

**GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)
GANDHINAGAR**

EXPLANATORY MEMORANDUM

The Ministry of Power (MoP), Government of India (GoI), in exercise of powers conferred by sub-section (1) read with sub-section (2) (z) of section 176 of the Electricity Act, 2003 has notified the Electricity (Rights of Consumers) Rules, 2020 (here onwards referred to as Principal Rules) on 31.12.2020. Pursuant to these Rules, the Commission has notified Gujarat Electricity Regulatory Commission (Net Metering Rooftop Solar PV Grid Interactive Systems) (Third Amendment) Regulations, 2022. Subsequently, Ministry of Power, Government of India has notified the Electricity (Rights of Consumers) Amendment Rules, 2024 on 22.02.2024 (here onwards referred to as Amendment Rules 2024) making amendments in certain clauses of the Principal Rules. The State Electricity Regulatory Commissions have been asked to either make new Regulations or amend existing Regulations to align the applicable Regulations with the said Rules vide MoP letter dated 18.01.2021. Accordingly, the Commission has decided to make amendments in the Gujarat Electricity Regulatory Commission (Net Metering Rooftop Solar PV Grid Interactive Systems) Regulations, 2016 and its subsequent amendments as provided in the Draft Regulations.

The relevant provisions of the Amendment Rules, 2024 read as under:

“.....

5. In the principal rules, in rule 11,-

(i) for sub-rule (7), the following sub-rule shall be substituted, namely:-

“(7) For installation of roof top solar photo voltaic systems, the technical feasibility study shall be completed within a period of fifteen days and the

outcome of the study shall be intimated to the applicant, failing which it shall be presumed that the proposal is technically feasible.

(7A) The applications for roof top solar photo voltaic systems up to 10 kW capacity, complete in all respects shall be deemed to have been accepted without requiring technical feasibility study and any commensurate enhancement of the sanctioned load of the consumer, as may be required, shall be carried out by the distribution licensee.”;

(ii) for sub-rule (8), the following sub-rule shall be substituted, namely:-

(8) subject to sub-rule (7A), during the time period from the feasibility study or deemed acceptance of the application till the completion of installation, in case, there is any requirement of upgradation of distribution infrastructure like augmentation of service line, distribution transformer capacity, and the like for installation of the required capacity of roof top solar photo voltaic system, the same shall be carried out by the distribution licensee or consumer, as the case may be:

Provided that the cost of strengthening the distribution infrastructure, including distribution transformer, as necessary, to facilitate the installation of roof top solar photovoltaic systems up to a capacity of 5 kW or a higher capacity as prescribed by the State Commission, shall be included in the revenue requirement of the distribution licensee.

(iii) for sub-rule (9), the following sub-rule shall be substituted, namely:-

“(9) After installation of roof top solar photovoltaic system, the consumer shall submit the installation certificate to such distribution licensee and such distribution licensee shall complete signing of connection agreement, installation

of meter and successful commissioning of the roof top solar photovoltaic system within fifteen days from the date of submission of the installation certificate.

(9A) The Formats of connection agreement and installation certificate shall be placed on web-portal of the distribution licensee.”

In order to align the existing Regulations and amendments thereof, with the above Rules, the Regulations 5.1, 7 and ‘Annexure-IV’ to the Regulations need to be amended.

Below is the sequential narration as well as reasons for carrying out the amendments in the provisions of the existing Regulations and its subsequent amendments thereof.

1. Rule 5 of the Amendment Rules, 2024 provides as under:

“In the principal rule, in rule 11

.....

(ii) For sub-rule (8), the following sub rule shall be substituted, namely: -

(8) Subject to Sub rule (7A), during the time period from the feasibility study or deemed acceptance of the application till the completion of the installation, in case there is any requirement of upgradation of distribution infrastructure like augmentation of the service line, distribution transformer capacity, and the like for installation of the required capacity of rooftop solar photovoltaic system, the same shall be carried out by the distribution licensee or the consumer, as the case may be:

Provided that the cost of strengthening the distribution infrastructure including, distribution transformer, as necessary to facilitate the installation of rooftop solar photovoltaic systems upto a capacity of 5 KW or a higher capacity as prescribed by the State Commission shall be included in the revenue requirement of the distribution licensee.”

Relevant Provisions of the Existing GERC (Net Metering Rooftop Solar PV Grid Interactive Systems) Regulations, 2016:

5. Capacity Targets for Distribution Licensee.

.....

“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).

Proposed Amendment:

The Regulation 5.1 is proposed to be substituted as under:

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 the cost of strengthening of distribution infrastructure, including distribution transformer, as necessary, to facilitate the installation of Rooftop Solar PV System up to 6 KW including subsequent addition aggregating upto 6 KW, shall be included in the Annual Revenue Requirement of Distribution Licensee.

Provided further that for aggregate Rooftop Solar capacity above 6 KW, system strengthening charges shall be recovered by the Distribution Licensee from the applicant of Rooftop Solar system as per the below stipulations:

(a) For LT consumers installing Rooftop Solar PV System above 6 kW up to 100 kW in aggregate:

(i) In respect of State owned Discoms and Torrent Power Limited:

System strengthening charges for Rooftop Solar capacity above 6 kW up to 100 kW shall be recovered from the Applicant by the Distribution Licensee for the Rooftop Solar capacity based on per kW basis charges as applicable for release of new/additional load at Low Tension, being recovered from the applicant by the concerned Distribution Licensee as approved by the Commission from time to time.

Provided that in case of addition of Rooftop Solar capacity resulting into total Rooftop Solar capacity above 6 kW, the system strengthening charges shall be recovered only for additional Rooftop Solar capacity.

(ii) In respect of other Discoms:

In case there is any requirement of upgradation of distribution infrastructures like the augmentation of service line, distribution transformer capacity, and the like for installation of the required capacity of Rooftop Solar PV System, the same shall be carried out by the distribution licensee, the cost of such augmentation shall be borne by the consumer.

Provided that as and when the Commission approves recovery of charges on per kW basis for release of new connection/additional load, the same shall be applicable for recovery of charges towards system strengthening for installation of Rooftop Solar PV system.

(b) For HT consumers installing Rooftop Solar PV System above 6 kW up to 1000 kW in aggregate:

(i) In respect of State owned Discoms:

System strengthening charges for Rooftop Solar capacity above 6 kW up to 1000 kW shall be recovered from the Applicant by the Distribution Licensee for the Rooftop Solar capacity based on per KVA basis charges as applicable for release of new/additional load at High Tension, being recovered from the applicant by the concerned Distribution Licensee as approved by the Commission from time to time.

Provided that in case of addition of Rooftop Solar capacity resulting into total Rooftop Solar capacity above 6 kW, the system strengthening charges shall be recovered only for additional Rooftop Solar capacity.

(ii) In respect of other licensee:

In case there is any requirement of upgradation of distribution infrastructures like the augmentation of service line, and the like for installation of the required capacity of Rooftop Solar PV System, the same shall be carried out by the distribution licensee, the cost of such augmentation shall be borne by the consumer.

Provided that as and when the Commission approves recovery of charges on per kW basis or per KVA basis for release of new connection/additional load, the same shall be applicable for recovery of charges towards system strengthening for installation of Rooftop Solar PV system.

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

Rationale:

In order to align the provisions of the existing Regulations with Amendment Rules, 2024, the modification in the corresponding Regulation 5.1 is proposed for including system strengthening costs in ARR of Discoms instead of recovery from the individual applicants who are installing small Rooftop Solar PV system up to 6 kW.

2. Rule 5 of the Amendment Rules, 2024 provides as under:

“In the principal rule, in rule 11 -

(i) for sub rule (7), the following sub-rule shall be substituted, namely: -

“(7) For installation of rooftop solar Photo voltaic systems, the technical feasibility study shall be completed within period of fifteen days and the outcome of the study shall be intimated to the applicant, failing which it shall be presumed that the proposal is technically feasible.

(7A) The application for rooftop solar photo voltaic systems upto 10 KW capacity, complete in all respects shall be deemed to have been accepted without requiring technical feasibility study and any commensurate enhancement of the sanction load of the consumer, as may be required, shall be carried out by the distribution licensee”.

(iii) for sub rule (9), the following sub-rule shall be substituted, namely: -

“(9) After installation of Rooftop solar photo voltaic system, the consumer shall submit the installation certificate to such distribution licensee and such distribution licensee shall complete signing of connection agreement, installation of meter and successful commissioning of the rooftop solar photo voltaic system within 15 days from the date of submission of the installation certificates.

(9A) The format of connection agreement and installation certificate shall be placed on web portal of the distribution licensee.”

Relevant Provisions of the Existing GERC (Net Metering Rooftop Solar PV Grid Interactive Systems) Regulations, 2016 and its subsequent amendments thereof:

7 Procedure for Application

Various activities and different authorities are associated with the Solar Rooftop PV project. It is necessary that the different entities carry out the works within prescribed time limit. Therefore, time frame prescribed in the table below shall be scrupulously followed by the concerned authorities.

Sr. No.	Activity	Sub Activity	Duration in day(s)
1	<i>Registration at GEDA or agency designated by the Government of Gujarat</i>	<i>GEDA or agency designated by the Government of Gujarat shall issue Registration Certificate.</i>	<i>5 days from receipt of duly completed application</i>
2	<i>Approval from Chief Electrical Inspector</i>	<i>CEI shall approve Single Line Diagram, Earthing Diagram and Wiring Diagram</i>	<i>10 days from receipt of duly completed application</i>
3	<i>Application to Distribution Licensee</i>	<i>Applicant shall submit application in prescribed format along with following compliance and documents to Distribution Licensee</i> <ul style="list-style-type: none"><i>Capacity of Solar Rooftop to be installed (Subject to Regulation 6.2)</i>	

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4	<i>Technical Feasibility Report (TFR)</i>	<i>On Registration with Distribution Licensee, letter to concerned Circle/Division for TFR and informing applicant regarding specifications of CTPT, meter.</i>	<i>5 days from receipt of duly completed application</i>
5	<i>TFR from field</i>	<p><i>TFR to include following</i></p> <p><i>a) Name of Consumer.</i></p> <p><i>b) Load details of the building where roof-top is to be installed as under: Name of Division, Sub-Division, Consumer Name, Consumer No., Address, Tariff, Contract Demand/ Load, Connected Load</i></p> <p><i>c) Name of 11 KV feeder, Transformer capacity, Solar Rooftop capacity already connected as well as approved/sanctioned on this transformer including this proposed Solar Rooftop capacity whether total Rooftop solar capacity is within the rated capacity of transformer.</i></p> <p><i>d) Maximum demand recorded during last one year.</i></p> <p><i>e) No dues certificate.</i></p> <p><i>f) No legal disputes pending certificate.</i></p> <p><i>g) Detailed estimate to be recovered from applicant for strengthening of Distribution Licensee's system for the work to be carried out for providing connectivity and evacuation facility of surplus power to be injected by the applicant.</i></p> <p><i>Note: Solar installation to be restricted up to T/C capacity, and if</i></p>	<i>10 Days from the letter of Head Office.</i>

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		<i>required, it is to be strengthened at the cost of Solar Rooftop Generator.</i>	
6	<i>Post TFR</i>	<i>On receipt of TFR from field, Head Office shall issue letter to applicant regarding In principle consent for connectivity, payment of connectivity charges and execution of connectivity agreement within 15 days. OR Issuing estimate to applicant for system strengthening (if required) to be paid within 30 days, payment of connectivity charges and execution of connectivity agreement.</i>	<i>5 days from receipt of TFR from field office</i>
7	<i>Signing of connectivity agreement and issuance of letter to applicant for completion of project work</i>	<i>Case 1 (No system strengthening required) On payment of Connectivity Charges and execution of Connectivity Agreement within 15 days of consent. Letter to applicant to complete the project work within 6 months. Case 2 (If system Strengthening required) On payment of Connectivity Charges and execution of Connectivity Agreement within 30 days along with payment of estimate. Letter to applicant to complete the project work within 6 months.</i>	<i>5 days from execution of agreement 5 days from execution of agreement</i>
8	<i>System strengthening by Distribution Licensee</i>	<i>Distribution Licensee to complete the work of system strengthening on payment of estimate.</i>	<i>45 days in parallel to project installation</i>

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9	<i>Notice to applicant for commissioning</i>	<i>Issuance of two months' notice to applicant for commissioning of the project on expiry of 6 months project completion period.</i>	<i>Within 5 days on expiry of 6 months</i>
10	<i>In case of non-completion of work by applicant</i>	<i>If no intimation received from applicant on expiry of 2 months' notice period, application shall be cancelled informing the applicant within 30 days forfeiting all charges paid for Solar Rooftop Project.</i>	<i>Within 5 days on expiry of 2 months</i>
11	<i>On completion of work by applicant</i>	<p><i>Intimation to applicant to submit following documents within 5 days: (if not submitted along with intimation of commissioning by applicant)</i></p> <ol style="list-style-type: none"> <i>1. Ownership of Solar PV system</i> <i>2. Installation charging approval of Chief Electrical Inspector(CEI)</i> <i>3. Meter/ CTPT testing certificate from High-tech lab and ERDA.</i> <i>4. All equipment should comply with IEC standards. Applicant to submit relevant IEC certificate/test reports for all equipment's i.e. for modules/SPV/ inverters/ cables/ junction box/ Transformer /RMU/CTPT/meter etc.</i> <i>5. Installation of proper protection system (inverter shall have anti islanding feature) along with second line of protection such as no volt relay, (for Solar PV system above 10Kw), applicant has to pay connectivity charges and execute connectivity agreement with Distribution Licensee.</i> <p>Note: <i>If applicant is not submitting above documents within 5 days,</i></p>	<i>5 days from receipt of completion letter from applicant</i>

		<i>application shall be cancelled forfeiting all charges paid for Solar Rooftop Project.</i>	
12	<i>Intimation to Field Office</i>	<i>On receipt of documents from the applicant, intimation to Field Office/Sub- division for installation of meter (Solar meter to record total generation and bidirectional/ABT meter for net metering).</i>	<i>5 days from receipt of documents from the applicant</i>
13	<i>Report from field/sub- division</i>	<i>Installation of meter (Solar meter to record total generation and bidirectional/ABT meter for net metering) and intimate to applicant and report to HO</i>	<i>7 days from receipt of letter from HO</i>
14	<i>Intimation to GEDA or agency designated by the Government of Gujarat</i>	<i>Distribution Licensee shall intimate to GEDA or agency designated by the Government of Gujarat for issuing commissioning certificate</i>	<i>5 days from receipt of letter from Distribution Licensee</i>
15	<i>Issuance of Commissioning Certificate from GEDA or agency designated by the Government of Gujarat</i>	<i>GEDA or agency designated by the Government of Gujarat shall visit the site in consultation with Distribution Licensee and applicant and issue Commissioning Certificate</i>	<i>5 days from the receipt of intimation from applicant</i>

Proposed Amendment:

The Regulation 7 is proposed to be substituted as under:

Various activities and different authorities are associated with the Solar Rooftop PV project. It is necessary that the different entities carry out the works within prescribed time limit. Therefore, time frame prescribed in the table below shall be scrupulously followed by the concerned authorities.

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Sr. No.	Activity	Sub Activity	Duration in day(s)
1	Registration at GEDA or agency designated by the Government of Gujarat	GEDA or agency designated by the Government of Gujarat shall issue Registration Certificate.	5 days from receipt of duty completed application
2	Approval from Chief Electrical Inspector	CEI shall approve Single Line Diagram, Earthing Diagram and Wiring Diagram	10 days from receipt of duly completed application
3	Application to Distribution Licensee	Applicant shall submit application in prescribed format along with following compliance and documents to Distribution Licensee <ul style="list-style-type: none"> Capacity of Solar Rooftop to be installed (Subject to Regulation 6.2) 	
4	Technical Feasibility Report (TFR)	On Registration with Distribution Licensee, letter to concerned Circle/Division for TFR and informing applicant regarding specifications of CTPT, meter.	3 days from receipt of duly completed application
5	TFR from field	TFR to include following <ol style="list-style-type: none"> Name of Consumer. Load details of the building where rooftop is to be installed as under: Name of Division, Sub-Division, Consumer Name, Consumer No., Address, Tariff, Contract Demand/ Load, Connected Load Name of 11 KV feeder, Transformer capacity, Solar Rooftop capacity already connected as well as approved/sanctioned on this transformer including this proposed 	10 Days from the letter of Head Office.

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		<p>Solar Rooftop capacity whether total Rooftop solar capacity is within the rated capacity of transformer.</p> <p>d) Maximum demand recorded during last one year.</p> <p>e) No dues certificate.</p> <p>f) No legal disputes pending certificate.</p> <p>g) Estimate if any, to be recovered from applicant. Such estimate shall include details of works to be carried out for system strengthening for providing connectivity and evacuation facility of surplus power to be injected by the applicant, if estimate is not recovered based on Per KW/Per KVA charges.</p>	
6	Post TFR	<p>On receipt of TFR from field, Head Office shall issue letter to applicant regarding 'In Principle' consent for connectivity, payment of connectivity charges and execution of connectivity agreement within 15 days.</p> <p>OR</p> <p>Issuing estimate subject to Regulation 5.1, to Applicant for system strengthening to be paid within 30 days, payment of connectivity charges and execution of connectivity agreement.</p>	2 days from receipt of TFR from field office
7	Signing of connectivity agreement and issuance of letter to applicant for	<p>Case 1 (No system strengthening required)</p> <p>On payment of Connectivity Charges and execution of Connectivity Agreement within 15 days of</p>	5 days from execution of agreement

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	completion of project work	consent. Letter to applicant to complete the project work within 6 months Case 2 (If system strengthening required) On payment of Connectivity Charges and execution of Connectivity Agreement within 30 days along with payment of estimate, if any. Letter to applicant to complete the project work within 6 months.	5 days from execution of agreement
8	System strengthening by Distribution Licensee	Distribution Licensee to complete the work of system strengthening.	15 days from date of payment of connectivity charges and execution of connectivity agreement.
9	Notice to Applicant for commissioning	Issuance of two months' notice to applicant for commissioning of the project on expiry of 6 months project completion period.	Within 5 days on expiry of 6 months
10	In case of non-completion of work by applicant	If no intimation received from Applicant on expiry of 2 months' notice period, application shall be cancelled informing the applicant within 30 days forfeiting all charges paid for Solar Rooftop Project.	Within 5 days on expiry of 2 months
11	On completion of work by Applicant	Intimation to Applicant to submit following documents within 3 days: (if not submitted along with intimation of commissioning by applicant) 1. Ownership of Solar PV system	3 days from receipt of completion letter from applicant

		<p>2. Installation charging approval of Chief Electrical Inspector(CEI)</p> <p>3. Meter/CTPT testing certificate from High-tech lab and ERDA.</p> <p>4. All equipment should comply with IEC standards. Applicant to submit relevant IEC certificate/test reports for all equipment's i.e. for modules/SPV/ inverters/ cables/ junction box/ Transformer /RMU/CTPT/meter etc.</p> <p>5. Installation of proper protection system (inverter shall have anti islanding feature) along with second line of protection such as no volt relay, (for Solar PV System above 10 Kw), applicant has to pay connectivity charges and execute connectivity agreement with Distribution Licensee. Note: If Applicant is not submitting above documents within 3 days, application shall be cancelled forfeiting all charges paid for Solar Rooftop Project.</p>	
12	Intimation to Field Office	Upon receipt of documents from the Applicant, intimation to Field Office/Sub- division for installation of meter (Solar meter to record total generation and bidirectional/ABT meter for net metering).	2 days from receipt of documents from the applicant
13	Report from field/sub- division	Installation of meter (Solar meter to record total generation and bidirectional/ABT meter for net metering) and intimate to applicant and report to HO	5 days from receipt of letter from HO

14	Intimation to GEDA or agency designated by the Government of Gujarat	Distribution Licensee shall intimate to GEDA or agency designated by the Government of Gujarat for issuing commissioning certificate	2 days from receipt of letter from Distribution Licensee
15	Issuance of Commissioning Certificate from GEDA or agency designated by the Government of Gujarat	GEDA or agency designated by the Government of Gujarat shall visit the site in consultation with Distribution Licensee and applicant and issue Commissioning Certificate	3 days from the receipt of intimation from applicant

Provided that the application for Rooftop Solar Photovoltaic systems upto 10 kW capacity, complete in all respect shall be deemed to have been accepted without requiring technical feasibility study and any commensurate enhancement of the sanction load of the consumer, as may be required, shall be carried out by the Distribution Licensee.

Rationale:

Timeline is proposed to be aligned in the Regulation 7 is in line with time frame provided in the Amendment Rules, 2024.

The Amendment Rules, 2024 provides to undertake technical feasibility study within a period of 15 days. Similarly, Amendment Rules, 2024 provides that after installation of roof top solar photovoltaic system, the consumer shall submit the installation certificate to such distribution licensee and such distribution licensee shall complete signing of connection agreement, installation of meter and successful commissioning of the Rooftop Solar Photovoltaic System within fifteen days from the date of submission of the installation certificate. Accordingly, amendments in timelines in the table under ‘Regulation 7 – Procedure for Application’ is proposed.

3. Requirement for Amendment in the provisions of ‘Annexure-IV’ to the Regulations:

The relevant provisions in the ‘Annexure – IV’ of Regulations is as under:

“8. Connection cost

8.1 The Consumer/Prosumer/ Solar Power system developer under third party sale shall bear all cost related to setting up of Rooftop Solar Photovoltaic System including metering and inter connection. The Consumer/Prosumer/Solar Power System developer under third party sale agrees to pay the actual cost of modifications and upgrades to the service line, cost of upgradation of transformer to connect photovoltaic system to the grid, in case it is required.”

Proposed Amendment

The Clause 8.1 of Connectivity Agreement at ‘Annexure- IV’ is proposed to be substituted as under:

8.1 The recovery of cost from the Applicant for strengthening of distribution infrastructure, including distribution transformer shall be governed as per Regulation 5.1.

Rationale:

In order to align the provisions of the existing Regulations with Amendment Rules, 2024, the modification in the Clause 8.1 of Connectivity Agreement at ‘Annexure- IV’ is proposed for including system strengthening costs in ARR of Discoms instead of recovery from the individual applicants who are installing small Rooftop Solar PV system up to 6 kW.

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