 MW and more, discovered through Competitive Bidding in last Financial Year, and adopted by the Commission. In case no bidding is done in previous Financial Year, then the latest tariff discovered through competitive bidding shall be applicable. The total amount arrived for excess energy injected by such consumer shall be adjusted in the form of credit equivalent to such amount payable in the immediately succeeding billing cycle:

Provided that, even in case of Domestic consumers having existing Net Metering installations governed as per the Rajasthan Electricity Regulatory Commission (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015 and subsequent amendments thereof, the excess quantum exported shall be purchased by the Distribution Licensee at the weighted average tariff of large scale solar projects of 5 MW and more, discovered through Competitive Bidding in last Financial Year, and adopted by the Commission. In case no bidding is done in previous Financial Year, then the latest tariff discovered through competitive bidding shall be applicable. The total amount arrived for excess energy injected shall be adjusted in the form of credit equivalent to such amount payable in the immediately succeeding billing cycle:

Provided further in case of consumers other than domestic category, including those having existing Net Metering installations governed as per the Rajasthan Electricity Regulatory Commission (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015 and subsequent amendments thereof, the net surplus electricity remaining available at the end of billing period of the respective category shall lapse and no payment shall be made for the same.

Provided also that, for consumers covered under specific Central and/or State Government Schemes, such as PM KUSUM, quantum of energy and rate of purchase by Distribution Licensees shall be as per Order issued by the Commission in this regard.

- b) If the quantum of electricity Units imported by the Eligible Consumer during any Billing Period exceeds the quantum exported, the Distribution Licensee shall raise its bill for the net electricity consumption after adjusting the credited Units.

Provided that, for Net Metered consumers the Net imported energy (Total Consumption from all sources – Allowable Solar Generation) from the grid shall be billed according to the highest slab corresponding to the total consumption from all sources.

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Provided further that even for the Consumers covered under the existing Net Metering installations governed as per the Rajasthan Electricity Regulatory Commission (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations, 2015 and subsequent amendments thereof, the energy billing shall also be governed by the above proviso.

- c) *The unadjusted net credited Units of electricity as at the end of each financial year for the domestic category consumer shall be purchased by the Distribution Licensee at the same rate as mentioned in 12.6.1 (a), and will be credited in the account of the consumer within the first month of the following year.*
- d) *The maximum permissible energy that can be consumed from Renewable Energy generating system installed under the Net Metering Arrangement shall be limited to the energy corresponding to the minimum Capacity Utilisation Factor/Plant Load Factor in percent as applicable for respective technology as specified in the Rajasthan Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020 plus 5 percent.*

12.7 In case of any dispute in billing, it would be settled by the Consumer Grievance Redressal Forum and if issue still remains unresolved, the consumer may approach the Ombudsman. “

30 Regulation 13: Reporting requirements

Commission's Proposal:

“13.1 The Distribution Licensee shall report the following, by May 1st of each year and shall also place on its website:

- (a) Total number of Eligible Consumers having interconnected Renewable Energy generating system at the end of the previous financial year;
- (b) Total kW capacity of the Eligible Consumers interconnected at the end of previous financial year;
- (c) Total kWh received by the Eligible Consumer from the Distribution Licensee by month and by year for the previous financial year;
- (d) Total kWh of Renewable Energy generated by the Eligible Consumer by month and by year for the previous financial year;
- (e) Total kWh delivered by the Eligible Consumer to the Distribution Licensee as per billing cycle and by year for the previous financial year;
- (f) For each Eligible Consumer interconnection:
 - 1) Renewable Energy technology utilized;
 - 2) Gross power rating;
 - 3) Geographic location; and
 - 4) Date interconnected. ”

Stakeholders' Comments/Suggestions:

- 30.1 Bask Research Foundation with regard to Clause 13 suggested that the Commission should include the below mentioned clauses:

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"13.2 The Distribution Licensee shall make available following information to the consumer on monthly basis through its CRM platform.

- a. Total kWh received by the Eligible Consumer from the Distribution Licensee by month and by year for the previous financial year;*
- b. Total kWh of Renewable Energy generated by the Eligible Consumer by month and by year for the previous financial year;*
- c. Total kWh delivered by the Eligible Consumer to the Distribution Licensee as per billing cycle and by year for the previous financial year;*
- d. Capacity Utilisation Factor/ Plant Load factor for the month*
- e. Capacity Utilisation Factor/ Plant Load factor till date"*

The stakeholder also commented that the inclusion of above suggestions shall reduce monitoring cost for consumers, especially for those installing small rooftop systems and provide more credible inputs to the consumers. Further, the Distribution Licensee may also provide app-based monitoring services to consumers at a cost proposed by the Distribution Licensee and approved by the Commission. However, the subscription to such services shall be optional.

Commission's Views/Decision:

- 30.2 The proposed provisions are in line with the RERC Net Metering Regulations, 2015.
- 30.3 The Commission has included new provision of developing web-based application processing system and mobile app by Distribution Licensee to provide submission of the applications by the Consumers within 3 months of notification of these Regulations.
- 30.4 Hence, the Commission is of the view that there is no need for modification to the clause.

31 Regulation 14: Renewable Purchase Obligation

Commission's Proposal:

"14.1 The quantum of electricity generated from the Renewable Energy generating system under Net Billing arrangement or Net Metering arrangement by an Eligible Consumer, shall qualify towards compliance of Renewable Purchase Obligation (RPO) for the Distribution Licensee in whose area of supply, the Eligible Consumer is located:

Provided that, such quantum of electricity generated shall qualify towards compliance of Renewable Purchase Obligation under Net Metering arrangement only if an Eligible Consumer is not defined as obligated entity."

Stakeholders' Comments/Suggestions:

- 31.1 Auroville Consulting commented that Renewable Purchase Obligation (RPO) by definition can only include RE exported to the grid. Self-consumption of RE therefore, does not qualify under RPO. The stakeholder suggested that the Commission may consider adapting the following paragraph to reflect this.

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"The quantum of renewable energy exported to the grid of Distribution Licensee under the Net feed-in, Net Metering or Gross Feed-in arrangement by an Eligible Consumer, shall qualify towards compliance of Renewable Purchase Obligation (RPO) for the Distribution Licensee in whose area of supply, the Eligible Consumer is located:

Provided that, such quantum of electricity generated shall qualify towards compliance of Renewable Purchase Obligation only if an Eligible Consumer is not defined as obligated entity."

- 31.2 UltraTech Cement Limited commented that Obligated Entity is mandated to fulfil the RPO under RERC (Renewable Energy Certificate and Renewable Purchase Obligation Compliance Framework) Regulations, 2010, as amended from time to time. As these entities are required to comply with RPO Regulations, the quantum of electricity generated from RE generating system connected behind the Consumer's meter, operating in parallel with the Distribution Licensee's Grid, and not opting either for Net Billing arrangement or Net Metering, shall qualify towards RPO of such consumer if such consumer is an Obligated Entity. This will help such consumers to comply with RPO from RE power rather than purchase of REC's. The stakeholder suggested that the Commission may consider changing Clause 14.1 as per suggestions below:

"14.1 The quantum of electricity generated from the Renewable Energy generating system under Net Billing arrangement or Net Metering arrangement by an Eligible Consumer, shall qualify towards compliance of Renewable Purchase Obligation (RPO) for the Distribution Licensee in whose area of supply, the Eligible Consumer is located:

Provided that, such quantum of electricity generated shall qualify towards compliance of Renewable Purchase Obligation under Net Metering arrangement only if an Eligible Consumer is not defined as obligated entity.

Provided further that, quantum of electricity generated from Renewable Energy generating system connected behind the Consumer's meter, operating in parallel with the Distribution Licensee's Grid, and not opting either for Net Billing arrangement or Net Metering, shall qualify towards Renewable Purchase Obligation of such consumer, if such consumer is an Obligated Entity."

- 31.3 Ecomitram Sustainable Solutions Private Limited suggested that Commission may consider changing Clause 14.1 as per suggestions below:

"14.1 The quantum of electricity generated from the Renewable Energy generating system under Net Billing arrangement or Net Metering arrangement by an Eligible Consumer, shall qualify towards compliance of Renewable Purchase Obligation (RPO) for the Distribution Licensee in whose area of supply, the Eligible Consumer is located. Provided that, Distribution Licensee shall acknowledge the proportionate contribution by respective Eligible Consumer by way of suitable Certificates as a token of appreciation."

Commission's Views/Decision:

- 31.4 The Commission is of the view that no change is required in existing Draft Regulations as the proposed provisions specifically mentions the provisions for RPO compliance for both the arrangements. Further, the Discoms are already incurring additional expenses due to behind the meter consumers, hence, no changes are required in the Draft Regulations.
- 31.5 The Commission is of the view that there is no need for any modification to the definition and the proposed definition in the Draft Regulations has been retained.

32 Regulation 15: Applicability of other charges

Commission's Proposal:

"15.1 The quantum of electricity generated from the Renewable Energy generating system under Net Metering arrangement, whether self-owned or RESCO-owned installed on Eligible Consumer premises, shall be exempted from banking charges, wheeling charges, cross subsidy surcharge, and additional surcharge."

Stakeholders' Comments/Suggestions:

- 32.1 UltraTech Cement Limited and another stakeholder commented that the RE generating system connected behind the Consumer's meter, operating in parallel with the Distribution Licensee's Grid, should also be exempted from banking charges, wheeling charges, transmission charges, transmission or wheeling losses, parallel operation charges, cross subsidy surcharge and additional surcharge. Such RE systems are substituting their own thermal generation. There is no export of power to grid in case of behind the meter project, hence, there is no use of open access, and no charges should be applicable on such systems also. The stakeholder suggested that the Commission may consider changing Clause 15.1 as per suggestions below:

"15.1 The quantum of electricity generated from the Renewable Energy generating system under Net Metering arrangement, whether self-owned or RESCO-owned installed on Eligible Consumer premises, shall be exempted from banking charges, wheeling charges, cross subsidy surcharge, and additional surcharge."

Also, the quantum of electricity generated from the Renewable Energy generating system connected behind the Consumer's meter, operating in parallel with the Distribution Licensee's Grid, and not opting either for Net Billing arrangement or Net Metering, whether self-owned or RESCO-owned or set up as a Captive Generating plant under Electricity Act and Rules installed on Eligible Consumer premises, shall also be exempted from banking charges, wheeling charges, transmission charges, transmission or wheeling losses, parallel operation charges, cross subsidy surcharge, and additional surcharge."

32.2 AVVNL and JVVNL commented that Net Metered consumers pay significantly less energy charges as the energy drawn from the grid reduces owing to self-generation. Thus, the portion of fixed costs of DISCOMs that was supposed to be recovered from energy charges of such a consumer remains unrecovered and the burden of this will get passed on to other consumers through tariff revisions. The stakeholders, hence, proposed that an additional charge be levied on such consumers availing Net Metering facility to compensate the loss borne by DISCOMs in terms of recovery of fixed costs from energy charges. The stakeholders have also given reference to MSEDCL tariff petition for FY20 to FY24 where they have proposed a similar charge namely Grid Support Charges to be payable by rooftop solar Net Metered consumers. MERC, vide Tariff Order dated 30.03.2020 has recognised the need for same. The stakeholders requested the Commission to determine suitable charges to be levied on consumers opting for Net Metering.

Commission's Views/Decision:

32.3 As regards the Grid Support Charges, the Commission clarifies that the Parallel Operation Charges mentioned in the Regulation 17 are equivalent to the Grid Support Charges and will be levied on the Consumers only when Distribution Licensee files proposal for same in its retail supply tariff petition for the same along with the proper justification.

32.4 The Commission has noted the suggestions of the stakeholders and decides to provide separate provisions for the applicability of charges for the quantum of electricity generated from the self-owned and RESCO-owned Renewable Energy generating system under Net Metering arrangement. It is clarified that self-owned Renewable Energy generating system under Net Metering arrangement, if installed on Eligible Consumer premises, shall be exempted from banking charges, wheeling charges, cross subsidy surcharge, and additional surcharge.

32.5 RESCO-owned Renewable Energy generating system under Net Metering arrangement, installed on Eligible Consumer premises, shall be exempted from banking charges and, wheeling charges. In the normal course, the supply of energy by a third party other than the Distribution Licensee, attracts the levy of Cross Subsidy Surcharge and Additional Surcharge. Such Surcharges are applicable to the consumer for the energy received from third party or the third-party investor/Developer. However, the levy of Cross Subsidy Surcharge and Additional Surcharge on such supply of energy to the consumer may discourage the attraction of investment by the third party for implementing the Solar Rooftop projects to be installed on the roof of the consumers' buildings. The Commission is of the view that exemption from levying such charges may be granted in case of all the LT Domestic consumers, in order to achieve the targeted capacity addition and also to enable usage of maximum rooftops

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space available. For other categories, cross subsidy surcharge and additional surcharge may be applicable for RESCO-owned Renewable Energy generating system under Net Metering arrangement, at a lower rate of 50% of cross subsidy surcharge and additional surcharge applicable for open access consumers. However, for consumer categories for which cross subsidy surcharge and additional surcharge are to be made applicable but have not been determined by the Commission, a suitable provision has been incorporated. Commission has determined the concessional charges by considering lowest cross subsidy surcharge for large industrial service consumer as Rs 1.70/kWh, which is lowest determined cross subsidy surcharge among the categories of open access consumers. Further Commission has also determined additional surcharge as Rs 0.80/kWh and considering 50% of the cross subsidy surcharge and additional surcharge taken together works out to be Rs 1.25/kWh. Accordingly, the same has been specified for such consumers till the same is revised by the Commission through a separate order.

32.6 The modified provisions are as follows:

"15.1 The quantum of electricity generated from the self-owned Renewable Energy generating system under Net Metering arrangement, if installed on Eligible Consumer premises, shall be exempted from banking charges, wheeling charges, cross subsidy surcharge, and additional surcharge.

15.2 The quantum of electricity generated from the RESCO-owned Renewable Energy generating system under Net Metering arrangement, if installed on Eligible Consumer premises, shall be exempted from banking charges and wheeling charges:

Provided that, cross subsidy surcharge and additional surcharge shall be applicable for such RESCO-owned Renewable Energy generating system under Net Metering arrangement, except in case of LT domestic category consumers, at the rate of 50% of cross subsidy surcharge and additional surcharge applicable for open access consumers.

Provided further that in case of consumer categories for which cross subsidy surcharge and additional surcharge has not been determined by the Commission surcharge (cross subsidy plus additional surcharge), shall be applicable @ Rs. 1.25/kWh for such category of consumers, till the same is revised by the Commission through a separate order.

15.3 The quantum of electricity generated from the self- owned or the RESCO-owned Renewable Energy generating system under the Net Billing arrangement, if installed on Eligible consumer premises, shall be exempted from banking charges, wheeling charges, cross subsidy surcharge and additional surcharge.

33 Regulation 16: Sharing of CDM Benefits

Commission's Proposal:

"16.1 The CDM benefits arising from solar energy generation from Renewable Energy generating system shall be retained by Distribution Licensee:

Provided that, the entire CDM benefits obtained by the Distribution Licensee shall be fully passed on to the consumers through the ARR."

Stakeholders' Comments/Suggestions:

- 33.1 Auroville Consulting commented that only RE exported to the grid should qualify under CDM benefits. RE that is consumed behind the meter does not qualify under CDM benefits. The stakeholder suggested that the Commission may consider adapting the following paragraph to reflect this:

"The CDM benefits arising from solar energy exported by the Consumer to the grid of Distribution Licensee shall be retained by Distribution Licensee:

Provided that, the entire CDM benefits obtained by the Distribution Licensee shall be taken into account while proposing consumer tariffs through the ARR."

- 33.2 Ecomitram Sustainable Solutions Private Limited suggested that the Commission may consider changing Clause 16.1 as per suggestions below:

"16.1 The CDM benefits arising from generation from Renewable Energy Generating System shall be retained by Distribution Licensee.

Provided that Distribution Licensee shall acknowledge the proportionate contribution by respective Eligible Consumer by way of suitable Certificates as a token of appreciation"

Commission's Views/Decision:

- 33.3 The Commission is of the view that no change is required in the Draft Regulations as the benefits of CDM are proposed to be passed on to the consumers.

34 Regulation 17: Parallel Operation Charges

Commission's Proposal:

"17.1 The Commission may stipulate from time to time the 'Parallel Operation Charges' to be levied on the energy generated under Net Metering systems, which shall cover balancing, banking and wheeling cost after adjusting RPO benefits, avoided distribution losses and any other benefits accruing to the

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Distribution Licensee, based on the Petition filed by Distribution Licensee, supported by adequate justification:

Provided that, no Parallel Operation Charges shall be levied on Net Billing consumers:

Provided further that, Parallel Operation Charges on the Renewable Energy generating system connected behind the Consumer's meter shall be in accordance with Regulation 10.14.5."

Stakeholders' Comments/Suggestions:

- 34.1 UltraTech Cement Limited commented that Parallel Operation Charges (POC) is set aside even for Captive Power Plant (CPP) by APTEL. Hence, POC should not be levied on RE based plants installed behind the meter. These plants will replace the own thermal power and hence, such levy is unjust and inappropriate. It should be clarified that POC will not be applicable in case of RE based Captive Power Plants in Rajasthan. Considering CUF of 20%, 1 MW solar will generate around Rs. 16 Lakh units. If POC of Rs. 20/KVA/month is levied, then it comes to Rs. 240000/- per annum, i.e., ~ 15 paise / kWh, which is unviable for renewable. The stakeholder suggested that Commission may consider changing Clause 17.1 as per suggestions below:

"17.1 Provided further that, Parallel Operation Charges shall not be applicable on the Renewable Energy generating system connected behind the Consumer's meter ~~shall be in accordance with Regulation 10.14.5.~~"

- 34.2 Cleanmax Enviro Energy Solution Pvt. Ltd submitted that the projects are developed for 25 years and any amendment /addition of charges on the projects on the previously installed projects shall destroy the viability of the projects. The stakeholder also suggested that the charges determined and applicable at the time of execution of the project shall remain firm for the project for its lifetime and any new charges/increase in charges shall be applicable for the projects executed after the issuance of such charges duly permitting smooth transition of the ongoing projects at that point of time.

Commission's Views/Decision:

- 34.3 As regards the applicability of additional POC charges on the RE based plants installed behind the meter, the Commission is of the view that no change is required in the proposed provisions in the Draft Regulations as the Discoms are already incurring additional expenses due to behind the meter consumers. Further, the installation of such facility may reduce the utilization of Distribution Network and thereby such consumer may pay lower charges for such network setup earlier for it. Such unrecovered part of expenses is then loaded on other consumers of the Distribution Licensee. Hence, an enabling provision has been introduced for levy of additional Parallel Operation Charges in the

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form of Fixed Charges or Demand Charges and any other Charges for such systems, provided that the Distribution Licensee shall propose such additional Parallel Operation charges such as Fixed Charges or Demand Charges and any other Charges for such systems, in its retail supply Tariff Petition, supported by adequate justification.

- 34.4 The Commission also clarifies that the POC charges have been imposed not to put burden on the consumers, but to ensure that unrecovered expenses are not loaded on the general consumers.

35 Regulation 18: Penalty

Commission's Proposal:

"18.1 In case of failure to meet the requirements under these Regulations, the Renewable Energy generating system or the Distribution Licensee, as the case may be, shall be liable to pay penalty as decided by the Commission from time to time."

Stakeholders' Comments/Suggestions:

- 35.1 Shri Shanti Prasad commented that the provisions of Clause 10.14.6 should not apply to Grid Interconnected RE generating system as in that case these details will be available during meter testing vide Clause 11.9 and should apply only where such installations are not grid connected. The stakeholder also commented that the Commission may also clarify whether penalty under Clause 18.1 is exclusive or inclusive of that under Clause 10.14.6. Further, the stakeholder also suggested that the penalty amount may also be indicated in line with Rule 11(12) of the Electricity (Rights of Consumer) Rules.

Commission's Views/Decision:

- 35.2 The Commission clarifies that the provisions of the penalty mentioned in the Regulations already includes the non-compliances of all requirements under these Regulations.
- 35.3 Hence, the Commission decides to retain the provisions proposed in the Draft Regulations.

36 Miscellaneous

Stakeholders Comments/suggestions:

- 36.1 Shri G.L. Sharma commented that the "Electricity (Rights of Consumers) Rules, 2020 (Rule 11(4) thereof) states that the Regulations on Grid Interactive Rooftop Solar PV system and its related matters shall provide for Net Metering for loads up to 10 kW whereas in the present proposed Regulations the

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maximum limit has been prescribed as 1MW, i.e., on much higher side. This is against the above Rules, therefore, the maximum limit in the present Regulations may be kept as 10 kW only so as to be in line with above referred Rules.

36.2 Shri G.L. Sharma submitted that with Net Metering system, the costlier power of DISCOM (this is about Rs. 8/ per kWh) is being set off with a cheaper power of rooftop plant/plants installed in consumer premises, power of which cost around Rs. 2 per kWh. Thus, DISCOM is losing a great amount. It would also mean that DISCOM is subsidising such plants for no gains. There is no provision in any law that DISCOM shall have such loss and transfer the same to the consumers. It has been noted that in open market, there is surplus power and could be purchased by DISCOM if required at similar rate of around Rs. 2 per kWh. The stakeholder suggests that there is no reasoning or justification for DISCOM being advised through Regulations to set off the costlier power with cheaper power. DISCOM shall be allowed to bill the consumer for their full consumption at its rates and any power sold by the consumer be purchased at Rs 2 per kWh or so, i.e., both the arrangements may be put in force independent to each other. The stakeholder also suggested that there should not be no Net Metering Regulations to avoid the loss to the DISCOM.

36.3 Various stakeholders have raised following concerns:

- Sudden Change is damaging for Industry: - If given a reasonable time, there would be no hue and cry among the stakeholders and people will have sufficient amount of time to decide on which arrangement they want to adopt, i.e., Net Billing or Behind the meter after doing the due diligence. The shortage of time will definitely have the negative impact on the achievement of target and will de-motivate the solar Industry. Businesses are built on long term predictable policies and sudden change in policy will put the Solar Industry in trouble.
- Negative Impact on Employment and Revenue Generation: -As per a report by NRDC and CEEW, India's RE workforce has grown five-fold in the past five years, i.e., from 2014 to 2019 and acceptance of net-metering among C&I consumers played a vital role in this. It is expected to generate 450,000 jobs by 2022 to achieve the target of 175 GW. In the report, it was recommended to strengthen support for decentralized RE projects such as rooftop solar, which have a higher job creation potential and the Draft Regulations are totally opposite of the recommendations, which will have huge negative impact in terms of employment and revenue generation to the State.

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- Difficulty in RPO compliance by Discoms: - Discoms are already lagging to meet their RPO compliances, after this Policy since the solar installation will drop further, it would be tougher for Discom to meet RPO in future.
- Industries/Institutions having seasonal or irregular load: Industries/Institutions having seasonal or irregular load will have no options but to reduce their capacity to 20-30% from now due to restriction on net-metering and lower tariff in Net Billing, which will increase its payback period by 3-4 times as compared to net metering arrangement.
- The stakeholder commented that the Companies working in Solar Industry (mainly Residential, Commercial and Industrial Sector, i.e., for rooftop projects up to 1 MW) are the smaller companies mainly MSMEs, which are already grappling with problems like low liquidity or cash flow amid the crisis brought in by the COVID-19 pandemic. MSMEs are the backbone of any country's economy, such rules shall completely result in the collapse of such local business. Besides, the manpower and manufacturing units in business will also be affected adversely and will incur excessive losses to already liquidity deficit companies. The stakeholders requested the Commission to discard this proposal and continue with earlier proposal of net metering for all capacities of solar systems, as the proposed amendment will totally discourage the consumers, industries, offices, schools, etc., from adopting rooftop solar. The proposed amendment will discourage the consumer wanting solar above 10kW to adopt this as well.

36.4 FICCI along with other stakeholders submitted as under: -

- A. The above Rule of Govt. of India and Draft Regulations need to be looked into the spirit of Section 108, which authorises Govt. of Rajasthan to look into all aspects in the perspective of any impact on on-going programs and industry.
- B. Extension for signing PPA(s), based on prevailing net-metering policy is proposed up to 30th September 2021 and completion of these projects on or before 31st March 2022.
- C. Under the ambit of behind the meter solar power generation, prosumer should be given the liberty to do on his own and should not require any permission from DISCOM.

The stakeholder is of the opinion that these proposals will not only help the State in smooth transition of RE programs to current regulation of Right of Electricity Consumers, 2020 but also contribute in tackling the post Covid-19 challenges in business / employability and building significant capacity to meet the fast-emerging electricity demand in Electric Mobility, where-in Distributed generation is only solution.

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- 36.5 Shri Dharm Deo Agarwal commented that the Draft Regulations are based on the Electricity Act, 2003 (36 of 2003) and subsequent amendments thereof. The stakeholder suggested that a major amendment in the Electricity Act, 2003 is under consideration by Government of India, Ministry of Power, which includes the Grid Interactive Distributed RE generating system. As such, till such time, new amendments are approved in the Electricity Act, 2003 by Ministry of Power, Government of India, the proposed Draft Regulations maybe kept pending. The stakeholder suggested that this Draft is directly affecting the common man hence should be made simple and understandable and should be 2-3 pages only. The stakeholder also commented that enhanced charges of application fees and security deposit may not be implemented.
- 36.6 Several stakeholders have raised their objection against the Draft Regulations and are not in favour of Net Billing as it is not consumer friendly and economical for the consumers. The stakeholders are of opinion that by proposing the limit of 1 MW solar plant under the LT Domestic Consumer category will discourage Rooftop capacity for C&I consumers and further will impact MSME. The stakeholders requested the Commission to reconsider the Draft Regulations especially for C&I category.
- 36.7 Bask Research Foundation In line with 'Electricity (Rights of Consumers) Rules, 2020' notified by Ministry of Power, suggested that these Regulations explicitly provide recognition to consumers having Grid Interactive Distributed RE generating systems as 'Prosumers'. Further, it is also suggested that the Commission also define rights and responsibilities of prosumers, in addition to rights and responsibilities held by the virtue of being an electricity consumer.
- 36.8 Various Stakeholders have commented that even under the present Regulations, the excess generated energy is not being paid by DISCOM to commercial / industrial consumers and is lapsed at month end whereas in other States, the adjustments are made on financial year basis. In case of seasonal consumers, yearly adjustment should be done. The stakeholder further commented that a consumer who does not intend to get into Net Billing or Net Metering is also proposed to be charged for just getting a power connection from DISCOM. This might lead to people going off-grid or not disclosing their RE Generating System.
- 36.9 Shri Surendra Jhalora commented that the rate of RE generation is decided with the formula and it is compared with Mega projects, which appears impractical and does not fit in the economy of scale for small RE projects of few kW capacity.

Commission's Views/Decision:

- 36.10 As regards the comments on the capacity of the Grid Interactive Distributed RE Sources to be installed under these Regulations, the Commission has suitably aligned the Regulations with the provisions of Electricity (Rights of Consumer) Rules, 2020.
- 36.11 As regards the concerns raised by various stakeholders with respect to the impact of the Draft Regulations on the industry, the Commission is of the view that the Draft Regulations have been framed to balance the interest of consumers and Distribution Licensees. Further, as explained in Explanatory Memorandum, the Commission has tried to ensure that rate for purchase of energy by Distribution Licensee under Net Billing Arrangement is set in a manner that it recovers the cost of installation and maintenance of Generating System, and also provides adequate return on investment on account of distributed generation. Recent initiatives by the Banks to offer such RE generator loan akin to Home Loan has enabled longer tenure of loan coupled with lower interest rate. Thus, the return on investment under the Net Billing Arrangement would remain beneficial, which will also encourage the consumers to set up RE generating facilities under the Net Billing Arrangement.

37 Annexure-IV-A: Model Net Billing Connection Agreement

"Commission's Proposal:

.....

2 Technical and Interconnection Requirements

"2.7 Due to Discom's obligation to maintain a safe and reliable distribution system, Eligible Consumer agrees that if it is determined by the Discom that Eligible Consumer's Renewable Energy generating system either causes damage to and/or produces adverse effects affecting other consumers or Discom's assets, Eligible Consumer will have to disconnect Renewable Energy generating system immediately from the distribution system upon direction from the Discom and correct the problem at his own expense prior to a reconnection."

"2.8 The consumer shall be solely responsible for any accident to human being/animals whatsoever (fatal/non-fatal/departmental/non-departmental) that may occur due to back feeding from the Renewable Energy generating system when the grid supply is off. The Distribution Licensee reserves the right to disconnect the consumer's installation at any time in the event of such exigencies to prevent accident or damage to man and material."

4 Access and Disconnection

"4.1 Discom shall have access to metering equipment and disconnecting means of the Renewable Energy generating system both automatic and manual, at all times."

"4.2 In emergency or outage situation, where there is no access to the disconnecting means, both automatic and manual, such as a switch or

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breaker, Discom may disconnect service to the premises of the Eligible Consumer."

5 Liabilities

"5.1 Eligible Consumer and Discom shall indemnify each other for damages or adverse effects from either party's negligence or intentional misconduct in the connection and operation of Renewable Energy system or Discom's distribution system."

"5.5 The proceeds from CDM benefits shall be retained by the Discom."

6 Commercial Settlement

"6.1 All the commercial settlement under this agreement shall follow the RERC (Grid Interactive Distributed Renewable Energy generating system) Regulations, 2020 as amended from time to time."

7 Connection Costs

"7.1 The Eligible Consumer shall bear all costs related to setting up of Renewable Energy generating system including metering and interconnection costs. The Eligible Consumer agrees to pay the actual cost of modifications and upgrades to the service line required to connect Renewable Energy system to the grid in case it is required."

8 Termination

"8.1 The Agreement may be terminated at any time by mutual consent."

Stakeholders' Comments/Suggestions:

- 37.1 Bask Research Foundation with regard to Clause 2.7 and 2.8 of 'Technical and Interconnection Requirements' suggested that following provision may be adjoined in Clause 2.7:

"Provided that the Distribution Licensee provides satisfactory proof (tests or technical audits) in support of the adverse effects determined by the Discom."

The stakeholder with regard to Clause 2.8 commented that this clause is in contradiction with provisions defined under Section 5 (Liabilities) of the model agreement.

- 37.2 Bask Research Foundation with regard to Section 4 'Access and Disconnection' suggested that the Discom should also have the right to acquire data related to generation and power quality of RE Generating System, provided that any benefits arising from monetisation of such data shall be passed on to the consumers through ARR.
- 37.3 Bask Research Foundation with regard to Clause 5.1 of Section 5 'Liabilities' suggested that indemnity from intentional misconduct is against the principles

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of law and should be removed. Further, the provision is also in conflict with Clause 10.5 of the Draft Regulations.

- 37.4 Bask Research Foundation with regard to Clause 5.5 of Section 5 'Liabilities' suggested that it should be revised to read as follow:

"The proceeds from CDM benefits shall be retained by the Discom, to be passed on to all consumers as per RERC Grid Interactive Distributed Renewable Energy Generating Systems Regulations 2020."

- 37.5 Bask Research Foundation with regard to Section 6 and section 7 suggested that following clause may be considered for inclusion:

"6..... In case of delay in payment of the net amount due to the prosumer beyond 30 days from the settlement date, the licensee shall pay interest to the prosumer at the FBIL rate +200 base points prevailing on 1st April of the settlement year...."

"7..... provided that consumer is intimated for same prior to approval of application for connectivity and consent of the prosumer for payment of such charges. If the consumer is not willing to provide such consent, the Discom has the right to reject the application of the prosumer for connectivity of Renewable Energy generating system."

- 37.6 Bask Research Foundation with regard to Section 8 'Termination' suggested that the intent and consent of prosumer is paramount for termination of the agreement and hence, suggested that the clause may be revised to read:

"The prosumer may intimate the Discom for termination of agreement, and the same shall be executed within 30 days of such intimation."

Commission's Views/Decision:

- 37.7 The Commission has noted the comments and is of the view that there is no requirement for modification to be made in the proposed provisions of Model Agreement.
- 37.8 In the light of the foregoing discussion, the finalized Regulations duly authenticated, placed below, may be got published in the official Gazette.
- 38 Copy of this memo, along with the finalized Regulations, may be sent electronically and/or by post to the State Government, CEA, concerned Utilities and other stakeholders.

(Prithvi Raj)
Member

(S.C. Dinkar)
Member

(Shreemat Pandey)
Chairman

Annexure-1

The list of stakeholders who offered the comments/suggestions:

1. Tribal Area Development Department, GoR
2. Spark Health Arts and social club
3. Yevanti Kumar
4. Novergy Energy Solution Pvt Ltd
5. Shanti Prasad
6. FORTI
7. Namit Dubey
8. CVK Solar Enterprises Pvt Ltd
9. Insolation Energy Pvt Ltd
10. Vareyn Solar Pvt Ltd
11. Sunrays Future Solar Pvt Ltd
12. Renesun Power
13. REAR RE Association
14. Ultravibrant Solar Energy Pvt Ltd.
15. UltraTech Cement
16. NIMMA
17. Radiance Renewables
18. Rudraksh Energy
19. Penta Solarex Pvt Ltd
20. RSA
21. Kishangarh Marbles Association
22. Aditya Chittlangia
23. Mewar Chamber of commerce & Industry
24. Prayas pune
25. Smart Roof Solar Pvt Ltd
26. Pitamah Energy Solution
27. Solar enthusiast & Solar learner
28. Rajasthan Tiles Manufacture Association
29. Shri G.L.Sharma
30. Sun source Energy Pvt Ltd
31. Chopra Strips Ltd.
32. The employers Association of Rajasthan
33. Vibrant Solar
34. Bhiwadi Manufacturers Association
35. Anshul Awasthi
36. Steady Structure
37. Dry Solar Energy Solution
38. Future watt
39. M L Gupta Secretary
40. Naman Marbles Pvt Ltd
41. Basant Chhopra
42. Narpat Steels Pvt Ltd
43. Chopra Strips Ltd

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44. Shree chanchal industries pvt ltd
45. Shree Charbhuj Industries
46. Chetan Metals Pvt Ltd
47. United Council of Rajasthan Industries
48. Raj Pharmaceutical Manufacturers Association
49. Amplus Energy Solutions Pvt Ltd
50. REIL
51. Ujjaval Matrix Infrastructure Pvt. Ltd.
52. Priyanshi Saxena
53. Subrat Ghosh
54. Jodhpur Handicrafts Exporters Assn.
55. M/s Gattani Hospital
56. M/s Marble Gangsaw Association, Rajsamand
57. Confederation of Indian Industry-NR
58. M/s Chemical & Mineral Industries Pvt. Ltd.
59. M/s Penta Solarex Pvt. Ltd.
60. M/s Solarib Renewable Pvt. Ltd.
61. Sushil
62. M/s Laghu Udhog Bharti
63. M/s Sharma Industries
64. M/s Sonu Handicrafts
65. M/s Chemical Product Industries
66. M/s Solar Specialist Group
67. Alok Singh
68. M/s Sun Power and Construction
69. M/s TVM Power Solar System (P) Ltd.
70. M/s Sunce Plus Solar Pvt. Ltd.
71. Roshan Sharma
72. Dharm Deo Agarwal
73. M/s Marudhara Industries Association Jodhpur
74. M/s Sun Alpha Energy Group
75. M/s Navkar Alloy
76. M/s World Resources Institute
77. Amit Gupta
78. (FICCI)
79. M/s Annapurna Industries
80. Surendra Jhalora
81. M/s SSB Powers
82. M/s Chetak Engineering
83. B K Makhija
84. Ankit Kachhawaha
85. M/s Seth Sanwariya electronic & Solar systems
86. M/s Uravashi Solar Enterprises LLP
87. M/s Genus Energizing Lives
88. M/s Green Energy Instruments
89. M/s Stockwell Solar Services Pvt. Ltd
90. M/s Ashlyn Solar Infra Pvt. Ltd
91. M/s Solar 91 Cleantech Pvt. Ltd

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92. M/s mPower Green Energy
93. B Ram Dhaka
94. Anoop Singh
95. Arlyn Choudhary
96. Mahima Choudhary
97. M/s Satwik Sungreen Corporation
98. Hari Singh
99. The Rajasthan Solar Association
100. Ratan Singh
101. M/s InfiSolar Power India
102. Shyodana Ram
103. Nand Lal Jangid
104. M/s mPower Green Energy Pvt. Ltd.
105. Pranjal Dhariwal
106. M/s Arkaa Grenergy Consulting Pvt. Ltd
107. Anurag Paliwal
108. Ravi kumar sharma
109. M/s Rama Reflection India
110. M/s Sitapur Industries Association
111. M/s Solar Plus Energy Pvt Ltd.
112. M/s Bikaner Zila Udyog Sangh
113. M/s Sunbound Energy
114. M/s Mittal Secure Solar System
115. M/s Tieup Solar Energy
116. M/s Techsun Solar power
117. M/s Bask Research Foundation
118. Vijay Jangid
119. M/s Vivaan Solar Pvt Ltd
120. M/s National Solar Energy Fed of India
121. M/s Vivaan Solar Pvt. Ltd.
122. M/s Sun Infra Solar Pvt. Ltd.
123. M/s OM Solar Green Energy
124. Arvind Saini
125. M/s Cosine power Pvt. Ltd.
126. M/s International Techno Engineers
127. M/s Chirmi Overseas
128. M/s Solar Pulse
129. M/s Shree Cement Ltd
130. Nikhil Dhaka
131. M/s Satyam Works
132. M/s Distributed Solar Power Association
133. M/s Kankaria Solar Systems
134. M/s Hotel Udhyog Uttan Sansthan
135. M/s Jodhpur Industries Association
136. Vibgyor Energy
137. RRECL
138. M/s Ladhani Oil Mills
139. M/s Chandi Marble Pvt. Ltd.

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140. M/s Bapu Marble Pvt. Ltd.
141. Neeraj Bihani
142. M/s SRI Savitr Solar Pvt. Ltd.
143. Rajkumar Meena
144. M/s Rampratap Developers Pvt. Ltd.
145. M/s Padmavati Agrico (India) Pvt. Ltd
146. M/s Samdari Strips Pvt. Ltd
147. M/s Rajlaxmi Steel Industries
148. JVVNL
149. M/s Samta Power
150. Dr. Parul Mathuria
151. M/s Udaipur Chamber of Commerce & Industry
152. Dr Parul
153. M/s Green Affiliates Pvt. Ltd
154. M/s Swadeshi J M Rajasthan
155. Rajeshwar Singh Rajpurohit
156. M/s Pinaka Solar Power
157. M/s Rural Anant Energy Development Society
158. Pramod Jhanwar
159. M/s Lieferant LLP
160. M/s Secure Meters Ltd.
161. M/s Cleanmax Enviro Energy Solution Pvt Ltd
162. M/s Solar91 Cleantech Pvt Ltd
163. M/s Plastic Manufacturers Association Rajasthan
164. M/s Bapu Marbles Pvt. Ltd, Rajsamand
165. M/s Navbharat Marble Industries
166. IAS Rajendra Bhanawat
167. M/s Rajnagar Marble Industries
168. AVVNL