# BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION GANDHINAGAR

# In the matter of:

<u>Gujarat Electricity Regulatory Commission (Net Metering Rooftop Solar PV Grid Interactive Systems) (Third Amendment) Regulations, 2022.</u>

### **CORAM:**

Mehul M.Gandhi, Member S. R. Pandey, Member

### STATEMENT OF REASONS

# 1. Background

- 1.1. In exercise of powers conferred under Sections 61, 66, 86 (1) (e) and 181 of the Electricity Act, 2003 read with all other provisions, the Commission (GERC) notified the Gujarat Electricity Regulatory Commission (Net Metering Rooftop Solar PV Grid Interactive Systems) Regulations, 2016 (Principal Regulations Notification No. 5 of 2016) on 18.06.2016 and it was subsequently amended through amendments dated 06.10.2017 (Notification No. 2 of 2017) and 22.01.2020 (Notification No. 2 of 2020).
- 1.2. Thereafter, while disposing of Petition No. 1936 of 2021, the Commission noted necessity of revisiting the Gujarat Electricity Regulatory Commission (Net Metering Rooftop Solar PV Grid Interactive Systems) Regulations, 2016 (Notification No. 5 of 2016) and amendments thereto by initiating process for amendment in the GERC (Net Metering Rooftop Solar PV Grid Interactive Systems) Regulations, 2016 and with consideration of provisions of Gujarat Solar Power Policy, 2021 and Electricity (Rights of Consumers) Rules, 2020 notified by Ministry of Power (MoP). The Commission has also followed the procedures specified for pre-publication etc. prior to notification of the Regulations.
- 1.3. Accordingly, a Draft Notification dated 29.06.2021 has been published and Public

- Notices in daily newspapers were issued by the Commission seeking suggestions/ objections from the stakeholders in the matter.
- 1.4. Thereafter, the Commission conducted a public hearing on the Draft Amendment Regulations on 14.09.2021. List of stakeholders who submitted written comments and made representation during public hearing is provided as **Annexure-I**.
- 1.5. The Commission has issued Draft Gujarat Electricity Regulatory Commission (Net Metering Rooftop Solar PV Grid Interactive Systems) (Third Amendment) Regulations, 2022 and invited comments and suggestions from the stakeholders and also held public hearing for considering their suggestions on different proposed amendments/additions/alterations in the Principal Regualtions stated in Drfat Regulations. The Commission observed that on some of the proposed Draft Amendment neither any objections received on affidavit from the stakehoders nor any submissions have been made during hearing on it by the stakeholders. Therefore, upon the consideration of the proposed amendments in Draft Regulations, the Commission decided to retain the same.
- 1.6. After detailed analysis and due consideration of the suggestions/ objections provided by the stakeholders as detailed in the succeeding paragraphs, the Commission hereby finalize the Gujarat Electricity Regulatory Commission (Net Metering Rooftop Solar PV Grid Interactive Systems) (Third Amendment) Regulations, 2022.

# 2. Amendment in Regulation 1 (2) of the Principal Regulations:

## 1. Short Title, Extent and Commencement

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

## **Comments/Suggestions of the Stakeholders:**

2.1. The proposed Regulations shall apply to the new applications registered with Nodal Agency after publication in the Official Gazette so that old registered projects which are under progress may not be hampered in any way.

- 2.2. The Regulations shall come into force after 3 months from the date of the publication in the Official Gazette and till such time the provisions of the previous Regulations shall prevail. In order to have a smooth transition from the regime of previous Regulations to the present amendments and permitting adequate time for the ongoing projects as per the provisions of the previous Regulations a gestation time of minimum 3 months should be provided.
- 2.3. Amendments should not be applicable to applications which are registered with GEDA before date of publishing of Draft Third Amendment in Net Metering Regulations and no retrospective effect be given.

#### Commission's decision:

The Regulations which may be made hereinafter for any amendment in any existing Regulations shall come into force from the date of Notification in the Official Gazattee and it has a prospective effect from the date of publication. The suggestion regarding giving effect after 3 months from date of notification is not acceptable as the Regulations are amended to give effect in the existing Regulations immediately on its publication so as to avoid any ambiguities in the applicability of provisions to such projects including disputes which may arise on that basis. Whenever any change, modification, alteration, amendment made out in the provisions of Statute or Sublegislation, it must have some cut off date and applicability of the same. The suggestions of the stakeholders that the consumer/applicant who have applied for set up rooftop projects to the GEDA and it has been registered by GEDA shall be governed by the provisions of previous Regulations is also not acceptable as the Regulations are applicable to the beneficiaries from the date of publication of Regulations and it has no linkage with Registration of projects with GEDA or any other authority. Hence, the suggestions of the objectors are not accepted.

#### 3. Amendment in Regulations 2.1 of the Principal Regulations:

(c) Addition of New Definition Clause "Gross Meter" and "Gross Metering" in Regulation 2.1 of the Principal Regulations:

2.1 (ma) "Gross meter" means unidirectional energy meter installed at the point at which the electricity generated by solar energy system of the eligible consumer injects into the grid of Distribution Licensee.

## **Comments/Suggestions from the Stakeholders:**

3.1. It is submitted that Meter being technical term, it ought to be defined to characterize technical capability. Net meter is already defined in the existing Regulations with such philosophy. In order to avoid the possibility of theft, it is necessary to install bidirectional meter instead of unidirectional meter. Hence, it is proposed to adopt definition of Gross Meter as same that of Net meter.

#### Commission's decision:

The comments/suggestions from the stakeholders that for "Gross Meter" it is necessary to install bidirectional meter instead of unidirectional meter to avoid the instances of theft is not acceptable as the purpose for installation of "Gross Meter" and "Net Meter" are different and distinct from each other. The "Gross Meter" installed for recording the energy export or import from the grid. While "Net Meter" is installed for recording import and export of energy in the same meter. The data recorded in the aforesaid meters are utilized for energy accounting as the case may be. Therefore, the configuration of above meters are different and distinct. Hence, the contention of the objector that the definition of "Gross Meter" and "Net Meter" be kept as same is not acceptable.

## 4. Amendment in Regulations 2.1 of the Principal Regulations:

- (c) Addition of New Definition Clause "Gross Meter" and "Gross Metering" in Regulation 2.1 of the Principal Regulations:
- 2.1 (mb) "Gross Metering" means an arrangement for measurement of energy in a system under which Rooftop PV Solar System installed at eligible consumer premises delivers total electricity generated to the Distribution Licensee.

## **Comments/Suggestions from the Stakeholders:**

- 4.1. It is proposed to align the definition of "Gross metering" with definition given in Electricity (Rights of Consumers) Amendment Rules, 2021. It is also proposed that the word "total" in definition of "Gross metering" should be removed.
- 4.2. It is also suggested that recently MoP issued Electricity (Rights to Consumers) Rules, 2021 which has come into force from 29.06.2021 wherein the definitions of "Grossmetering", "Net-metering" or "Net feed-in" and "Net-billing" are provided and only in case of "Gross-metering" two separate import and export meters are used and in case of "Net-billing or "Net-metering" single bi-directional meter will be used. Accordingly, the new definitions "Net-billing" or "Net feed-in" be incorporated.
- 4.3. The capacity for project under Net-metering to be considered as 500 KW or Sanctioned Load of Prosumer whichever is lower as per MoP Electricity (Rights of Consumers) (Amendment) Rules, 2021. The Commission may consider the option of net metering to the Prosumer for loads up to 500 KW or up to the sanctioned load, whichever is lower, while for the projects above 500 KW capacity be permitted under the provisions of net-billing or net feed-in, since the solar rooftop project are implemented by variety of Prosumers, with varying load patterns and power requirements. There are consumers having sufficient load but who would not have excess power for which they wish to avail net metering or any other mechanism, whereas there can be other set of prosumers who would generate excess power during a particular time of the day or on weekend and would require a suitable mechanism of either Net metering/Net-Feed-in/Net Billing for adjustment of excess units generated. Hence, the Commission to define Net Feed-in/Net Billing as per the Electricity (Rights of Consumers) (Amendment) Rules, 2021 and prosumer shall have option to select either mechanism out of the three arrangements i.e., Gross Metering/Net Billing/ Net Feed-in. This will enable wider reach of the policy and would cater to varying type of prosumers."

#### Commission's decision:

The Ministry of Power has issued Electricity (Rights of Consumers) Rules, 2021 vide Notification dated 29.6.2021 wherein the definition of "Gross metering" is given as under:

'(ia) "gross-metering" means a mechanism whereby the total solar energy generated from Grid Interactive Rooftop Solar Photovoltaic system of a Prosumer and the total energy consumed by the Prosumer are accounted separately through appropriate metering arrangements and for the billing purpose, the total energy consumed by the Prosumer is accounted at the applicable retail tariff and total solar power generated is accounted for at feed-in-tariff determined by the Commission;'

According to the aforesaid definition two separate import and export meters are used in case of "gross metering". As per the definition for ""net-metering" or "net feed-in" single bi-directional meter is used. We note that in gross-metering mechanism, Rooftop solar power project inject energy into the grid which is sale of energy to the licensee or consumer; whereas the energy consumption by the consumer at its place of consumption is purchase of energy by it as supply of energy by licensee or other generator. Hence, for metering of both i.e. import and export of energy in case of the gross metering needs seperate meters. Therefore, the Commission decides that in case of "gross metering", two (2) separate meters i.e. import and export meters are used while in case of "net-metering" single bi-directional meter will be used as provided in the Principal Regulations.

In view of the above, it is observed that there is difference in the gross metering in the proposed Draft Amendment Regulations and the provisions of the Electricity (Rights of Consumers) Amendment Rules, 2021 vide Notification dated 28.06.2021 issued by the Ministry of Power. Hence, we decide to keep the definition of "gross metering" aligned with the Notification dated 28.06.2021 of MoP as stated above.

Some of the objectors have suggested for the capacity of the project under net metering to be kept as 500 KW or sanctioned load of the Prosumer whichever is lower. Some of the stakeholders have suggested that the capacity to set up solar rooftop project under net metering be kept as 1 MW. The above issue is dealt with

in later part of this Order.

Some of the objectors/stakeholders have suggested that the definition of "net-feed in"/ "net-billing" be incorporated in the Regulations is concerned, the said definition and energy accounting in such mechanism for solar power plant projects are different and distinct from gross-metering and net-metering. The above definitions were not part of the Draft Amendment Regulations or comments were also not sought from stakeolders on it. Hence, the same is not permissible to allow in final amendment. Hence, above suggestion is not accepted as it is beyond the scope of the proposed amendments.

5. Amendment in definitions and Interpretations 2.1 of the Notification No. 5 of 2016 dated 18.06.2016.

2.1 (p) "Net Metering" means an arrangement under which Rooftop Solar PV System installed at Eligible Consumer's premises delivers surplus electricity, if any, to the Distribution Licensee after off-setting the electricity supplied by the distribution licensee to such Eligible Consumer during the applicable billing period.

## Comments/Suggestions from the Stakeholders:

5.1. It is proposed to align the definition in line with definition given in Electricity (Rights of Consumers) Amendment Rules, 2021.

#### Commission's decision:

The definition of "net metering" provided in the existing Regulations of the Commission is as under:

2.1 (p) "Net Metering" means an arrangement under which Rooftop Solar PV System installed at Eligible Consumer's premises delivers surplus electricity, if any, to the Distribution Licensee after off-setting the electricity supplied by the distribution licensee to such Eligible Consumer during the applicable billing period.

While the definition of "net metering" provided in the Electricity (Rights of Consumers) Amendment Rules, 2021 is as under:

(jb) "net-metering" means a mechanism whereby solar energy exported to the Grid from Grid Interactive rooftop Solar Photovoltaic system of a Prosumer is deducted from energy imported from the Grid in units (kWh) to arrive at the net imported or exported energy and the net energy import or export is billed or credited or carried-over by the distribution licensee on the basis of the applicable retail tariff by using a single bidirectional energy meter for net-metering at the point of supply;'.

On comparision of above definitions it is found that there is minor difference in the language of definition. It is therefore decided to align the definion of net metering as per Electricity (Rights of Consumers) Amendment Rules, 2021. Therefore, the existing definition of "net metering" provided in the existing Regulations is amended as per Electricity (Rights of Consumers) Amendment Rules, 2021 notified by Ministry of Power and accordingly the same is incorporated in the Regulations in place of 2(p) of Principal Regulations by substituting the definition specified in MoP Rules, 2021 as under:

2(p) "net-metering" means a mechanism whereby solar energy exported to the Grid from Grid Interactive Rooftop Solar Photovoltaic system of a Prosumer is deducted from energy imported from the Grid in units (kWh) to arrive at the net imported or exported energy and the net energy import or export is billed or credited or carried-over by the distribution licensee on the basis of the applicable retail tariff by using a single bidirectional energy meter for net-metering at the point of supply;'.

## 6. New definition of "third Party":

## **Comments/Suggestions of Stakeholders:**

"Third party" means a developer setting up solar project on the Rooftop/premises of a consumer for generation or sale of such power to the same consumer in the same premises.

#### Commission's decision:

The provision of "third party sale" is provided in the Gujarat Solar Power Policy, 2021 for different category of consumers i.e. residential, industrial, commercial, institutional and other consumers are different and distinct as under:

# "9. PROJECTS FOR RESIDENTIAL CONSUMERS

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9.2 Solar Projects can also be set up by a developer on the rooftop / premises of a residential consumer for generation and sale of power to such consumer in the same premises (Third Party Sale) for which the developer and consumer shall enter into a lease agreement and/or power sale agreement...

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# 11. PROJECTS UNDER THIRD PARTY SALE

11.2 The sale of electricity by the owner of SPSs to separate consumers shall be considered as Third-Party Sale. Installation of solar projects by a developer for third party sale shall be allowed without any capacity restriction. Developers can also install solar projects on rooftop / premises of a consumer for generation and sale of power to such consumer in the same or different premises or to another consumer by entering into lease agreement and/or power sale agreement....

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In MoP Rules 2020 the provisions for Rooftop Solar projects set up by service provider is provided as under:

11. Consumer as prosumer.-(1) While the prosumers will maintain consumer status and have the same rights as the general consumer, they will also have right to set up Renewable Energy (RE) generation unit including roof top solar photovoltaic (PV) systems – either by himself or through a service provider.

The aforesaid provisions are related with the solar projects set up by service provider (third party sale) is permissible as per the GoG Policy as well as MoP Rules. However, there is difference with regard to set up of such projects at the premises by the service provider (third party sale) as under:

1. As per GoG policy and MoP Rules the solar projects be set up on the same premises, of the consumer/prosumer where the point of injection and consumption are same. As per GoG Policy it is apply to residential consumers and as per MoP Rules it applied to all category of consumers. i.e. industrial, commercial and other consumers.

- 2. The GoG policy provides that in case of industrial, commercial, institutional and other consumers who desire to take power supply from service provider (third party sale), the service provider (third party sale) can set up solar project on the same or different premises of the consumer for generation and supply to such consumers or to another consumer. Therefore, it is permissible as per aforesaid provision that the service provider may set up solar project at different point of injection and consumption of energy by the consumer/prosumer. While in case of MoP Rules such provision is not permissible.
- 3. In case of inconsistency between the provision of Rules notified under the Act and Government Policy, the provisions of Rules shall prevail over the provisions of the Policy.
- 4. Considering the above, it is decided to align the above provisions as per the provisions of MoP Rules.

Therefore, the Commission decides to add definition of third party as under: "Third party" for this Regulations means a developer setting up solar project on the Rooftop/premieses of a consumer/prosumer for generation and sale of such power to the consumer/prosumer in the same premises.

## 7. Amendment in Regulation 3 (Scope and Application) of the Principal Regulation:

# Amendment in Regulation 3.1 of the Principal Regulation

The Ministry of Power has notified The Electricity (Rights of Consumers), Rules, 2020 and Amendment 2021 wherein it is provided that net metering arrangement is permissible at premises of prosumer. Considering the same, the Commission had suitably proposed an amendment in Regulation 3.1 being part of Regulation 3, i.e. Scope and Application of the Principal Regulations by issuing Draft Regulations and invited comments and suggestions on it.

#### **Comments/Suggestions from the Stakeholders:**

No comments received from the stakeholders.

#### Commission's decision:

No comment is received on the proposed draft amendment in Regulation 5 of the Principal Regulations. We decide to retain the said proposed amendment as under:

"The words "or from solar power plant set up by third party" shall be added after the words "who are receiving electricity from its own generating source" and at the end of the said regulations, i.e. after the words "situated in Distribution Licensee area", the sentence "or prosumer who consumes electricity from the grid and injects electricity from its Solar Power System into the grid for supply to Distribution Licensee using same point of supply" shall be added."

### Amendment in Regulation 3.2 (b) of the Principal Regulation

The Commission had proposed Amendment in Principal Regulation 3.2 (b) in Draft Regulations as under:

"In Regulation 3.2 (b) the words "or other premises except Residential" shall be added at the end of the sentence after the words i.e. "in the consumer premises".

## **Comments/Suggestions from the Stakeholders:**

The Electricity (Rights of Consumers) Amendment Rules, 2020 notified by the MoP provides that net-metering arrangement is permissible only for prosumer i.e. a person who consumes electricity from the grid and can also inject electricity into the grid for distribution licensee using same point of supply. This definition is also retained by the Commission in the Draft Amendment at Regulation 2.1(s). Accordingly, the draft amendment needs to be suitably modified.

It is also suggested that in some cases of residential/industrial consumers adjoining terrace belongs to same ownership, in such cases, the consumers shall be allowed to use other premises having one meter connectivity considering as captive consumption.

Some of the stakeholders have suggested that the words "or other premises except Residential" be deleted.

#### Commission's decision:

The "Prosumer" is defined in Regulations 2.1 (sa) in the proposed Amendment Regulations. The prosumer retained a status of consumer and also having right to set up solar project itself or through service provider in the premises and consume and inject energy from using same point of supply.

Therefore, in case of prosumer the energy generated, injected and consumed by the person using the same point of supply. The word "or other premises except residential" is inconsistent with the provisions of the Electricity (Rights of Consumers) Amendment Rules, 2020 notified by the Ministry of Power.

With regard to the contention/suggestion of the stakeholders that the residential/industrial consumers having adjoining terrace belonging to the same ownership be allowed to use adjoining terrace for same meter connectivity as captive consumption is concerned, when the consumer is having two premises (building) adjoining with each other with same ownership and having only one point of connection for supply from where energy is utilized by consumers is metered, in that case, the solar rooftop project set up in the adjoining terrace (premises) having same ownership from which the energy is generated and injected into the grid using the same point of supply is permissible as per the Regulations.

Considering the above, the suggestions of the stakeholders that in proposed amendment in Regulation 3.2 (b) to add word "or other premises except Residential" be deleted with consideration of point of injection of energy and supply be the same is valid and therefore, the Principal Regulations is retained to read as under:

"3.2 (b) shall be located in the consumer's premises"

## 8. Amendment in Regulation 4 (General Principles) of the Principal Regulation:

The Commission had proposed Amendment in Principal Regulation 4 (General Principles) in Draft Regulations as under:

"The word "/gross metering" shall be added in first para of the Regulation 4 of Principal Regulations after words "The Distribution Licensee shall provide the net metering" and the word "/prosumer" shall be added between the words "arrangement to the eligible consumer" and the words "who intends to install grid connected Rooftop Solar PV System"."

In first proviso of Regulation 4 the word "/prosumer" shall be added between the word "consumer" and "is eligible to install the grid connected Rooftop Solar PV System".

#### **Comments/Suggestions from the Stakeholders:**

No comments received from the stakeholders.

#### Commission's decision:

No comment is received on the proposed draft amendment in Regulation 4 of the Principal Regulations. We decide to retain the aforesaid proposed amendment.

# 9. Amendment in Regulation 5 (Capacity Targets for Distribution Licensee) of the Principal Regulation:

The Commission had proposed Amendment in Principal Regulation 5 (Capacity Targets for Distribution Licensee) in Draft Regulations as under:

"The word "/gross metering arrangement" shall be added in first para of the Regulation 5 of Principal Regulations after words "The Distribution Licensee shall provide the net metering arrangement" and the word "/prosumers" shall be added after the word "Eligible consumers".

### **Comments/Suggestions from the Stakeholders:**

No comments received from the stakeholders.

#### Commission's decision:

No comment is received on the proposed draft amendment in Regulation 5 of the Principal Regulations. We decide to retain the aforesaid proposed amendment.

# 10.Amendment in Regulation 6 (Eligible Consumer and Individual projects capacity) of the Principal Regulations:

The Commission had proposed Amendment in Principal Regulation 6 (Eligible Consumer and Individual projects capacity) in Draft Regulations as under:

"Amendment in Regulation 6 titled "Eligible Consumer and individual project capacity" shall be substituted by the title "Eligible Consumer/Prosumer and individual project capacity".

# **Comments/Suggestions from the Stakeholders:**

No comments received from the stakeholders.

#### Commission's decision:

No comment is received on the proposed draft amendment in Regulation 6 of the Principal Regulations. We decide to retain the aforesaid proposed amendment.

# 11. Amendment in Regulation 6.1 (Eligible Consumer and Individual projects capacity) of the Principal Regulations:

The Commission had proposed Amendment in Principal Regulation 6.1 (Eligible Consumer and Individual projects capacity) in Draft Regulations as under:

"From the sentence "In addition to the general eligibility defined in Regulation 2.1(I) of these Regulations, the Eligible Consumer for the Rooftop Solar PV System with net metering shall:", the words "with net metering" shall stand deleted and the word '/Prosumer' inserted after the Eligible Consumer. Accordingly, the said Clause shall read as under:

"In addition to the general eligibility defined in Regulation 2.1(1) of these Regulations, the Eligible Consumer/Prosumer for the Rooftop Solar PV System shall:",

# **Comments/Suggestions from the Stakeholders:**

No comments received from the stakeholders.

#### Commission's decision:

No comment is received on the proposed draft amendment in Regulation 6.1 of the Principal Regulations. We decide to retain the aforesaid proposed amendment.

# 12. Amendment in Regulation 6.1 (ii) (Eligible Consumer and Individual projects capacity) of the Principal Regulations:

The Commission had proposed Amendment in Principal Regulation 6.1 (ii) (Eligible Consumer and Individual projects capacity) in Draft Regulations as under:

"The Regulation 6.1 (ii) shall be amended by inserting the word "or possess on rental basis" between the words "be in legal possession" and the word "of the premises including the rooftop or terrace or building or infrastructure or open areas of the land or part or combination thereof on which the Solar PV System is proposed to be installed."

#### **Comments/Suggestions from the Stakeholders:**

No comments received from the stakeholders.

#### Commission's decision:

No comment is received on the proposed draft amendment in Regulation 6.1 (ii) of

the Principal Regulations. We decide to retain the aforesaid proposed amendment.

# 13. Amendment in Regulation 6.1 (iv) (Eligible Consumer and Individual projects capacity) of the Principal Regulations:

The Commission had proposed Amendment in Principal Regulation 6.1 (iv) (Eligible Consumer and Individual projects capacity) in Draft Regulations as under:

"6.1 (iv) Consume all of the electricity generated from the Rooftop Solar PV system at the same premises or other premises. If the consumer is not able to consume all of generated electricity in the same premises or other premises, he shall be governed by Regulation 9 of these Regulations."

## **Comments/Suggestions from the Stakeholders:**

The Electricity (Rights of Consumers) Amendment Rules, 2020 notified by the MoP provides that net-metering arrangement is permissible only for prosumer i.e. a person who consumes electricity from the grid and can also inject electricity into the grid for distribution licensee, using same point of supply. This definition is also retained by the Commission in the Draft Amendment at Regulation 2.1(s). Accordingly, the Draft Amendment needs to be suitably modified by removing word "or other premises" from the proposed amendment 6.1. (iv) Regulation.

#### Commission's decision:

The "Prosumer" is defined in Regulations 2.1 (sa) in the proposed Amendment Regulations. The prosumer not only retaines status of consumer but also has a right to set up solar rooftop projects by itself or through service provider in the consumer's premise. The point of supply of such consumer be utilized for injection of energy generated from such Roofop Solar Project and consumption of energy at same premises.

Therefore, in case of prosumer, the energy generated, injected and consumed by the person using the same point of supply. The word "or other permises" is inconsistence with the provisions of the Electricity (Rights of Consumers) Amendment Rules, 2020 notified by Ministry of Power. Therefore, the word "or other premises" is decided to delete from the proposed amendment. Accordingly, the Original Regulation 6.1 (iv) of the Principal Regulations is amended as under:

6.1 (iv). consume all of the electricity generated from the Rooftop Solar PV System at the same premises. If the consumer/prosumer is not able to consume all of generated electricity in the same premises, it shall be governed by Regulation 9 of these Regulations.

## 14. Addition of Regulation 6.1 (v) in the Principal Regulations:

The Commission had proposed to add Regulation 6.1 (v) (Eligible Consumer and Individual projects capacity) in Principal Regulation through Proposed Draft Regulations as under:

"6.1 (v) Inject all the electricity generated from the Rooftop Solar PV System into the grid as sale to the licensee at the tariff determined by the Commission."

# **Comments/Suggestions from the Stakeholders:**

Some of the Stakeholders have suggested that this Clause needs to be deleted, as this new Clause is in contradiction with the new Clause 6.1.(iv).

Some of the objectors contended that in case of consumer/ prosumer with new metering system, it will not be in a position to utilize electricity generated from Rooftop Solar Project and inject energy into the grid in that case there is no differentiation between Net Metering and Gross Metering.

#### Commission's decision:

The suggestion of the stakeholders that Regulation 6.1(v) needs to be deleted as it is in contravention to Regulation 6.1(iv) is not accepted because the amendment in the Principal Regulations proposed by Third Amendment by the Commission wherein new provision with regard to gross meter and gross metering proposed to be introduced wherein the "consumer"/ "prosumer" is eligible to generate and inject energy into the grid under net metering provision, gross metering provision from solar rooftop projects. This is an additional provision in the Principal Regulations proposed to be added by way of amendment Regulation 6.1(v) wherein the consumer/prosumer is able to inject energy into the grid only for sale to the licensee at the rate determined by the Commission. In such case there is no consumption of energy generated and injected from the Solar Rooftop Projects at the consumer/prosumer premises. Hence, the

comment/suggestion of the objector is not accepted and the Commission decides to retain the amendment as suggested.

## 15. Addition of Regulation 6.1 (vi) in the Principal Regulations:

The Commission had proposed to add Regulation 6.1 (vi) (Eligible Consumer and Individual projects capacity) in Principal Regulation through Proposed Draft Regulations as under:

"6.1 (vi) Any individual or company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person shall be eligible for setting up of Solar Power Systems (SPSs), either for the purpose of captive use and / or for selling of electricity to the Distribution Licensee or Third Party whether or not under the Renewable Energy Certificate (REC) mechanism or fulfilment of Renewable Purchase Obligation subject to provisions of the Electricity Act, 2003, as amended from time to time."

# **Comments/Suggestions from the Stakeholders:**

No comments received from the stakeholders.

### **Commission's decision:**

No comment is received on the proposed draft amendment in Regulation 6.1 (vi) of the Principal Regulations. We decide to retain and to add the same after Regulation 6.1 (v).

# 16. Amendment in Regulation 6.2 of the Principal Regulations read with First Amendment and Second Amendment:

(a) Rooftop Solar PV System shall be permitted for net metering for loads up to 10 kW and for gross metering for loads above 10 kW.

#### **Comments/Suggestions from the Stakeholders:**

The objectors/stakeholders have raised following different objections/suggestions on the proposed amendment in Regulation 6.2 of the Principal Regulations pertaining to capacity of Rooftop Solar Power Projects permitted to set up by the consumers.

(i) The proposed amendment in the Regulations state that the solar rooftop projects be permitted for load upto 10 kW under Net Metering provisions and

- above 10 kW load under gross metering provisions.
- (ii) The rooftop projects be permitted up to 500 kW capacity load under Net Metering provisions as per amendment issued by Ministry of Power vide Notification dated 28.06.2021.
- (iii) The Rooftop projects upto 1 MW be permitted to set up under Net Metering provisions as per existing Regulations (Principal Regulations) and the Government of Gujarat Solar Policy, 2021.
- (iv) The solar rooftop projects be permitted under Net Metering provisions up to 5 MW.
- (v) Introduce the category of behind-the-meter Solar PV Projects and net billing in the Regulations, giving more choice to the consumers. Behind-the-meter systems will need to be register with Discoms and has made provisions related to interaction of such projects with grid.
- (vi) Restricting Net Metering for Rooftop Solar capacity up to 10 kW only will severely impact its proliferation and vast potential shall remain unrealized. Even, the notification by Central Government of the Electricity (Rights of Consumers) Amendment Rules, 2021 has provided for capacity upto 500 kW for Net Metering for Solar Rooftop PV System.

### Commission's decision:

There are diversified suggestions/objections from the stakeholders with regard to the capacity of Solar projects permitted under Net Metering, gross metering provisions as stated above.

Some of the objectors have suggested that the ceiling for setting up solar rooftop projects permitted for net metering up to load of 10 kW while some of the objectors suggested that the solar rooftop projects for gross metering for load above 10 kW be retained.

Some of the objectors have suggested that the aforesaid provisions of proposed amendment of ceiling of solar rooftop projects for net metering and gross metering provided in the amended Regulations linked with load of  $10\,\mathrm{kW}$  needs to be revisited and limited the setting up solar projects under Net Metering be enhanced from  $10\,\mathrm{kW}$  to  $500\,\mathrm{kW}/1000\,\mathrm{kW}/5000\,\mathrm{kW}$ .

Some of the objectors have suggested that the concept of Behind-the-Meter for solar projects without any ceiling as per MoP Rules be permitted under net billing or net feed-in provisions be introduced without applicability of Forecasting and Scheduling Regulations notified by the Commission.

The purpose of these (Net-Metering) Regulations is to promote Rooftop Solar Power Projects by utilization of roof available at the premises of the consumers so that the land utilization for setting up such projects may be avoided. It is also suggested to introduce to meet out the envisaged capacity of 175 GW RE projects to be set up by the Government of India.

The Commission has notified GERC (Net Metering) Regulations, 2016 vide Notification No. 05 of 2016 with consideration of above aspects providing ceiling of 1 MW wherein the consumer is eligible to set up the rooftop projects. The said Regulations is not having concept of the gross metering and net feed-in or net-billing. The Commission in the proposed amendment has introduced the gross metering provisions which provides that the consumer who desire to set up solar plant and sell the energy to the licensee by feeding it into the grid and not consume any energy for self-consumption or sale to other consumers.

The Commission in the proposed amendment has provided that the solar rooftop projects permitted under Net Metering provisions for load upto 10 kW and above 10 kW shall be under gross metering provisions. The said provisions proposed by the Commission with consideration of MoP Rules, 2020 dated 31.12.2020. The said Rules have been amended by the MoP vide Notification dated 28.06.2021 which provides that the net metering, gross metering, net billing or net feed-in arrangement shall be in accordance with the Regulations made by the Commission from time to time. The existing Regulations for Net Metering notified by this Commission already provided the net metering provisions in the Regulations wherein the capacity of solar projects permitted upto 1 MW which is prevailing at present.

There is no provisions of gross metering, net feed-in or net-billing mechanism for solar projects set up by the prosumer/consumer. However, in the draft amendment the Commission had proposed to introduce gross metering provisions and invited comments and suggestions on it.

As stated in earlier para that the solar rooftop projects having various benefits like reduce power procurement and supply cost of the distribution licensee, reduce the T & D losses, provide electricity at lower rate than purchase price and distribution licensees to sale it to consumer at higher rate. Energy consumed by the consumer is utilize for RPO compliance by distribution licensee etc. Hence, we decide to retain the provision of ceiling of Solar Rooftop project set up under Net Metering provision is permitted upto load of 1 MW with consideration of the existing Regulations and amended Rules notified by MoP.

We decide that the consumers are at liberty to set up the solar rooftop project under gross metering provision having capacity of above 10 kW and upto 1 MW is eligible to generate the electricity and inject into the grid as sale of energy to the licensee at the rate derived as per the decision/methodology of the Commission in Petition No. 1802 of 2019 for the solar projects.

As far as the suggestions of the stakeholders that the Commission may introduce/allow solar projects set up by the consumers behind the meter under net billing/net feed-in provision is concerned, it is a fact that such provision is not a part of the Draft Regulations notified by the Commission. Therefore, the necessary provisions of pre-publication prior to notify any Regulation under the Act, proceedings is not followed in the aforesaid proposed amendment. Hence, it is not permissible to incorporate the proposed amendment in these Regulations as it is not accepted.

The contention of some of the objector/stakeholder that the solar rooftop projects having more than 1 MW capacity connected with the licensee supply be exempted from the GERC (Forecasting and Scheduling) Regulations, as they are consuming the energy generated from the plant at the same place and only surplus energy injected into the grid is not acceptable as it is against the provisions of GERC (Forecasting and Scheduling) Regulations notified by the Commsision. The aforesaid Regulations do not differentiate between the solar projects set up under different mechanism at different places.

Further, the same is not permitted as removal of capacity for captive use above 1 MW grid connected Solar PV Projects needs to be brought under the provisions of

Scheduling and Forecasting Regulations wherein such capacity is specified as 1 MW. It leads to difficulty in energy accounting carried out by SLDC for Deviation and Settlement Mechanism under the Gujarat Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019 notified by the Commission.

Considering the above, we decide to amend Regulation 6.2 (a), (b) & (c) as under:

- (a) Rooftop Solar PV System shall be permitted under Net-Metering provisions for projects having capacity of 1 kW and above and upto 1000 kW.
- (b) Rooftop Solar PV System shall be permitted for gross-metering provisions for projects having capacity of above 10 kW and upto 1000 kW.

Provided that the installed capacity is aligned with the provisions for permitting consumer connections as stated in the Gujarat Electricity Regulatory Commission (Electricity Supply Code and Related Matters) Regulations, 2015 as amended from time to time read with the provisions of GERC (Terms and Conditions of the Intra-State Open Access) Regulations, 2011 as amended from time to time.

# (c) Capacity of Solar Power Plant set up by the Eligible Consumers:

Subject to limitation specified in Clause (a) and (b) above, the capacity of Solar Power Plant set up by the Eligible Consumers/Prosumers are permitted as under:

- (i) Solar Projects set up by residential consumers on their rooftop/premises shall be allowed irrespective of consumer sanctioned load. Incentives under existing schemes can be availed by consumers as per the provisions of the scheme.
- (ii) No capacity restrictions upto sanctioned load/contracted demand shall be applicable for the captive consumers and project set up under Third Party Sale within the permissible limit.
- (iii) For the projects set up under REC mechanism for captive use/third party sale, installation of solar projects shall be allowed up to sanctioned load/contracted demand.

(iv) The capacity of solar plant set up for fulfillment of RPO requirements shall be permitted regardless of their sanctioned load/contracted demand.

# 17. Amendment in Regulation 6.2 of the Principal Regulations read with First Amendment and Second Amendment:

(b) The installed capacity shall not be less than 1 kW and shall not exceed 1 MW.

# **Comments/Suggestions from the Stakeholders:**

The installed capacity shall not be less than 1 kW and shall not exceed 1 MW for all the categories except the Captive power projects for self-consumption with no export to grid and where the upper limit will be sanctioned load / contract demand.

Captive Consumers opting for above 1 MW capacity will not be able to get the benefit of surplus injection as they will not be allowed to export into grid. Consumer has to install the required safety & protection devices to ensure that there is no export into grid at any point of time.

It is proposed that capping installed capacity at 1 MW must be removed.

It is suggested that Clause should include broad clarification for Capacity Restriction to provide more clarity for different categories. Clause 6.2 (b) states about installed capacity restriction from 1 kW to 1 MW and as per Clause 6.2 (c-ii), there is no capacity restriction for the captive consumers and project set up under third party sale.

#### Commission's decision:

The capacity permitted to set up the solar rooftop projects is already decided in earlier para under Net Metering and gross metering provisions, wherein; under Net Metering it is permitted that the project developer to consume the energy at place of consumption by the consumer or prosumer and surplus energy, if any, available to export into the grid. While in case of gross metering the energy generated needs to only be exported into the grid. Therefore, the contentions of objectors of no export of energy is not valid and the same is not acceptable.

The contention of objector that Captive Consumers are not permitted to export surplus energy injection into the grid as it is not in consonance with the proposed

amendment is not correct. Therefore, the contention based on it is not accepted.

The classification for Capacity Restriction is provided in Clause 6.2 (b) for different category of solar rooftop projects.

The contention of the objectors/stakeholders that there is conflict between Clause 6.2 (b) and Clause 6.2 (c-ii) is concerned, it is clarify that the aforesaid provisions are modified where the capacity for net metering provision is kept between 1 kW upto 1 MW and for gross metering the capacity is above 10 kW and upto 1 MW. Further, the contention of the objectors with regard to conflicts between installed capacity of the plant specified above and no restriction of capacity set up for captive consumers and third party sale is concerned, it is clarified that the interpretation for the aforesaid provisions need to be read combinedly with consideration that the capacity of the plant specified under net metering and gross metering mechanism should not be defeated. Hence, the objections are not accepted.

# 18. Clause No. 8.2 (2):Interconnection with the Grid: Standards and Safety.

Amendment in title of Table and at Sr. No. (iv) provided in Regulation 8 (2) of the Principal Regulations are amended as under:

Sr. No.	Connected load of eligible consumer/prosumer	Connectivity level
(iv)	Above 100 kW/kVA	11 KV, 3 Phase, 50 Hz.

# **Comments/Suggestions from the Stakeholders:**

Some of the objectors have stated that Clause 8.2 (iv), rooftop generation above 100 kW needs connectivity through 11 kV only which shall require dedicated step-up transformers for connectivity of solar rooftop system with associated control and protection systems is very costly and uneconomical in view of capital expenditure and recurring no load and load losses. In the circumstances, proposal shall be unviable for the industries.

 Considering the above facts, connectivity for Rooftop Solar Power shall be allowed for direct use of generation at 415V level of respective Sub-stations with unidirectional energy meter to facilitate GEDA to certify solar power generation for fulfillment of RPO.

#### Commission's decision:

The aforesaid contention of the objectors are not acceptable as the consumers' supply received from the licensee at relevant voltage level having the connectivity of supply specified in the relevant Regulations (Supply Code). The connection of eligibile consumer/prosumer having connected load of 100 kW/KVA be permitted connectivity at 11 KV 3 Phase 50 Hz as per the provisions of Supply Code. The connectivity of solar projects of above category of consumers be given with consideration of point of supply i.e. connectivity with the licensee network. Therefore, the consumer/prosumer desired to set up solar projects under any mechanism specified in the Regulations the provisions of Supply Code for connectivity be applied. Therefore, the contention of the objectors that connectivity of such consumer be permitted on different voltage level is not permissible as per the provisions of Supply Code. Hence, the same is rejected.

19. Banking charges for Residential and Government Consumers, Captive Consumers, Third Party Sale, Projects under REC mechanism and Solar Projects for RPO Compliance

#### 9.1 For Residential and Government Consumers:

9.1.5 No Banking charges shall be applicable in solar power consumed by Residential Consumers.

## 9.2 For the projects set up under captive use:

9.2.11 Banking charges of Rs.1.50 / unit shall be applicable on solar energy consumed in the case of Demand based Consumers shall be applicable. In case of MSME manufacturing units and other than Demand based Consumers, Banking Charges of Rs.1.10 per unit on Solar Energy consumed shall be applicable. Banking Charges shall not be applicable to government buildings.

#### 9.3 PROJECTS UNDER THIRD PARTY SALE:

9.3.8 Banking charges of Rs 1.50 / unit shall be applicable on solar energy consumed in case of Demand based Consumers shall be applicable. In case of MSME units

and other than LT Demand based Consumers, Banking Charge of Rs.1.10 per unit shall be applicable on Solar Energy consumed shall be applicable. Banking Charges shall not be applicable to government buildings.

### 9.4 PROJECT UNDER REC MECHANISM

9.4.8 In case of Projects set up for third party sale, cross subsidy surcharge and additional surcharge shall be applicable similar to normal open access consumers as determined by the Commission from time to time.

#### 9.5 SOLAR PROJECTS FOR RPO COMPLIANCE

9.5.5 No banking charges shall be applicable.

# **Comments/Suggestions from the Stakeholders:**

(i) Some of the objectors have suggested that there can be no dispute that the provision of banking facility has a financial impact on the distribution licensees and imposition of banking charges is neither unprecedented nor arbitrary. In the Order in Petition No. 1936/2021, the Commission has acknowledged impact of Rs 2.60 per unit due to banking facility provided to the Rooftop Solar energy consumers.

Residential consumers being 70% to 80% of total RTS installations, it is essential to ascertain that shortfall in recovery from these consumers does not affect general body of consumers who has not installed RTS. Considering that year-on-year 600 MW residential RTS installation is proposed to be added in Gujarat, there will be severe repercussion owing to proposed exemption from banking charges for residential category. Therefore, banking charges for residential is inevitable.

Even for other consumers, RTS is preferred only for commercial gain. Hence, there has to be equitable banking charges for other categories as well. Any subsidy in banking will have severe impact on other consumers. Moreover, the benefit of banking facility is provided for entire 25 years of the project life which has substantial financial implications on the distribution companies, considering the quantum of solar capacity utilization.

Banking charges is imperative to recover the additional cost implication on distribution licensee for keeping equivalent additional conventional generation capacity available. Any exemption will give rise to new level of cross subsidy which is against the provisions of the Act.

Further, there are consumers, who set up solar rooftop under RPO mechanism for their statutory compliance. Hence, burden of same cannot be passed on to general body of consumers.

Apart from the financial implication for the distribution companies, there are issues related to system operation and load/generation balancing for providing banking facility.

Hence, it is proposed that banking charges of Rs. 2.60 per unit is recovered uniformly from all categories of consumers, be it residential, commercial, government, or industrial consumers – MSME or non MSME. The cost of solar generation is reduced. The benefit of such cheaper solar power also need to be socialised instead of allowing it to be privatised under the guise of solar energy, consumers cannot be allowed to load cost on other consumers and privatise the benefits.

(ii) Some of the stakeholders suggested that no banking charges are leviable on solar energy utilising consumers as licensees are benefitted to receive surplus energy available at quite cheaper rate and sale it higher rate. Further, it is helpful to reduce power procurement cost of the distribution licensees. Quantum of such energy utilise is quite low in comparision to total consumption of energy by the consumers and its implication on the revenue of the licensee is also very low. It is beneficial in reduction incost of supply of the licensee to the consumer, reduction in power procurement of cost, reduction in T & D losses, sale surplus energy received from solar project set up under these Regulations at quite lower rate in comparision to procure and supply to the consumer and resale such power to other consumers at the place of consumption with huge higher rate in comparision to purchase rate of such energy. Moreover, it is also helpful to the licensee to reduce its RPO compliance for such energy consumed by the consumer by avoiding the purchase of renewable energy and supply to the consumer at higher rate.

#### Commission's decision:

The suggestions of some of the stakeholders that the banking charge in the proposed amendment Regulations as stated above needs to be revisited with consideration of the banking charge of Rs. 2.60 per unit determined by the Commission in its Order dated 11.06.2021 in Petition No. 1936 of 2021.

The main contention is that the banking charge needs to be imposed on all consumers on equitable ground and avoid additional cost implication on other consumers and distribution licensees, it is against the new level of cross subsidization. Moreover, the benefit of banking facility is provided for entire 25 years of the project life which has substantial financial implications on the distribution companies, considering the quantum of solar capacity utilization and its impact on the distribution licensee.

Further, there may be some consumers who set up rooftop solar projects under RPO mechanism for fulfilment of their statutory requirement. Moreover, the Solar Projects set up by the consumers/prosumers under REC mechanism for commercial purpose. Therefore, the banking charge needs to be imposed on the aforesaid category of consumers and they shall not be exempted from banking charge.

The banking charge is not proposed on the residential consumer by the Commission considering the number of such consumers who set up Solar Rooftop Project at their premises for self consumption and surplus energy available, if any, to sell to the licensee is quite lower in comparison to total energy supplied to the consumers by the licensee. Further, there is no data submitted by the objectors/stakeholders specifying that what is the quantum of surplus energy, if any, available from such consumers as sale to the licensee. Moreover, the Government of India has envisaged to set up 175 GW Renewable Energy Projects consists of 40 GW Rooftop projects. To achieve the aforesaid target, the Rooftop projects set up by the Residential consumers which needs to be promoted as it is helpful to avoid use of land as well as utilize the space available at consumer premises. Further, the Rooftop projects set up by any category of consumers at its premises provide following benefits:

- 1) Reduce power procurement cost of the licensee to that extent of such energy consumed by such consumer.
- 2) Reduce T&D losses
- 3) Provide surplus energy if any available at quite chearprer rate in comparision to

- procurement of such energy and supply to the consumer by the licensee.
- 4) Helpful to meet out the RPO requirement to the extend of such energy at cheaper rate than purchase of such energy by the licensee.
- 5) The energy consumption of solar rooftop projects by residential consumers is qualify as fulfilment of RPO of the distribution licensees. The licensee shall not require to purchase the renewable energy to that extent and benefited by way of avoiding cost for fulfilment of RPO.
- 6) Sale of surplus energy purchased from the Rooftop Solar Project at higher rate to other consumers and to increase the higher revenue realization from such energy sale.

Considering the above benefits as well as quite low consumption of residential consumers through Solar Rooftop projects and to promote the Renewable energy based generation envisaged in the Act, Rules and the Policy, it is decided that the Residential consumers are exempted from banking charges.

The banking charge proposed in the Draft Amendment Regulations at different rates for different category of consumers instead of Rs. 2.60 per unit determined by the Commission in its Orders in Petition No. 1936 of 2021 with consideration of the said decision wherein the Commission has decided that the banking charges at different rate is applicable to different category of consumers as promotional measures and rationale given in it. Therefore, any change in the aforesaid rates qualify as review of the said Order which is not permissible.

The contention of the objector that the banking charge shall be apply on (i) solar projects set up under REC mechanism and (ii) solar projects set up for RPO compliance are not acceptable as the solar rooftop projects set up under aforesaid mechanism, the energy accounting in such category of project carryout in 15 minutes time block only. Since, there is no banking of energy in such cases and hence, there is no question of banking charges.

Considering the above, the objection/suggestion imposed banking charges of Rs. 2.60 per unit to all category of consumers/solar rooftop projects is rejected.

The banking charge @ Rs. 1.50 per unit shall be applicable to solar energy consumed by demand based consumers and in case of MSME manufacturing captive consumers

as well as other than demand based consumers the same is @ Rs. 1.10 per unit. Further, for Government buildings no such banking charge is applicable. In so far as the suggestion by some objectors that banking charge of Rs. 2.60 per unit shall be applicable to the consumers who consume the electricity generated from solar rooftop projects is concerned, the differential banking charges for demand based consumers as well as MSME and non-demand based consumers proposed in the Amendment Regulations is with consideration of different characteristics of the above consumers. The aforesaid consumers are captive consumers who have set up the plant for self use of energy as decied by the Commission in its order dated 11.06.2021 and corrigendum Order dated 6.07.2021 in Petition No. 1936 of 2021. The banking charge of Rs. 2.60 per unit determined by the Commission in Petition No. 1936 of 2020 with consideration of different factors the Commission has decided the applicability of banking charge @ Rs. 1.50 per unit as well as Rs. 1.10 per unit and no banking charge is applicable for Government buildings as per the decision by the Commission in its Orders in Petition No. 1936 of 2020. Further, any change in the banking charge to the captive consumers under demand based consumers or MSME or non-demand based consumers or third party sale as decided in above Orders in Petition No. 1936 of 2020 and in the present Regulations @ Rs. 2.60 per unit it amounts to review of above Orders. Moreover, and differential treatment to the ground mounted projects as well as roof top projects. Therefore, the contentions/ suggestions of the stakeholders are not accepted and the Commission decides to retain the above amendment as stated in the Draft Regulations.

The suggestion/comments of the stakeholder that the solar rooftop projects set up for RPO compliance shall be liable to pay applicable banking charges to them is not accepted as the energy accounting of energy generated and set-off of such energy to the consumers be given at 15 minutes time block. Hence, no banking facility is provided as per Regulation 9.5.5 for this category of consumers. Therefore, the banking charge is not applicable to such consumers.

## **20. Energy Accounting and Settlement:**

9. (c) In case of Prosumer set up the Solar Rooftop projects set up under Gross Metering provision, the electricity generated and supplied from such Solar Rooftop Project to the Distribution Licensee shall be shown separately in the bill issued by the Distribution Licensee for payment of such electricity to the Prosumer at the rate determined by the

Commission as decided in Petition No. 1802/2019. The electricity supplied by the Distribution Licensee to such Prosumer shall be stated separately in the bill by the licensee or each billing period for payment as per tariff rate applicable to such consumer as may be decided by the Commission.

# **Comments/Suggestions from the Stakeholders:**

If a prosumer intends to set up more capacity of the rooftop Solar for captive use beyond the permissible limit of net-metering, they should be allowed to install such capacity and be allowed to use for the captive use by paying applicable transmission/distribution charges only under alternate mechainsm.

Such prosumers need not pay transmission/distribution losses and also need not lay a separate line to the nearest Sub-station.

Only a separate meter to register such solar power generation is required for the purpose of determining transmission/distribution charges.

While allowing the choice of net-metering / net-billing / gross-metering / Behind-the-Meter systems to all consumers, it is suggested to have a slightly varying treatment for projects up to  $10 \, \text{kW}$ , between  $10\text{-}100 \, \text{kW}$  and  $> 100 \, \text{kW}$  as follows.

Project Size	<10kW	10-100 kW	>100 kW
Accounting framework	Net-metering	Net-metering OR Behind the Meter system or net-billing	Gross metering, Behind the meter systems or net- billing
Banking	Allowed on annual basis	Allowed on monthly basis for net-metering	Not Applicable
Banking Charges	Waived for small systems or until such time as some minimum rooftop capacity (say 2000 MW) comes online	For net-metering, should be levied, should be determined by the Commission. To begin with could be linked to ToD charges or could be roughly Rs 1/kWh for each unit banked.	Not Applicable

Buy back rate

Excess quantum exported after banking shall be purchased by the Distribution Licensee at the weighted average tariff of large-scale solar projects of 5 MW and more adjusted for transmission and distribution losses, discovered through Competitive Bidding in last Financial Year, and adopted by the Commission.

Alternatively, it could be 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%, on such rate.

For net-billing, any excess generation immediately not consumed as load. which is injected into the grid in each15minute block will be valued at the lowest variable cost of the Discom in respective 15 -minute block and the credit of this amount would be given to the consumer by the DISCOM in each billing cycle OR All excess injected

All excess injected into the grid can be bought at a single rate of Rs 2-2.5/kWh.

#### Commission's decision:

16. The suggestion of the stakeholders that the Prosumer be permitted to set up Rooftop Solar Projects for captive use beyond the permissible limit under Net-Metering by paying applicable transmission/distribution charges under only Alternate Mechanism. As regards to the contention of stakeholders that the Prosumers need not pay transmission/distribution losses and not to lay a separate line to the nearest sub-station is concerned, the same is governed by the relevant provisions of the Commission's Regulations and Orders.

The suggestion of the stakeholders to keep different mechanism of Net-Metering, Net-Billing, Gross-Metering, Behind-the-Meter systems etc. under which consumer/prosumer set up plant is concerned, the same is already decided in earlier para, hence, no repetation is required. So far as banking facility, banking charge and buy back rate of the surplus energy are concerned, the same were decided by the Commission in its Orders in Petition No. 1936 of 2021 for different categories of consumers. Hence, any deviation from the same is not acceptable and the Commission decides to retain the said clause as per the proposed amendment.

## **21. Energy Accounting and Settlement:**

9. (d) ......However, in case of any additional/reduction in Solar Capacity or Contracted / Sanctioned load, the earlier set-up Solar Rooftop project arrangement shall be considered different and distinct and a fresh agreement under existing Regulations shall be signed for additional capacity.

# **Comments/Suggestions from the Stakeholders:**

The stakeholder suggested that in case of addition of capacity in existing plant capacity be energy accounted separately be removed and all capacity consists of the old/new plant capacity be energy accounted in the same manner.

Accordingly, it is suggested that in the proposed Draft Regulation 9 (d) stipulates different accounting treatments and norms for the same consumers who have set up rooftop capacity under the applicability of different Regulations. This will make it difficult to implement the energy accounting provision as criteria for Rooftop Solar PV System is amended from time to time. The important provisions such as Energy accounting, Metering, Billing, Rate for purchase of surplus energy, capacity restriction for solar rooftop are amended from time to time. For instance, Banking facility / Netmetering facility was allowed on billing cycle basis under earlier Net-Metering Regulations which is now proposed to be changed from 07:00 to 18:00 Hours daily basis for HT Consumers and 07:00 to 18:00 Hours on billing cycle basis for LT consumers. Similarly, the rate for purchase of surplus energy was also different under previous Regulations.

Thus, there is operational, implementation and monitoring related difficulties to give different treatment for same consumers for a part of solar Rooftop capacity set up under earlier Net-Metering Regulations. In order to avoid such operational, implementation and monitoring related difficulties, it is suggested to modify above regulations by providing that 'taking into account implementation related difficulties, in case a consumer desire to set up any additional Solar Capacity over and above the existing solar rooftop capacity set up under the provisions of earlier Net-Metering Regulations, the entire rooftop solar capacity of a consumer i.e. existing plus additional solar rooftop capacity shall be governed as per the provisions of Net-Metering Regulations as applicable on the date of commissioning of such additional capacity. Energy accounting and commercial settlement of generated energy shall be carried out on 'First in First Out' basis.

#### Commission's decision:

The stakeholders have suggested that the proposed amendment in clause 9 (d) of the Regulations provides that the consumer who sets up rooftop capacity under different Regulations shall be governed by the provisions of Regulations prevailing on the date of commissioning of the Rooftop Solar PV Capacity. It leads to operational, implementation and monitoring of energy accounting, metering, billing, rate of purchase of surplus power, capacity distribution, banking charges, banking facility etc. Hence, considering the above, the aforesaid provision be modified providing that taking into account implementation related difficulties, in case a consumer desire to set up any additional Solar Capacity over and above the existing solar rooftop capacity set up under the provisions of earlier Net-Metering Regulations, the entire rooftop solar capacity of a consumer i.e. existing plus additional solar rooftop capacity shall be governed as per the provisions of Net-Metering Regulations as applicable on the date of commissioning of such additional capacity.

The aforesaid contentions of the objectors are not acceptable as the Solar Rooftop Projects set up by the consumer/prosumers under the provisions of different Regulations having mechanism for energy accounting, banking facility, payment for surplus energy, etc. as a commercial mechanism. The rights and obligations of the consumer/prosumer/licensee arose under the agreement executed by them at the time of set up solar power project by the prosumer/consumer. Accordingly, agreement were also carried out by the licensee with consumer/prosumer. The suggestion of the stakeholders to revise/review the earlier Regulations/Agreement between the licensee and consumer/prosumer retrospectively and benefits etc. granted to such consumers be withdrawn by way of amendment is not permissible being against the law. Hence, the same is not accepted.

So far as contention of the stakeholders that such additional capacity create energy accounting difficulty etc. are concerned, we note that the solar rooftop project set up under provisions of different Regulations, energy metering be carried out through different energy meters by which recording the energy in the meter and giving treatements as per Regulations no issue of energy accounting arise. Hence the contention of the objectors are not accepted and rejected.

The contention of the stakeholder that the energy accounting for different capacity of solar project set up under different net metering mechanism Energy accounting and commercial settlement of generated energy shall be carried out on 'First in First Out' (FIFO) basis is concerned, it is clarified that the energy accounting be carried out on monthly or bi-monthly basis as per the energy recorded in the meter. The treatment of recorded energy be given effect in the bills by the licensee combindely. Therefore, the issue of 'FIFO' does not arise.

#### 22. Clause 9.1 For Residential and Government Consumers:

9.1.2 Solar Projects can also be set up by a developer on the rooftop / premises of a residential consumer for generation and sale of power to such consumer in the same premises or other premises (Third Party Sale) for which the developer and consumer shall enter into a lease agreement and/or power sale agreement.

## Interconnection agreement point no. 1.2 in Eligibility:

Consumer needs to consume electricity generated from the Solar Power System set up in the same premises where Rooftop Solar PV System is set up or other places than the consumption premises. Provided that in case of Residential, the place of generation of electricity and consumption shall always be same.

#### **Comments/Suggestions from the Stakeholders:**

Both statements are in contradiction to each other and it is requested to change in the agreement as flexibility in third party sale with other premises will boost the RESCO model in residential segment which will lead to capacity addition boost towards Gujarat Government targets.

For proper energy accounting and commercial settlement of net import/export, it is required to have FIFO system.

#### Commission's decision:

The solar rooftop set up at the premises of consumers/prosumer. Such plant be set up under third party sale/captive use. The energy generated and consumed in the consumer/prosumer permises. Such premises may not be owned by consumer/prosumer or it can be on lease basis entered in agreement by developer and consumer. In rooftop solar power project the energy generated and consumed

and injected into the grid from the same point of supply. The word 'or other premises' (Third Party Sale) decided to be deleted from the proposed amendment in Clause 9.1.2. After that there is no contradiction in the Regulations. Hence, the revised clause 9.1.2 is now read as under:

"....9.1.2 Solar Projects can also be set up by a developer on the rooftop / premises of a residential consumer for generation and sale of power to such consumer/prosumer in the same premises under Third Party Sale for which the developer and consumer/prosumer shall enter into a lease agreement and/or power sale agreement.

#### 23. Clause 9.1 For Residential and Government Consumers:

9.1.3 (b) In case of Third-Party Sale covered under Clause 9.2 - At 75% of the simple average of tariff discovered and contracted under competitive bidding process conducted by GUVNL for non-park based solar projects in the preceding 6-month period, i.e., either April to September or October to March as the case may be, from the Commercial Operation Date (COD) of the project. The same shall remain fixed for the entire term of the arrangement.

# **Comments/Suggestions from the Stakeholders:**

It is submitted that the reference to the clause 9.2 in the Regulations need to be corrected as Clause 9.1.2 since the provisions for setting up of Rooftop Solar project for third party sale in case of Residential consumer is referred in the Clause 9.1.2 and not in the Clause 9.2.

#### **Commission's decision:**

The suggestion of the stakeholers is valid. There is typographical error in draft amendment Regulation 9.1.3 (b) with regards to reference of Regulation 9.2 is given instead of 9.1.2. Therefore, said error is rectified by stating 9.1.2 in place of 9.2. Accordingly, corrected clause 9.1.3 (b) reads as under:

"9.1.3 (b) In case of Third-Party Sale covered under Clause 9.1.2 - At 75% of the simple average of tariff discovered and contracted under competitive bidding process conducted by GUVNL for non-park based solar projects in the preceding six-month period, i.e., either April to September or October to March as the case may be, from the Commercial Operation Date (COD) of the project. The same shall remain fixed for

the entire term of the agreement."

### 24. Clause 9.2 For the projects set up under Captive use:

9.2.1 This section of the Regulations shall refer to industrial, commercial, Government institutions and other consumers setting up projects under Captive use.

# **Comments/Suggestions from the Stakeholders:**

Required clarification for Government institutions as there is a separate policy for residential and Government consumers.

#### Commission's decision:

The suggestion of the stakeholders is valid. The reference of Government Institutions as proposed in amemded Regulation 9.2.1 is not correct. Hence, we accept the suggestion and accordingly the Regulation is amended as under:

"9.2.1 This Section of the Regulations shall be referred to industrial, commercial, institutional and other consumers setting up projects under Captive use."

# 25. Clause 9.2. For the projects set up under captive use:

9.2.4. Installation of solar projects with collective ownership of more than one consumer investing / holding of equity amount collectively shall be as specified in the Electricity Rules, 2005 and amendments made in it from time to time.

In such cases of collective ownership, the energy generated shall be consumed by each of the consumer/owner of plant as specified in the Electricity Rules, 2005 and amendments made in it from time to time.

## **Comments/Suggestions from the Stakeholders:**

As this Regulation pertains to rooftop projects and above clause pertains to Group captive policy, it required clarification that is it possible to set up project with collective ownership of different tariff consumers like NRGP/LTMD/HT etc. Also required standards and detailed guidelines for interconnection/metering point with distribution licensee.

It is submitted that the provisions in para 11 (Regulation 9.2.4) of Draft Regulations provides for setting up of captive solar rooftop project through collective ownership

of more than one consumers.

In this regard it is to state that unlike ground mounted solar power project wherein the location of generation and consumption are different and involves wheeling of entire generated energy for group captive consumers, the group captive mode is allowed. However, in case of rooftop power project, it may not be necessarily possible to wheel entire generated solar energy since part of energy may be consumed at the location of generation itself and part of energy may involve wheeling depending upon locations of group captive users. Thus, this may be lead to applicability of two different methodology / treatment for same rooftop project namely treatment under Net Metering Regulations for the part solar capacity involving consumption at same location and wheeling treatment for balance rooftop capacity involving wheeling of energy by other group captive consumers. Further, it would be difficult to monitor the proportionality criteria where generation and consumption is at same location.

This may lead to implementation, operation and monitoring related issue for allowing solar rooftop projects under group captive mode. Accordingly, the Commission is requested to not allow rooftop solar project under the group captive mode and the provision may be deleted accordingly.

#### **Commission's decision:**

The stakeholders have suggested that in the proposed amendment, Regulation 9.2.4 provides that captive generating plant set up with collective ownership by more than one consumer by investing/holding of equity collectively as per the provisions of the Electricity Rules, 2005 and amendments made therein from time to time, be not permitted as in collective ownership different categories of consumers like NRGP/LTMD/HT category of consumers own the plant. It will create difficulty in giving energy accounting as well as require standard and detailed guidelines for interconnection/metering point with distribution licensee. Case of collective transactions of captive generating plant on ground mounted and Rooftop Solar Projects are different and distinct. Hence, the Commission may not allow collective captive generating plant set up by rooftop owners. We find force in the suggestion of the stakeholders that if captive generating plant set up by the stakeholders collectively as a group of captive users, it will create energy accounting, metering set-off, wheeling issues and it requires to specify a detailed guidelines for such projects because the

owners may be situated at different places and having different connections with the licensee. Hence, we decide to modify Regulation 9.2.4 as under:

9.2.4. Installation of Rooftop solar project carried out by the Captive Consumer by keeping ownership and consumption of energy generated from such plant complying the provision specified in the Electricity Rules, 2005 and amendments made thereto from time to time. In such cases the ownership of the plant and energy generated from such plant shall be consumed by the captive consumer as specified in the Electricity Rules, 2005 and amendments made thereto from time to time.

## 26. Clause 9.2. For the projects set up under captive use:

9.2.5. The ownership in Captive Solar Generating plant and consumption of energy on annual basis (financial year basis) from it shall have to be proved as per the provision of Electricity Rules, 2005 by the members/persons of the Captive Solar Generating plant by submitting the necessary data/documents as per the relevant law for proving ownership during the financial year by the members/persons of CGP and also consumption of energy by the members/persons in proportion to their ownership in the CGP as per the provisions of Electricity Rules, 2005 to the (i) Chief Electrical Inspector and (ii) the Distribution Licensee in whose area of supply the consumption of such energy take place. In case of failure to prove the Captive Generating Plant status by the owners on annual (Financial Year) basis, the energy supplied from such plant shall be considered as supply by the third party sale and it shall attract Cross Subsidy Surcharge and Additional Surcharge as decided in these Regulations.

### **Comments/Suggestions from the Stakeholders:**

The stakeholders have suggested to remove following words from the Clause 9.2.5.

"...ii) the Distribution Licensee in whose area of supply the consumption of such energy take place.."

#### **Commission's decision:**

The objectors have suggested that in the proposed amendment Clause 9.2.5, the sentence "(ii) the Distribution Licensee in whose area of supply the consumption of such energy take place" be removed is not accepted because the captive consumption of the consumers recorded at the consumption place is given effect in the energy bill amount by the licensee issued by it. Further, the captive generating plants are exempted from

Cross Subsidy and Additional Surcharge payable on the energy consumption while in case of third party sale, Cross Subsidy Surcharge as well as Additional Surcharge are applicable. Hence, if the solar rooftop plant set up by the consumer/owner fails to comply with the provisions of Electricity Rules, 2005 in that case the Cross Subsidy Surcharge and Additional Surcharge are attracted and it reflects as revenue of the licensee and to that extent the overall revenue requirement of the licensee will be reduced. Hence, the suggestion of the objectors that the ownership and consumption by "the Distribution Licensee in whose area of supply such consumption of such energy takes place" be removed is not accepted and the said clause is retained.

## 27. Clause 9.2 For the projects set up under captive use:

9.2.6 In case of solar projects set up by HT / EHV consumers for captive use, the energy set-off shall be allowed between 07.00 hours to 18.00 hours of the same day. That means, the generated solar energy during a day shall be consumed by HT or EHV consumer during 07.00 hours to 18.00 hours on the same day. The surplus energy after the specified period shall be purchased by Distribution Licensee at rates specified under these Regulations.

## Comments/Suggestions from the Stakeholders:

The stakeholders have suggested following methodology for energy accounting:

- (i) Energy accounting for above 1 MW projects will be on 15 minute basis and consumers installing more than 1 MW will not be eligible for benefit of surplus injection.
- (ii) For projects up to 500 kW: on billing cycle basis as per Net Metering.
- (iii) For projects above 500 kW & up to 1 MW: For HT/EHV consumers; between 07.00 hours to 18.00 hours of the same day.
- (iv) For projects above 1 MW: on 15 minute basis.

#### **Commission's decision:**

The objectors/stakeholders have suggested different energy accounting methods for different categories of consumers for HT/EHV consumers. For the project set up upto 500 kW the energy accounting be on billing cycle basis while the projects above 500 kW and upto 1000 kW between 07.00 hours to 18.00 hours of the same day and for

energy accounting of the projects above 1 MW on 15 minutes time blocks. The above suggestions are not accepted as in case of HT/EHV consumers the energy accounting needs to be carried out on 07.00 hours to 18.00 hours of the same day. It is already decided by the Commission in Petition No. 1936 of 2021 and accordingly, the amendment is proposed in the Principal Regulations. Moreover, the suggestions of the Stakeholder will lead to discrimination amongst the same category of consumers for energy accounting and hence, the same is not accepted and the proposed amendment is retained.

### 28. Clause 9.2. For the projects set up under captive use:

9.2.9 The surplus energy, not consumed during the above mentioned period by the consumer after set-off shall be compensated by Distribution licensees following Surplus Injection Compensation (SIC) rates.

- a. In case of MSME Manufacturing Enterprises At Rs 2.25 / unit for first 5 years from commissioning of project and thereafter for the remaining term of the project at 75% of the simple average of tariff discovered and contracted under competitive bidding process conducted by GUVNL for Non-park based solar projects in the preceding 6-month period, i.e., either April to September or October to March as the case may be, from the commercial operation date (COD) of the project. The same shall remain fixed for the entire term of the agreement.
- b. In case of other than MSME Manufacturing Enterprises-At 75% of the simple average of tariff discovered and contracted through competitive bidding process conducted by GUVNL for Non-park based solar projects in the preceding 6-month period, i.e., either April to September or October to March as the case may be, from the commercial operation date (COD) of the project. The same shall remain fixed for the entire term of the agreement.

## **Comments/Suggestions from the Stakeholders:**

The stakeholders have suggested that the tariff should be 100% of the simple average of tariff discovered and contracted under competitive bidding process conducted by GUVNL for the purpose of Rooftop Solar.

It is suggested to remove the last line of the para 9.2.9 (a) and (b), which reads as "*The same shall remain fixed for the entire term of the agreement*" to provide better clarity and remove repetition.

#### Commission's decision:

The contention of objector that the tariff should be 100% of the simple average of tariff discovered and contracted under competitive bidding process conducted by GUVNL for the purpose of Rooftop Solar is not accepted as the same is kept in the Draft Regulation based on the Orders of the Commission in Petition No. 1936 of 2021, wherein the Commission has already considered the objections of the stakeholders and decided the aforesaid rates.

The stakeholders have suggested that in the proposed amendment in Regulation 9.2.9 (a) and (b) the last line "the same shall remain fixed for the entire term of the agreement" be removed to provide better clarity and remove repetition is not accepted as the last sentence in Clause 9.2.9 (a) makes it clear that the rates specified in earlier sentence consists of two types of rates – (i) Rs. 2.25 per unit for 5 years, and (ii) for remaining term of the projects it is 75% of simple average of tariff discovered and contracted by GUVNL. While in Clause 9.2.9 (b) the rates are stated as 75% of simple average tariff discovered and contracted through competitive bidding conducted by GUVNL.... The aforesaid tariff/rate shall remain fixed for the entire term of the agreement. The pharse "the same shall remain fixed for the entire term of the agreement" provides clarity on the applicability of the rates in different situations. Hence, the suggestion of the objectors is not accepted.

### 29. Clause 9.2 For the projects set up under captive use:

9.2.11 Banking charges of Rs.1.50 / unit shall be applicable on solar energy consumed in the case of Demand based Consumers shall be applicable. In case of MSME manufacturing units and other than Demand based Consumers, Banking Charges of Rs.1.10 per unit on Solar Energy consumed shall be applicable.

Banking Charges shall not be applicable to Government buildings.

### **Comments/Suggestions from the Stakeholders:**

The different banking rates have been suggested by the stakeholders stated below:

### (i) For projects up to 500 kW:

No banking charges

## (ii) For projects above 500 kW & up to 1 MW:

As per Clause 9.2.11 (banking charges of Rs. 1.50/kWh for demand based consumers and Rs. 1.10/kWh for MSME & other than demand based consumers)

### (iii) For projects above 1 MW:

Banking charges shall not be applicable as consumer will not get the benefit of banking.

It is proposed that Banking charges should be applicable only for projects above 500 kW and upto 1 MW.

It is also proposed that Banking charges shall be prudent to all the categories.

It is proposed that No banking charges must be levied on the captive consumers, especially in case of gross metering. Without prejudice to the above, banking charges must be levied on solar energy banked and not consumed.

#### Commission's decision:

The objectors/stakeholders have suggested different rates for banking charge with consideration of size of rooftop projects set up by the consumers. The same is not accepted as it leads to discrimination and classification among the same category of consumers for banking charge. Further, the banking charge has already been decided by the Commission in its Orders in Petition No. 1936 of 2021. Hence, any change in this Regulation leads to a situation that the banking charge applicable for the same consumer for energy consumed from captive use by ground mounted projects and solar rooftop project for self consumption different banking charge applied which is not permissible. Hence, we decide not to accept the suggestion of the objectors and retain the clause 9.2.11 as it is stated above. Further, it is clarified that in case of gross metering there is no consumption of energy by the consumer and there is no question of banking and applicability of banking charges.

### **30. Clause 9.3 Project under Third Party Sale:**

9.3.1 This section of the Regulations shall refer to industrial, commercial, Government institutions and other consumers, setting up projects under third party sale.

## **Comments/Suggestions from the Stakeholders:**

The stakeholders suggested that the reference of Govt. institutions in the aforesaid Regulation is not correct and it needs to be removed and modify the said clause.

#### Commission's decision:

The suggestion of the stakeholder is valid. The reference of Government Institutions stated in proposed amended Regulation 9.3.1 is not correct. Hence, we accept the suggestion and accordingly the Regulation shall be amended as under:

"9.3.1 This Section of the Regulations shall refer to industrial, commercial, institutional and other consumers setting up projects under Third Party Sale."

#### 31. Clause 9.3.2....

The sale of electricity by the owner of Solar Power Systems/ Projects (SPSs) to separate consumers shall be considered as Third-Party Sale. Developers can also install solar rooftop projects on rooftop/ premises of a consumer for generation and sale of power to such consumer in the same or different premises or to another consumer by entering into lease agreement and/or power sale agreement.

### **Comments/Suggestions from the Stakeholders:**

The stakeholders suggested that the sentence "....or different premises or to another consumer by entering into lease agreement and/or power sale agreement" stated in proposed amendment clause 9.3.2 be deleted as in case of third party owner solar power system/project set up by the developer opt to sale power to consumers of different premises than in that case the generation should be wheeled to receipient unit of power purchase having separate connecitivity requires to grant at premises where solar plant is set up. It falls in the crieteria of open access in that case no net metering is involved. Hence, such provision needs to be amended.

#### Commission's decision:

The suggestion of the stakeholder seems valid as in case of the solar rooftop power project set up by the developer other than the owner of the premises is qualify as project set up by the third party who is permitted to sale the energy generated from it. The third party project developer shall set up the rooftop project on the premises of the consumer/prosumer. The definition of prosumer specified in the Regulations state that "prosumer" means a person who consumes electricity from the grid and can also inject electricity into the grid for Distribution Licensee, using same point of supply. Thus, the energy generation and consumption from the solar plant having same point of consumption. Therefore, the project developer if set up the plant in other premises than the consumption of such energy by the consumer/prosumer it needs open access for wheeling the energy, which is against the definition of prosumer provided in the Net Metering Regulations. Therefore, we decide to delete the phrase "...or different premises or to another consumer by entering into lease agreement and/or power sale agreement" at the end of proposed amendment in Clause 9.3.2 of the Regulations. The amended Regulations is reproduced as under:

**9.3.2** The sale of electricity by the owner of Solar Power Systems/ Projects (SPSs) to separate consumers/prosumer shall be considered as Third-Party Sale. Developers can also install solar rooftop projects on rooftop/premises of a consumer for generation and sale of power to such consumer/prosumer by entering into lease agreement and/or power sale agreement.

## 32. Clause 9.3 Project under Third Party Sale:

9.3.4 In case of solar rooftop projects set up by HT / EHV consumers, the energy set-off shall be allowed between 07:00 hours to 18:00 hours of the same day. That means, the generated solar energy during a day shall be consumed by HT or EHV consumer during 07.00 hours to 18.00 hours on the same day. The surplus energy after the specified period shall be purchased by Distribution licensee at rates specified under these Regulations.

### **Comments/Suggestions from the Stakeholders:**

The stakeholder suggested that the banking facility must be provided to the HT or EHV consumers for the entire duration of the billing cycle.

#### **Commission's decision:**

The suggestion of the stakeholders that the banking facility must be provided to the HT/EHV consumers for the entire duration of the billing cycle is not accepted as the energy accounting for these categories of consumers the set-off shall be allowed between 7 hours to 18 hours of the same day which consists of the banking facility during the aforesaid period already decided by the Commission in Orders in Petition No. 1936 of 2021, wherein the aforesaid issue has been dealt by the Commission and decided to amend the Net Metering Regulations with consideration of aforesaid decision. Hence, the suggestion of the stakeholders is not accepted and the proposed amendment in Regulation 9.3.4 is retained.

## 33.9.3. Project under Third Party Sale:

9.3.5 In case of solar projects set up by LT demand-based consumers, the energy setoff shall be allowed between 07:00 hours to 18:00 hours basis of the same billing cycle.
That means, the generated solar energy during a billing cycle between 07:00 hours to
18:00 hours shall be consumed by the consumer during the specified period in the same
billing cycle.

### **Comments/Suggestions from the Stakeholders:**

The stakeholders have suggested that in case of LT other than demand-based consumers under Third Party Sale energy accounting (energy set-off) shall be on billing cycle basis. The same is appears inadvertently missed out. The energy accounting shall be carried out on billing cycle basis for other than demand based LT consumers provided in the Government of Gujarat Solar Power Policy, 2021. Therefore, it needs to align with Gujarat Solar Power Policy 2021 notified by the State Government.

#### Commission's decision:

The suggestion of stakeholder/objectors is valid. The Commission has in its Orders in Petition No. 1936 of 2021 decided that the energy accounting in case of solar projects set up by LT other than demand based consumers, shall be on billing cycle basis. The same is missing in the proposed Draft amendment Regulations. Thus, it is a valid suggestion and accordingly we decide to modify the Regulation 9.3.5 as under:

"9.3.5 - In case of solar projects set up by LT demand-based consumers, the energy setoff shall be allowed between 07:00 hours to 18:00 hours basis of the same billing cycle. That means, the generated solar energy during a billing cycle between 07:00 hours to 18:00 hours shall be consumed by the consumer/prosumer during the specified period in the same billing cycle. While in case of solar projects set up by LT non-demand based consumers, the energy set-off shall be allowed on billing cycle basis"

## 34. Clause 9.4. Project under REC mechanism:

9.4.7 No banking charges shall be applicable.

## **Comments/Suggestions from the Stakeholders:**

The objector/stakeholder have suggested that the Ministry of Power in its "Discussion Paper dated 04.06.2021 on REC Mechanism" opined that no REC is to be issued to the beneficiary of the concessional charges or waiver of any other charges.

In the draft amendment, the Commission has decided that no banking charges shall be applicable to projects set up under REC mechanism. This would be contrary to the provision of the MoP Discussion Paper. Hence, it is suggested that projects being set up under REC mechanism shall be liable to pay banking charges as decided in Regulation 9.2 or 9.3.

Some of the stakeholders have suggested that the banking charge be applicable on the consumers/prosumers who set up the solar rooftop projects under REC mechiansm at the rate of Rs. 2.60 per unit.

#### Commission's decision:

The suggestion of the stakeholders that the banking charges decided in Regulation 9.2 or 9.3 shall be made applicable to the consumers/prosumers set up solar rooftop proejcts under REC mechanism is not acceptable as the energy accounting of such entity is carried out on 15 minutes time block basis. Any surplus energy available after set-off in 15 minutes time block be deemed as sale to the licensee. For such energy consumer/prosumer/solar generator be compensated at the rate decided for surplus injection of energy by the Commission. Thus, there is no banking facility provided for such consumers/prosumers as specified in Regulations 9.2 and 9.3. Therefore, the proposed amendment is not accepted.

## 35. Clause 9.5 Solar Projects for RPO compliance:

9.5.5 No banking charges shall be applicable

## **Comments/Suggestions from the Stakeholders:**

The stakeholder suggested that an obligated entity can set up solar rooftop project under RPO mechanism for their own statutory compliance. However, the consumers of Distribution Licensee cannot be burdened with the cost of setting up Solar Rooftop by obligated entities for RPO compliance. Hence, obligated entity setting up solar rooftop project for RPO compliance shall be liable to pay banking charges as decided in Regulation 9.2 or 9.3.

## **Commission's decision:**

The stakeholders have suggested that consumers who set up solar project for RPO compliance shall also be liable to pay banking charges as proposed in Amendment Regulation 9.2 for captive consumers and Regulation 9.3 for third party sale. The aforesaid suggestion is not accepted as the solar projects set up by the consumers for RPO compliance, energy accounting of such consumers, irrespective of different categories of consumers, is carried out in 15 minutes time block. Thus, there is no banking facility available to the project developer who set up solar plant to meet out RPO compliance. The proposed amendment for RPO compliance projects specified in Regulation 9.5 is different and distinct than the proposed amendment in Regulation 9.2 pertaining to captive generating plant and Regulation 9.3 pertaining to third party sale projects. Hence, the suggestion of the stakeholders is not accepted and the Commission decide to retain the same clause.

## 36. Clause 12.2 Wheeling and Transmission of Electricity:

12.2.1 "Wheeling of power for captive consumption / third party sale shall be allowed on payment of transmission charges, transmission losses, wheeling Charges and wheeling losses, as applicable to normal open access consumers. If the generated solar energy is consumed within the same premises without use of grid, no transmission / wheeling charges & losses shall be applicable.

### **Comments/Suggestions from the Stakeholders:**

The stakeholder suggested that it is required clarification on phrase "without use of grid" provided in this Regulation. The stakeholder suggested that wheeling and transmission losses/charges should not be applicable in case of solar energy generated and consumed in the same premises.

MoP in the Electricity (Rights of Consumers) Rules, 2020 has defined prosumer as a person who consumes electricity from the grid and can also inject electricity into the grid for distribution licensee by using same point of supply. This definition is also retained by the Commission in the Draft Amendment at Regulation 2.1(s).

Based on the above, it is clear that no wheeling arrangement is envisaged for rooftop solar projects being set up for net metering. Accordingly, the draft amendment needs to be modified suitably.

In terms of Order No. 3 of 2020 dated 08.05.2020, 50% of wheeling charges and losses as applicable to normal open access consumers were levied on the solar projects for captive consumption.

Levy of 100% transmission charges, transmission losses, wheeling charges and wheeling losses will not only make the solar projects unviable for captive consumers, but also goes against the mandate of the Electricity Act, 2003. There is no justification for doubling the said charges under the Draft Amendment, 2021. The wheeling charges and losses should not be more than 50% for captive plants.

The solar power projects involving wheeling of electricity is governed as per the provisions of the Commission's Solar Tariff Order dated 08.05.2020 read with Suo-Motu Order No. 06 of 2020 dated 05.08.2020 and Orders in Petition No. 1936 of 2021 and solar project set up under Net-Metering arrangement i.e. (Involving generation and consumption at same location) shall be governed as per the provisions of GERC Net Metering Regulations. Therefore, provisions related to wheeling and transmission of electricity for captive consumption / third party sale and applicability of charges thereof may not be required in the GERC Net-Metering Regulations. The Commission is requested to take suitable view in the matter.

Wheeling of power for captive consumption / third party sale shall be waived off on the transmission charges, transmission losses, wheeling charges and wheeling losses, as applicable to normal open access consumers. If the generated solar energy is consumed within the same premises without use of grid, no transmission / wheeling charges & losses shall be applicable.

Clause 12.2.1. Wheeling of power for captive consumption / third party sale shall be allowed on payment of transmission charges, transmission losses, wheeling charges and wheeling losses, as applicable to the premises without use of grid, no transmission / wheeling charges & losses shall be applicable.

In the Gujarat Solar Policy 2015, concessional benefit of 50% in wheeling and transmission charges were provided to Captive consumers to promote Renewable sources of Energy as well as fulfilment of RPO obligation of Captive consumers which have been forfeited in the said Regulation.

Due to proposed amendment, Captive consumers would not be able to fulfil their RPO obligation as mandated in Section 86 of the Electricity Act, 2003 and would discourage them for investing in Renewable Sources of Energy.

#### Commission's decision:

The amendment proposed in Regulation No. 12.2.1 is modified with consideration of suggestion of the stakeholders to give clarity about non-applicability/applicability of transmission/wheeling charges and losses in different conditions of energy injection and consumption of it. The proposed amendment Regulation 12.2.2 in above condition is not required and therefore, the same is deleted and accordingly, the modified clause is stated below:

"Whenever wheeling/transmission of power for captive consumption/ third party sale shall be allowed with open access permission by the licensee, in that condition transmission charges, transmission losses, wheeling charges and unit losses, as applicable to normal open access consumers shall be applied.

While in case of energy generated from solar power projects is consumed by the consumer/prosumer with same point of injection and consumption within the same premises without use of grid no transmission/wheeling charges and losses shall be applied."

### 37. Clause 12.3 Cross Subsidy Surcharge and Additional Surcharge:

12.3.1 Cross Subsidy Surcharge and Additional Surcharge shall not be applicable in case of Captive Projects. In case of projects set up for Third Party Sale, Cross Subsidy Surcharge

and Additional Surcharge shall be equal to charges for normal open access consumers.

These charges shall be as determined by the Commission from time to time.

## **Comments/Suggestions from the Stakeholders:**

The objectors/stakeholders have made following suggestions:

- (i) The promotional benefits provided under Section 86 (1) (e) of the Act need to be continued.
- (ii) Cross Subsidy Surcharge and Additional Surcharge shall not be applicable in case of Captive Projects.
- (iii) In case of projects set up for Third Party Sale, Cross Subsidy Surcharge and Additional Surcharge shall be 50% of such charges applicable to normal open access consumers. These charges shall be as determined by the Commission from time to time. (iv) Imposing CSS and Additional Surcharge on the projects developed under RESCO
- mode which is not treated as Third Party Sale will deter the growth of rooftop solar power plants in the State.

#### Commission's decision:

Cross Subsidy Surcharge and Additional Surcharge proposed to levy on energy supplied under third party sale as applicable to normal open access consumers with consideration of Orders in Petition No. 1936 of 2021 wherein it was decided that the Cross Subsidy Surcharge and Additional Surcharge shall be applicable to the consumption of energy by the consumer receiving power from Solar projects set up under REC mechanism or under third party sale. Hence, any change/amendment suggested by Stakeholders in these Regulations qualifies as review of the aforesaid Orders based on which the proposed amendment incorporated in the Draft Regulations. Therefore, the suggestion of the stakeholders is not accepted and the Commission decides to retain the said clause.

### 38. Regulation 16. Penalty or Compensation:

16.1 In case of replacement of damaged/non-working old Solar modules with new one, the capacity of the Solar Power Plant shall not exceed the original approved installed capacity of the Solar Power Project for which Agreement for Sale/Purchase signed between the Solar Project Developer / Distribution licensee or Consumer/Prosumer. For

replacement/enhancement of capacity of solar power project, approval of the distribution licensee is required and the distribution licensee shall decide such application within 30 days, failing which it will be considered as deemed approval. If any capacity is found in excess of original approved installed capacity through replacement/enhancement without permission of the licensee, it shall be qualified as 'Unauthorized Capacity Addition' and it shall attract Penalty. The addition of Solar Modules after Commissioning of Solar Power Plant by consumer/Solar Power Generator will also be considered as 'Un-authorized Capacity Addition'. The Distribution Licensee shall levy the Penalty considering 'Un-authorized Capacity Addition' and utilization of generation at twice the applicable tariff for such Solar Developer/Consumer for the period of such extension/replacement of capacity and equipments of solar power plant to the extent of such excess capacity will also be liable to be removed.

## **Comments/Suggestions from the Stakeholders:**

Some of the stakeholders have suggested that apart from incident of unauthorized installation of additional solar modules or replacement of existing solar modules, DISCOMs have also witnessed the incidences of installation and grid connectivity of entire new rooftop solar project without approval of concerned distribution licensee. This causes concern with regard to security and safety of grid, man and material. Therefore, the Commission may incorporate the provisions that installation and grid connectivity of solar rooftop project without approval of concerned distribution licensee causes penalty or compensation in line with the provision of Regulations 16.1.

In case of replacement of damaged/non-working old Solar modules with new one, the capacity of the Solar Power Plant shall not exceed the original approved installed capacity of the Solar Power Project for which Agreement for Sale/ Purchase signed between the Solar Project Developer/ Distribution licensee or Consumer/ Prosumer. For replacement/ enhancement of capacity of solar power project, approval of the distribution licensee is required and the distribution licensee shall decide such application within 30 working days from date of submission of application with all documents and applicable charges, failing which it will be considered as deemed approval. If any capacity is found in excess of original approved installed capacity through replacement/ enhancement without permission of the licensee, it shall be qualified as 'Un-authorized Capacity Addition' and it shall attract Penalty. The addition

of Solar Modules after Commissioning of Solar Power Plant by consumer/Solar Power Generator will also be considered as 'Un-authorized Capacity Addition' and energy injected from such unauthorised addition shall be dealt with in line with Regulation 9(a). Further, the Distribution Licensee shall levy the Penalty considering 'Un-authorized Capacity Addition' and utilization of generation based on pro-rata of total energy generated on unauthorised capacity vis a vis total capacity, at twice the applicable tariff for such Solar Developer/ Consumer, for the period of such extension/replacement of capacity and equipments of solar power plant to the extent of such excess capacity will also be liable to be removed.

In case of replacement of damaged/non-working old Solar modules with new one, the capacity of the Solar Power Plant shall not exceed the original approved installed capacity for which Agreement for Sale/Purchase signed between the Solar Project Developer/ Distribution licensee or Consumer/Prosumer.

Provision of penalty should also applicable to solar plant which is setup without permission of licensee.

#### Commission's decision:

The suggestion of the stakeholders seems to be valid. Accordingly, the Commission decides to modify the proposed amendment in Draft Regulation as under:

## 16.1 Replacement/Repairing of parts of the existing Solar Rooftop Projects

In case of existing Solar Rooftop Power Project whenever any Solar PV modules/inverters or any part is damaged or not working, the Solar Rooftop Power Project owner may replace such part of Solar Rooftop Power Plant. In case the Solar PV modules/inverters or other parts of the Project are not available of earlier capacity of such part when the plant was commissioned and made operative, in such condition, the parts which are damaged or defective can be replaced with the parts which will be available at relevant time of replacement of such part. The Solar Rooftop Power Project owner shall intimate immediately to the licensee about the replacement of Solar PV modules or any parts for information and records of the licensee. The licensee shall verify such replacement of Solar PV modules or other parts, within 30 days, from the receipt

of such application from the Solar Rooftop owner, failing which will be deemed as approved by the licensee.

## 16.2 Addition in capacity of Solar Rooftop Plants by owner without approval of the licensee

The addition of Solar Modules after commissioning of Solar Power Plant by consumer/Solar Power Generator for which Agreement for Sale/Purchase signed between the Solar Project Developer/Distribution licensee or Consumer/Prosumer will be considered as 'Un-authorized Capacity Addition'. It shall attract penalty for utilization of generation from such plant at twice the applicable tariff for such Solar Developer/Consumer for the period of such additional capacity and equipments of Solar Power Plant to the extent of added unauthorized solar power plant capacity.

# 16.3 Installation and connectivity of Solar Rooftop Project with the licensee network without any approval/permission

Any installation of new Solar Rooftop Project without approval of concerned distribution licensee shall be qualified as unauthorized connection/use and it shall attract penalty for utilization of generation from such plant at twice of the applicable tariff for such Solar Developer/Consumer for the period of such capacity and equipments of Solar Power Plant to the extent of unauthorized solar power plant capacity connected without approval of licensee and such equipments of solar power plant shall liable to be removed.

## 39. Third Para of Agreement (Annexure-IV)

....Voltage level for his/her/its own use or sale to consumers under third party sale or sale to Distribution Licensee within the same premises or other premises.

### **Comments/Suggestions from the Stakeholders:**

The stakeholders have suggested that in the aforesaid provision the Roofotp Projects shall be located at the consumer/prosumer premises and not other premises as the net-metering/gross metering etc. permitted under the Electricity (Rights of Consumers) Rules, 2020 by set up solar rooftop projects using same point of supply. Hence, the word

or other premises from the third para of Annexure-IV be deleted.

#### **Commission's decision:**

The suggestion of the Objector is accepted and accordingly, necessary changes/modification in the Regulations is made out as under:

"AND, WHEREAS	$\_$ (name of the consum	ner/Prosumer/SPS developer under
third party sale) desires t	o set-up such Solar Pho	otovoltaic Rooftop System of kW
at conn	ected with (Name of t	the Distribution Licensee)'s grid at
Voltage level for his	s/her/its own use or so	ale to consumers under third party
sale to Distribution Lice	nsee within the same	premises using the same point of
supply".		

## 40. Fifth para of Agreement of Annexure - IV

"..and in compliance with the applicable Policy/Rules/Regulations/Codes (as amended from time to time) by the Consumer/ Prosumer/ SPS developer under third party sale which includes

- 1. Government of Gujarat Solar Power Policy 2015.

## **Comments/Suggestions from the Stakeholders:**

Control period of Government of Gujarat Solar Power Policy 2015 has already ended. Hence, reference needs to be removed to avoid confusion.

#### Commission's decision:

The suggestion of the stakeholders that control period of Government of Gujarat Solar Policy 2015 is already over, is valid suggestion and required to be removed. Accordingly, we decide to remove the same from Annexure-IV of the proposed Draft Amendment and the numbers are change accordingly.

......

- 1. Government of Gujarat Solar Power Policy 2021.
- 2. Electricity (Rights of Consumers) Rules, 2020 and amendment thereto.
- 3. Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010.

- 4. Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 as amended from time to time.
- 5. Central Electricity Authority (Installation and Operation of Meters)
  Regulations 2006 as amended from time to time.
- 6. Gujarat Electricity Regulatory Commission (Electricity Supply Code & Related Matters) Regulations, 2015 as amended from time to time.
- 7. Gujarat Electricity Regulatory Commission Distribution Code 2004 and amendments thereto.
- 8. Instruction, Directions and Circulars issued by Chief Electrical Inspector from time to time.
- 9. CEA (Technical Standards for Connectivity of the Distributed Generation)
  Regulations, 2013 as amended from time to time.

## 41. Clause 1. Eligibility of Annexure - IV

1.2 Consumer needs to consume electricity generated from the Solar Power System set up in the same premises where Rooftop Solar PV System is set up or other places than the consumption premises. Provided that in case of Residential, the place of generation of electricity and consumption shall always be same.

## Comments/Suggestions from the Stakeholders:

The stakeholders have suggested that in the aforesaid provision the Roofotp Projects shall be located at the consumer premises and not at other premises as the net-metering/gross metering etc. permitted under the Electricity (Rights of Consumers) Rules, 2020 by set up Solar Rooftop Projects using same point of supply. Hence, the word or other premises from the third para of Annexure-IV be deleted.

#### Commission's decision:

The proposed amendment is accepted and accordingly Clause 1.2 of Annexure-IV is amended as under:

"1.2 Consumer needs to consume electricity generated from the Solar Power System set up in the same premises using same point of supply where Rooftop Solar PV System is set up."

## **42. Clause 1. Eligibility of Annexure - IV**

1.3 Consumer/ Prosumer/ SPS developer under third party sale shall ensure capacity of Rooftop Solar not to exceed than the limit specified in the Regulations. If it is violated than provisions of unauthorised use provision applicable and consumer/prosumer/SPS developer shall be penalized as per the provisions of these Regulations.

## **Comments/Suggestions from the Stakeholders:**

The stakeholder has suggested minor correction in Clause 1.3 of Annexure – IV as under:

**1.3** Consumer/Prosumer/SPS developer under third party sale shall ensure capacity of Rooftop Solar not to exceed than the limit specified in the Regulations. If it is violated **than then** provisions of unauthorised use **provision shall be** applicable and consumer/prosumer/SPS developer shall be penalized as per the provisions of these Regulations.

### **Commission's decision:**

The proposed amendment in clause 1.3 of Annexure-IV of Clause 1 – Eligibility is accepted and accordingly, clause 1.3 of Annexure-IV is modified as under:

"1.3 Consumer/Prosumer/SPS developer under third party sale shall ensure capacity of Rooftop Solar not to exceed than the limit specified in these Regulations. If it is violated then provisions of unauthorized use shall be applicable and consumer/prosumer/SPS developer shall be penalized as per the provisions of these Regulations."

## 43. Clause 6 metering of Annexure - IV

6.....

.....Provided that separate generation meter shall be installed in all projects irrespective of arraignment i.e. net metering or gross metering.

## **Comments/Suggestions from the Stakeholders:**

The stakeholder has suggested minor correction of typographical inadvertent error needed stated as under:

Provided that separate generation meter shall be installed in all projects irrespective of arraignment arrangement i.e. net metering or gross metering.

#### **Commission's decision:**

This suggestion of the stakeholder is accepted and accordingly, we decide to rectify the typographical error of '*arraignment*' by the word "arrangement" in the proposed amendment in clause 6 of metering stated in Annexure -IV read as under:

"6. Metering

.....Provided that separate generation meter shall be installed in all projects irrespective of arrangement i.e. net metering or gross metering."

## 44. Clause 7.2 for Residential and Government Consumers of Annexure - IV:

### "7.2 For Residential and Government Consumers:

...

(iii) (b) In case of Third-Party Sale covered under Clause 9.2- At 75% of the simple average of tariff discovered and contracted under competitive bidding process conducted by GUVNL for Non-park based solar projects in the preceding 6-month period, i.e., either April to September or October to March as the case may be, from the Commercial Operation Date (COD) of the project."

### **Comments/Suggestions from the Stakeholders:**

The stakeholder has suggested to correct inadvertent error and provide clarity as under:

•••

(iii) (b) In case of Third-Party Sale covered under Clause 9.2- At 75% of the simple average of tariff discovered and contracted under competitive bidding process conducted by GUVNL for Non-park based solar projects in the preceding 6-month period, i.e., either April to September or October to March as the case may be, from the commercial operation date (COD) of the project. The same shall remain fixed for the entire term of agreement.

The entire solar energy generation for such consumer shall be utilized for meeting the RPO of that distribution licensee. However, fixed/demand charges, peak charges, other charges shall be payable as applicable to respective category of consumers.

Further enabling provision to consider entire generation from solar rooftop plant towards Discoms' RPO is required to be made in the draft to avoid disputes. Similarly, provision of recovery of fixed charges/other charges, as applicable, is also required to be made in the draft amendment.

## Proposed new addition in Clause 7.2 as under:

7.2 (iv) Banking charges of Rs. 2.60 per unit shall be applicable on solar power consumed by Residential Consumers.

#### Commission's decision:

The suggestion of the stakeholder to add the sentence "The same shall remain fixed for the entire term of the agreement" is valid. Hence, we decide clause 7.2(iii) (b) shall be read as under:

"....(iii) (b) In case of Third-Party Sale covered under Clause 9.2-

At 75% of the simple average of tariff discovered and contracted under competitive bidding process conducted by GUVNL for Non-park based solar projects in the preceding six-months period, i.e., either April to September or October to March as the case may be, from the Commercial Operation Date (COD) of the project. The same shall remain fixed for the entire term of agreement."

The suggestion of the stakeholder to add Clause 7.2(iii)(c) that the entire energy generation of such consumer shall be utilized for meeting RPO of that distribution licensee. However, the fixed/demand charges, peak charges, other charges, penalty etc. shall be applicable to the respective category of consumers is concerned, we decide that the entire generation of solar energy of the Residential and Government consumers shall be utilized for meeting RPO of the distribution licensee in whose area such consumption take place, the same is not accepted as it is not a part of proposed amendment.

So far as the proposed amendment that the fixed/demand charges, peak charges and other charges, penalty etc. shall be applicable to the respective category of consumers is governed by as per the tariff scheduled decided by the Commission. Hence, it is not necessary to add in the aforesaid Regulations with regard to tariff and penalty applicable to such category of consumers.

The stakeholders have suggested that new clause be added with regards to banking charge of Rs. 2.60 per unit shall be applied on the Solar energy consumed by Residential consumers is not accepted with consideration of promotional aspects to the Residential consumers consumption from solar rooftop projects. The quantum of such consumption carried out by the Residential consumer out of total consumption by solar rooftop projects is quite lower. Moreover, the Residential consumers having solar rooftop projects at their premises are quite lower. Any consumption by such consumer will be helpful to the licensee to reduce to procure power and supply at higher rate to that extent to such consumers. Further, the consumption of such energy by the Residential consumers will be helpful to reduce the transmission and distribution losses of the licensee. Moreover, the surplus energy if any available after set-off received by the licensee at the place of consumption of the consumer is at quite lower rate than the power procurement by the distribution licensee from the generators and supply such energy by the licensee to the end consumers having higher cost. Thus, it is also helpful to reduce the power procurement cost of the licensee to some extent and enhance the revenue by sale of procurement of surplus energy at lower rate and selling it at higher rate to the end consumers. Hence, the objection of the objectors are not accepted.

### 45. Annexure – IV Clause No. 7.3 (iv)

In case of net export (net injection) of energy by the consumer to distribution grid during billing cycle, the Distribution Licensee shall compensate for surplus power, after giving set off against consumption during the billing period, at the rate of Rs. 1.75 per unit or the rate, if any, specified by the Commission for Surplus Injection Compensation (SIC) from time to time, over the life of the Rooftop Solar PV system i.e. 25 years. The entire Solar energy generation of such consumer shall be utilized for meeting the RPO of that Distribution Licensee. However, fixed / demand charges, peak charges, other charges, penalty, etc. shall be payable as applicable to the respective category of consumers.

## **Comments/Suggestions from the Stakeholders:**

The stakeholder has suggested that Clause No. 7.3 (iv) of Annexure-IV is inconsistent with clause no. 7.3 (v) of the said Annexure –IV as well as Regulation no. 9.2.9, so it may be deleted.

#### Commission's decision:

The suggestion of the stakeholders that sub-clause (iv) of clause 7.3 of Annexure – IV of the proposed amendment Regulation is inconsistent with the sub-clause (v) of Clause 7.3 of the Annexure -IV of the proposed regulation and Clause 9.2.9 seems valid so far as the Surplus Injection Compensation (SIC) for the captive consumers after set-off of energy. Hence, we decides to delete sub-clause (iv) of clause 7.3 of Annexure – IV. Further, sub-clause (v) of Clause 7.3 of Annexure-IV is revised as Clause 7.3 (iv) accordingly, the amended Regulation read as under:

7.3 (iv) The surplus energy, not consumed by the consumer during the above mentioned after set off period shall be compensated by Distribution Licensees at following rates (SIC).

- (a). In case of MSME Manufacturing Enterprises At Rs 2.25 / unit for first 5 years from commissioning of project and thereafter for the remaining term of the project at 75% of the simple average of tariff discovered and contracted under competitive bidding process conducted by GUVNL for Non-park based solar projects in the preceding 6-month period, i.e., either April to September or October to March as the case may be, from the commercial operation date (COD) of the project. The same shall remain fixed for the entire term of the agreement.
- (b). In case of other than MSME Manufacturing Enterprises-At 75% of the simple average of tariff discovered and contracted through competitive bidding process conducted by GUVNL for Non-park based solar projects in the preceding 6-month period, i.e., either April to September or October to March as the case may be, from the commercial operation date (COD) of the project. The same shall remain fixed for the entire term of the agreement.

Further, Clauses of Annexure – IV, i.e. clause 7.3 (vi) is reads Clause 7.3 (v), Clause 7.3

(vii) reads as Clause 7.3 (vi) and Clause 7.3 (viii) reads as Clause 7.3 (vii) and Clause 7.3 (ix) reads as Clause 7.3 (viii).

## 46. Clause 7.3 - For the projects set up under Captive Use of Annexure - IV:

(viii) Banking Charges of Rs. 1.50/unit shall be applicable on solar energy consumed in case of Demand Based Consumers shall be applicable. In case of MSME units and other than Demand Based Consumers, Banking Charges of Rs. 1.10 per unit on Solar Energy Consumed shall be applicable. Banking Charges shall not be applicable to government buildings.

## **Comments/Suggestions from the Stakeholders:**

The stakeholders suggested that Banking charges of Rs. 2.60 per unit shall be applicable on solar energy consumed by all consumers on a ground that the Commission has acknowledge the impact of Rs. 2.60 per unit due to banking facility.

### **Commission's decision:**

The Commission in Petition No. 1936 of 2021 has recognised the banking charge impact as Rs. 2.60 per unit. The Commission has also considered the different aspects of promotion of renewable energy and decided levy of different banking charges to different category of consumers in the said order. The energy generated from the solar Rooftop projects for captive consumption if remain surplus after consumption at consumer place is considered as Surplus Energy Injection (SIC) into the grid is qualify as deemed sale to the licensee at lower rate. Hence, the licensees to that extent will be benefited. Hence, we decides to retain the provisions of banking charges as suggested in the amendment Regulations, otherwise it will qulify as review of the said order based on which the proposed amendment in principal Regulations be carried out.

## 47. Clause 7.3 For the projects set up under Captive use of Annexure-IV:

(ix) Transmission and wheeling charges as per (viii) for third party sale.

### **Comments/Suggestions from the Stakeholders:**

Since wheeling is not envisaged, clause needs to be deleted to ensure clarity.

#### Commission's decision:

The suggestion of the stakeholders that industrial, commercial, institutional consumers are permitted to set up Rooftop projects at the same premises having same point of supply. Hence, the solar rooftop projects need to be set up at the consumer premises or other premises and connect with the grid having same point of supply. Therefore, there is no utilization of transmission or distribution network for transmission or wheeling of energy. Hence, the suggestion of the stakeholder is accepted accordingly. We decide to delete the clause 7.3 (ix) of the Annexure-IV.

### 48. Clause - 7.4 For the projects set up under third party sale of Annexure - IV

(i) ... The surplus energy after the specified period shall be purchased by Distribution licensee at rates specified under this policy.

## **Comments/Suggestions from the Stakeholders:**

The stakeholders have suggested to carryout the corrections by substituting the word "this Regulation" in place of "this Policy" in the said clause.

- (i) ... The surplus energy after the specified period shall be purchased by Distribution licensee at rates specified under the Regulation this policy.
- (ii) ... The surplus energy after the billing cycle shall be purchased by the Distribution licensee at rates specified under the Regulation this policy.

#### Commission's decision:

The suggestion of the stakeholders appears valid as the reference of "this Policy" in the last sentence of sub-clause (i) of Clause 7.4 of the proposed amendment Regulations is not relevant, but the word "this Regulation" needs to incorporate in the said clause. Therefore, the suggestion of the stakeholder is accepted and accordingly the change is made in aforesaid clause 7.4 (i) by adding following sentences at the end of the Regulation as stated below:

### 7.4 For the projects set up under third party sale:

(i) ... The surplus energy after the specified period shall be purchased by Distribution licensee at rates specified under this Regulation.

# 7.4 (ii)(A) In case of LT other than demand based consumers energy accounting (energy set-off) shall be on billing cycle basis.

**7.4 (ii)** ... The surplus energy after the specified period shall be purchased by Distribution licensee at rates specified under this Regulation.

## **Comments/Suggestions from the Stakeholders:**

The stakeholders have suggested to carryout correction by substituting the word "this Regulation" in place of "this Policy" in the said clause.

The stakeholders have also suggested that in new clause 7.4 (ii) (A) in case of LT other than demand based consumers energy accounting (energy set-off) shall be on billing cycle basis be added.

(i) ... The surplus energy after the billing cycle shall be purchased by the Distribution licensee at rates specified under **the Regulation this policy**.

#### Commission's decision:

The suggestion of the stakeholders is valid as the reference of "this policy" in the last sentence of sub-clause (ii) of Clause 7.4 of the proposed amendment Regulations is not relevant, but the word "this Regulation" needs to be incorporated in the said clause. Further, the suggestion of the stakeholders with regards to no reference of the energy accounting for the LT other than demand based consumer category is concerned, is valid. Hence, we decide to amend the clause 7.4 (ii) as under:

## 7.4. For the projects set up under third party sale:

(ii) In case of solar projects set up by LT demand-based consumers, the energy setoff shall be allowed between 07.00 hours to 18.00 hours basis of the same billing
cycle meaning thereby, the generated solar energy during 7:00 hours to 18:00
hours of a billing cycle shall be consumed by the consumer during the specified
period of 7:00 hours to 18:00 hours in the same billing cycle. While in case of
Solar Rooftop project set up by other than demand based LT consumers the
energy generated shall be given set-off on billing cycle basis.

### 49. Clause 7.4 For the projects set up under Third Party Sale of Annexure-IV:

(iii) The surplus solar energy purchased by Distribution Company from captive/third party solar projects shall be considered for fulfilling RPO of Distribution Company.

## **Comments/Suggestions from the Stakeholders:**

The stakeholder has suggested that the clause pertains to third party solar projects and the procurement of surplus energy by the licensee shall be different and distinct than the tariff of such energy generated and supplied to the licensee under the competitive bidding or sale to the licensee. Hence, the said clause needs to be deleted to ensure clarity.

## 7.4 For the projects set up under third party sale:

(iii) The surplus solar energy purchased by Distribution Company from *captive/*third party solar projects shall be considered for fulfilling RPO of Distribution Company.

#### Commission's decision:

The suggestion of the stakeholders is valid as the Commission in Petition No. 1936 of 2021, while deciding the surplus energy, if any, available from captive/third party sale consumer place there is no mention that such energy qualify as fulfillment of RPO of the licensee. Accordingly, the clause 7.4 (iii) of the Regulation is deleted. The subsequent clauses are renumbered accordingly.

### 50. Clause 7.4 For the projects set up under Third Party Sale of Annexure - IV

## 7.4 For the projects set up under third party sale:

(vii) Banking charges of Rs. 1.50/unit shall be applicable on solar energy consumed in case of demand based consumers shall be applicable. In case of MSME units other than demand based consumers, Banking charge of Rs. 1.10 per unit on solar energy consumed shall be applicable. Banking charges shall not be applicable to government buildings.

### **Comments/Suggestions from the Stakeholders:**

The stakholders have suggested that banking charge of Rs. 2.60/unit instead of Rs. 1.50/unit shall be applicable on solar energy consumed by all the consumers.

#### Commission's decision:

The stakeholders have suggested that banking charge of Rs. 2.60 per unit shall be applied on the solar energy consumed by Residential consumers is not accepted with

consideration of promotional aspects to the Residential consumers consumption from solar rooftop projects. Any consumption by MSME units or demand based consumers, or non-demand based consumers, will helpful to the licensee to reduce to procure power at higher rate and supply to such consumers. Further, the consumption of such energy by the above category of consumers will be helpful to reduce the procurement of renewable energy by the licensee for fulfilment of RPO. Further, it will helpful to reduce the transmission and distribution network losses of the licensee. The banking charge for the aforesaid category of consumers are already decided by the Commission in Petition No. 1936 of 2021. Therefore, any change in the aforesaid charges is not permissible. Hence, the objection of the stakeholders is not accepted and we decide to retain the said clause.

## 51. Clause 7.4 For the projects set up under third party sale:

(viii) Transmission and wheeling charges and losses as determined by the Commission shall be levied as applicable depending on the location of the plant and the point of consumption, if the open access on transmission and/or distribution network availed by the consumer/rooftop solar generators.

## Comments/Suggestions from the Stakeholders:

The stakeholders have suggested that since wheeling is not envisaged, clause needs to be deleted to ensure clarity.

#### Commission's decision:

The suggestion of the stakeholder that consumers are permitted to set up Rooftop projects at the same premises having same point of supply. Hence, the solar rooftop projects need to set up at the consumer premises or other premises and connect with the grid having same point of supply. Therefore, there is no utilization of transmission or distribution network for transmission or wheeling of energy. Hence, the suggestion of the stakeholder is accepted accordingly. We decide to delete the clause 7.4 (viii) of the Annexure-IV.

### 52. Clause 7.5 For the projects set up under REC Mechanism of Annexure - IV

(vii) No banking charges shall be applicable.

## **Comments/Suggestions from the Stakeholders:**

The objector/stakeholder have suggested that the Ministry of Power in its "Discussion Paper dated 04.06.2021 on REC Mechanism" has opined that no REC is to be issued to the beneficiary of the concessional charges or waiver of any other charges.

In the draft amendment, the Commission has decided that no banking charges shall be applicable to projects set up under REC mechanism. This would be contrary to the provision of the MoP Discussion Paper. Hence, it is suggested that projects being set up under REC mechanism shall be liable to pay banking charges as decided in Regulation 9.2 or 9.3.

Some of the stakeholders have suggested that the banking charge shall be applicable on the consumers/prosumers who set up the solar rooftop projects under REC mechiansm at the rate of Rs. 2.60 per unit.

#### Commission's decision:

The suggestion of the stakeholders that the banking charges decided in Regulation 9.2 or 9.3 shall be made applicable to the consumers/prosumers set up solar rooftop proejcts under REC mechanism is not acceptable as the energy accounting of such entity is carried out on 15 minutes time block basis. Any surplus energy available after set-off in 15 minutes time block is deemed sale to the licensee. For such energy consumer/prosumer/solar generator is compensated at the rate decided for surplus injection of energy by the Commission. Thus, there is no banking facility provided for such consumers as specified in Regulations 9.2 and 9.3 for consumer/prosumer. Hence, the objection of the stakeholder is not accepted.

### 53. Clause 7.5 For the projects set up under REC mechanism of Annexure - IV

(ix) Transmission and wheeling charges and losses as determined by the Commission shall be levied as applicable depending on the location of the plant and the point of consumption.

#### **Comments/Suggestions from the Stakeholders:**

The stakeholders have suggested that since wheeling is not envisaged, clause need to be deleted to ensure clarity.

#### Commission's decision:

The suggestion of the stakeholder that consumers are permitted to set up Rooftop projects at the same premises having same point of supply. Hence, the solar rooftop projects need to set up at the consumer premises or other premises and connect with the grid having same point of supply. Therefore, there is no utilization of transmission or distribution network for transmission or wheeling of energy. Hence, the suggestion of the stakeholder is accepted accordingly. We decide to delete the clause 7.5 (ix) of the Annexure-IV.

## 54. Clause 7.6 For the projects set up for RPO compliance of Annexure - IV

(vi) No banking charges shall be applicable.

## **Comments/Suggestions from the Stakeholders:**

Some of the stakeholders have suggested that the banking charge be applicable on the consumers/prosumers who set up the solar rooftop projects under RPO compliance at the rate of Rs. 2.60 per unit.

## Commission's decision:

The suggestion of stakeholders is not accepted as the energy accouting for such category of consumers needs to carry out on 15 minute time block basis. The surplus energy if any available after set-off is considerd as surplus injection and it shall be compensated at the rate of 75% of the simple average of tariff discovered and contracted by GUVNL through competitive bidding process. Hence, there is no banking charge leviable.

## 55. Clause 7.6 For the projects set up for RPO Compliance of Annexure - IV:

(vii) Transmission and wheeling charges and losses as determined by the Commission shall be levied as applicable depending on the location of the plant and the point of consumption, if the open access on transmission and/or distribution network availed by the consumer/rooftop solar generators.

## **Comments/Suggestions from the Stakeholders:**

The stakeholders have suggested that since wheeling is not envisaged, clause needs to be deleted to ensure clarity.

#### Commission's decision:

The suggestion of the stakeholder that consumers are permitted to set up Rooftop projects at the same premises having same point of supply. Hence, the solar rooftop projects need to set up at the consumer premises or other premises and connect with the grid having same point of supply. Therefore, there is no utilization of transmission or distribution network for transmission or wheeling of energy. Hence, the suggestion of the stakeholder is accepted. Accordingly, we decide to delete the clause 7.6 (vii) of the Annexure-IV.

### 56. Clause 7. Commercial Settlement

New Addition in Clause 7 of the Annexure – IV.

All commercial settlements under this agreement shall be as per GERC (Net Metering Rooftop Solar PV Grid Interactive Systems) Regulations, 2016 amended from time to time and Order No. 3 of 2020 dated 8.05.2020 and Suo-Motu Order No. 6 of 2020 dated 5.08.2020 of the Gujarat Electricity Regulatory Commission and any subsequent orders in this regard.

## Comments/Suggestions from the Stakeholders:

### New Addition in 7, after first para

Provided that in case the consumer is setting up additional solar rooftop capacity under the scheme over and above solar rooftop capacity set up prior to this scheme, surplus energy of entire solar rooftop capacity shall be purchased by Distribution Company at the applicable rate as decided in Regulation and life span of PPA (25 years) shall be calculated from commissioning date of first PPA.

#### Commission's decision:

The suggestion of the stakeholders are not accepted as the solar rooftop projects may be set up by the consumer/Third party on different dates under the prevailing regulations on the date of Commissioning of such rooftop projects having different energy accounting mechanism and purchase of surplus energy rate etc. Moreover, 25 years of the agreement for such project start from date of the commissioning of the rooftop project. Hence, the rooftop projects set up under different provisions of the Regulation are governed by the relevant provisions under which they are set up and

executed the agreement with the licensees. By incorporating the suggestion of the stakeholders it lead to situation to deviate from the earlier granted benefit to the rooftop project. Moreover, the solar rooftop projects set up later on is not entitled the benefit for 25 years specified in the Regulations, which is contrary to the provisions of the Regulations. Accordingly, we decide not to accept the suggestion and retain the said clause.

#### **57.Other Comments**

### **Comments/Suggestions from the Stakeholders:**

Based on Electricity (Right of Consumers) Rules Amendment 2021 published recently the Commission may re-draft and issue the amendment in the State Regulations in line with the provisions of the Rules that is now published by the MoP. The same will enable to save precious time and effort and repetition of work of the Commission.

The Commission shall hold the proceeding on draft of the amendment of the GERC (Net Metering Rooftop Solar PV Grid Interactive Systems. (Third Amendment), Regulations 2021. while incorporating the provisions of the recent published amendments of Rights of Consumer Rules, 2021, not to impose any charges like Cross Sub-sidy Surcharge, Additional Surcharges etc. on the rooftop solar PV power plant under all three categories.

#### Commission's decision:

The public hearing held on 14.09.2021 on Draft Regulations and the Commission has considered all the submissions/suggestions made by the stakeholders. The Commission has already decided the aforesaid issues in Petition No. 1936 of 2021. Based on aforesaid decision, the provisions for CSS and Additional Surcharge was incorporated in the Draft Amendment Regulations for different categories of consumers who set up Solar PV power plant under REC mechanism on Rooftop to align it with the solar power plant set up on the ground mounted scheme. Therefore, the suggestion of the stakeholder is not accepted.

#### **58. Other Comments**

5. Capacity targets for distribution licensee.

## Principal Regulation 5.1

The distribution licensee shall update distribution transformer capacity available for connecting Rooftop Solar PV Systems under net metering arrangement on yearly basis and shall provide the information to the Commission.

Provided that if augmentation of transformer/distribution network is required, the cost of such augmentation shall be borne by the consumer.

The capacity of Rooftop Solar PV System to be installed at the premises of any consumer shall not be less than one Kilo Watt (1kW).

## **Comments/Suggestions from the Stakeholders:**

The stakeholders have suggested that DISCOMs may publish the following information on quarterly basis which would be useful for planning.

- (a). Detail of circle/feeder wise rooftop generation capacity,
- (b). Circle-wise quantum of excess generation and payments made for the same,
- (c). Number and capacity of Behind-the-meter RE systems which are not availing net metering/net-billing,
- (d). Average time taken for processing an application in each circle (in this year and last year),
- (e). Number of DTs where the capacity threshold has been reached,
- (f). Number of pending applications with the distribution licensee.
- (g). Delays, if any, in making payments to consumers.

#### Commission's decision:

The aforesaid suggestions of the stakeholders for declaration of various information is concerned, the same are with regard to day to day administrative/management of the licensee concerned.

The Principal Regulations provide that the distribution transformer capacity available for connecting Rooftop Solar PV system provided by the licensee to verify by the consumers as well as by the Commission to see that the distribution licensee provides the facility to the consumers to set up the rooftop solar project and connect with the distribution transformer. The proviso to the Regultion 5.1 provides clarity to the

consumers and licensee that in case of augmentation of transformer of distribution network in that case the cost of the same is to be borne by the consumer. Considering the above, the suggestion of the stakeholder to direct the licensee to provide various details is not relevant and therefore, the same is not accepted.

#### 59. Other comments

Introducing the concepts of group net metering and virtual net metering.

## **Comments/Suggestions from the Stakeholders:**

The stakeholder suggested that the Commission may consider introduction of "Group Net Metering" and "Virtual Net Metering" to ease and accelerate the implementation of rooftop solar, especially in large housing societies.

The Delhi Electricity Regulatory Commission vide its DERC (Group Net Metering and Virtual Net Metering for Renewable Energy) Guidelines, 2019 have introduced Group Net Metering" and "Virtual Net Metering" provisions. The same may be allowed in the amendment proposed by the Commission.

#### Commission's decision:

The aforesaid suggestions are beyond the scope of proposed draft amendment as they are not part of the original Draft Regulations and no comments/suggestions were invited from the stakeholders. Hence, the same are not accepted.

#### **60. Other Comments**

The stakeholders have suggested that the Commission may introduce repowering provisions of solar projects, removal of capacity restriction for captive and third party projects and augmentation of solar projects set up under past and present regulations.

#### Commission's decision:

The amendment in the Principal Regulations proposed by the Commission with consideration of different aspects wherein it is proposed to introduce installation of solar rooftop projects under third party sale. Moreover, the ceiling for capacity of rooftop projects is specified with consideration of different aspects and provisions of MoP Rules, 2021. The benefit of Amendment Regulations is available to the consumers/prosumer/developers from the date of Notification. So far as repowering

provisions of solar projects, removal of capacity restriction for captive and third party projects and augmentation of solar projects set up under past and present Regulations are concerned, the same are beyond the scope of the present Draft Amendment Regulations. Hence, the same is not accepted.

#### **61.Other Comments**

Gross Metering with fair Feed-in-Tariffs (FIT):

## **Comments/Suggestions from the Stakeholders:**

The stakeholders have suggested that in the absence of determined FIT for gross metering / net billing of rooftop plants, most States are tending towards using APPC as the FIT for this purpose. Such a move will have a drastic impact on the entire rooftop sector and threatens to irreparably derail it. Most rooftop systems, particularly, in those 250 kW or less, will not even recover their cost of investment at an APPC based FIT.

A fair FIT will be very crucial for Gross Metering. It is average Cost of Supply (ACoS) instead of APPC. The gross metering will helpful to the distribution licensee by way of receiving power at the vicinity of load and helpful to earn higher revenue from every unit of solar generated and injected into the grid.

#### Commission's decision:

The Commission in the Draft Regulations has already specifieid the mechanism that the energy supplied from the solar rooftop projects be paid at the discovered tariff under the Competitive Bidding Process carried out by GUVNL for procurement of solar energy with an average of six months prices. The aforesaid tariff is reflective cost of solar energy generation available in the State. The average cost of supply to the consumer by the licensee consists of the price for different types of energy procured from different sources by the licensee consist of energy purchase from the conventional source of energy i.e. coal, gas, renewable energy like wind, solar, biomass, hydro etc. The average cost of supply of the licensee is not true reflective cost of solar energy generation. However, the purchase of solar energy by the distribution licensee either under net metering or gross metering provisions are quite lower in comparision to average cost of purchase of energy by the licensee. Thus, the procurement of surplus

energy available after consumption at consumer place from Solar rooftop project by the distribution licensee is not cost reflective tariff of such energy. Hence, the suggestion of the objector is not accepted.

#### **62.Other comments:**

### **Comments/Suggestions from the Stakeholders:**

• The stakeholders have submitted that there has been a significant development on solar inverter and "Zero Export" inverters are available which ensures consumer to use solar rooftop generated units only for self-consumption without exporting anything to grid, this concept is used in other States as "Behind-the-Meters" installation and it is requested the Commission to grant or to consider this option over and above net metering capacity of solar rooftop plants to consumers so that consumers can take advantage of idle rooftop space and generate power by self-consumption without disturbing the grid and be more competitive in global market.

#### Commission's decision:

The suggestion of the stakeholder to allow installation of the solar inverter and "Zero Export" inverters to use solar rooftop generated units only for self-consumption without exporting anything to grid, as "Behind-the-Meters" installation and requested to the Commission to grant or consider this option over and above net metering capacity of solar rooftop plants to consumers so that consumers can take advantage of idle rooftop space and generate power by self-consumption without disturbing the grid and be more competitive in global market and incorporation of definitions of "Net Billing" or "Net Feed-in" is concerned, the same are not part of orginal Draft Amendment Regulations on which comments/suggestions were not invited from the stakeholders by the Commission. Moreover, no opportunity of hearing has been given to the stakeholders on the aforesaid issue. Hence, we decide that the aforesaid suggestions are not acceptable while amending the Principal Regulations for which the Commission has issued the Draft Amendment Regulations.

#### 63. Clasue 10:

Amendment in title of Table and at Sr. No. (iv) provided in Regulation 8(2) of the Principal Regulations are amended as under:

The Clause No: 8 Sub Clauses No. (2) the connectivity level at which the Rooftop PV Solar System shall be connected with grid are specified as (table Sr. No-4) Connectivity level HT for connected load of Eligible consumer "Above 100 KW/KVA".

The Clause No: 8 Sub Clauses No. (3), HT consumer may install Rooftop Solar PV System at LT/HT voltage and connect them to their LT/HT system for interconnection of Rooftop Solar PV System with the local distribution licensee's grid.

## **Comments/Suggestions from the Stakeholders:**

- In Draft Notification No. \_ of 2021 titled "Draft GERC Net Metering Roof Top PV Grid Interactive Systems (Third Amendment)" dated 29.06.2021, The title of table and Sr. No (iv) provided in Regulation 8(2) of the Principal Regulations are amended. As per the Amendment, the connectivity level amended as 11 kV, 3 Phase, 50 Hz for the connected load of eligible consumer / prosumer above 100 kW/ KVA in place of HT level.
- The stakeholder suggested that it is not possible to change the existing 33kV and 220kV connectivity level to 11 kV. It is, therefore, requested to consider above points while revisit the draft amendment for final order and allow the interconnection of Rooftop Solar PV module system at LT (415V)/HT level for the eligible consumer prosumer having connected load of above 100kW/KVA at connectivity level of "11kV and Above, 3 Phase 50 Hz".
- Some of the SERCs have permitted to connect solar PV system at LT bus bar system. Similarly, the Commission may permit to the developer to connect solar system on LT side. It is also submitted by the stakeholder that some of the licensee like GIFT PCL does not have 11 KV system ring network but 33 KV system ring network. Therefore, the Commission may allow connectivity level at 11 KV is modified as connectivity level at 11 KV and above.

#### Commission's decision:

The connectivity to the rooftop projects is granted to the consumer by the licensee at the voltage level specified in the GERC (Electricity Supply Code and Related Matters) Regulations notified by the Commission. Any change in the Regulations requires to amend provisions of the Supply Code also. In the absence of change in the Supply Code

it is not permissible to amend the Regulations with regard to connectivity of the rooftop projects with the existing supply at its place which is qualify for point of injection and/or consumption of energy by the solar rooftop owner.

The interconnection point is a point on the electricity system including a sub-station or switchyard where electricity injected into or drawn from the electricity system. In case of HT consumer having load more than 100 kW the interconnection point of the applicant system and licensee system at HT side i.e. 11 KV. Hence, the suggestion of the stakeholder to allow on LT side is not permissible and the same is therefore not accepted.

#### **64.** Other comments:

The Commission is required to intervene and discontinue net metering facility with immediate effect. If at all the State and Central Government wish to promote solar rooftop, they can provide subsidy to consumers setting up such rooftop plants in accordance with the provisions of the Electricity Act, 2003.

#### Commission's decision:

The contention of objector is not acceptable as the net metering facility provided to the consumers as a part of distributed generation available at consumption place which is helpful to reduce the losses of the licensee, dependency of power procurement at higher cost and supply it with transmission and distribution network of the licensee at the consumer place. It is also helpful for the licensee to receive surplus power at quite cheaper rate than the power procure from their own generating station or other sources and supply to the consumers at their place by utlisation of transmission and distribution network on which they require to pay charges and losses, which works out to quite higher rate than procurement rate of such power to supply to the consumers in comparision to purchase of surplus power available from net metering. It is overall beneficial to the consumers at large, licensee, State as well as Nation. Hence, the contention of the objector is not accepted and the same is rejected.

## **65.Other Comments:**

Capacity of solar rooftop to be restricted to sanctioned load/contracted demand. The Commission is required to restrict capacity of solar rooftop up to sanctioned load/contracted demand.

Commission's decision:

The contention of the objector that penetration of solar rooftop in excess of sanctioned

load will be affect transformer also lead to network augmentation etc. are without any

supporting documents and merely a statement given by the objector.

It is also stated that the injection of energy set up by solar rooftop projects into the grid

lead to issue of unscheduled injection and it having commercial implications is

concerned it is noted that the solar rooftop projects set up by the consumers with main

purpose to consume the enegy generated from it for self consumption and only surplus

energy if any available be injected into the grid and the same may be absorbed or

consumed in the near by network from where such energy injected. It is also noted that

solar rooftop projects capacity are installed in whole licensee area/State area. The

penetration of such solar generation is quite lower in comparision to the power

requirement in the license area/State area. Further, the generation from solar power

plant having very lower CUF of about 20% and the surplus energy available after

consumption at the same place of generation are also negligible. Hence, the impact of

such energy on the grid is quite lower. Further, there is neither any case nor any

submission from SLDC who is monitoring and carryout real time base grid operation

and management. Therefore, the contentions of the objector which is not supported by

documents are not accepted and the same are rejected.

The Commission directs that the Third Amendment in the GERC (Procurement of

Energy from Renewable Sources) Regulations, 2010 be published in the Official Gazette

after incorporating the changes as decided and indicated in the foregoing paragraph of

this Order.

Sd/-

[S.R.Pandey]

Member

Sd/-[Mehul M. Gandhi]

Member

Place: Gandhinagar. Date: 31/05/2022.

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## <u>Annexure - I</u>

The Commission has received objections/suggestions from the following stakeholders pursuant to public notices dated 29.06.2021, in the matter of Draft Gujarat Electricity Regulatory Commission (Net Metering Rooftop Solar PV Grid Interactive Systems) (Third Amendment) Regulations, 2021

Sr. No.	Name of Objector (s)
1	Gensol Engineering Limited
2	SG Solar Association
3	Shreeji Energy
4	National Solar Energy Federation of India
5	Drashta Power Consultants Pvt Ltd
6	Reliance Industries Limited
7	CleanMax Enviro Energy Solution P Ltd
8	Federation of Solar Manufacturer and intermediaries
9	ASSOCHAM
10	Prayas Group
11	GUVNL
12	Amplus Solar
13	AMP Energy India Pvt Ltd
14	Torrent Power Limited
15	Welspun India Limited
16	Hirenkumar D Bhavsar
17	Environomics Project LLP
18	Goldi Solar Pvt Ltd
19	PGVCL
20	National High Speed Rail Corporation
21	Haver Standard India Pvt Ltd
22	Gujarat Narmada Valley Fertilizers & Chemicals Limited
23	Gujarat Alkalis & Chemicals Limited
24	GIFT Power Company Limited
25	Utility Users' Welfare Association

## <u> Annexure - II</u>

The following stakeholders were present during the hearing on 14.09.2021, in the matter of Draft Gujarat Electricity Regulatory Commission (Net Metering Rooftop Solar PV Grid Interactive Systems) (Third Amendment) Regulations, 2021:

Sr. No.	Name of Objector (s)
1	GUVNL
2	MGVCL
3	DGVCL
4	UGVCL
5	SLDC - Gujarat
6	TPL, Ahmedabad
7	TPL, Surat
8	GEDA
9	Gensol Engineering Limited
10	SG S <mark>olar</mark> Association
11	Reliance Industries Limited
12	F <mark>ed</mark> eration of Solar Manufacturer and intermediaries
13	Environomics Project LLP
14	G <mark>ol</mark> di Solar Pvt Ltd
15	Gujarat Narmada Valley Fertilizers & Chemicals Limited
16	BEE Electric Pvt. Limited
17	Sory <mark>a R</mark> oshni Limited
18	Kanoda Energy
19	Prozil I <mark>nfra Engi</mark> neering Pvt. Limited