



# THE ASSAM GAZETTE

অসাধাৰণ

EXTRAORDINARY

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GOVERNMENT OF ASSAM  
ORDERS BY THE GOVERNOR  
ASSAM ELECTRICITY REGULATORY COMMISSION

## NOTIFICATION

The 6th August, 2019

### **AERC (GRID INTERACTIVE SOLAR PV SYSTEMS), REGULATIONS, 2019**

**No. AERC.608/2017/65.-** WHEREAS the Assam Electricity Regulatory Commission notified the Assam Electricity Regulatory Commission (**Grid Interactive Solar PV Systems**) Regulations, 2015 on 14<sup>th</sup> May, 2015 and

WHEREAS the Government of Assam (GoA) vide notification no. PEL.65/2014/207 notified the Assam Solar Energy Policy, 2017 on 16<sup>th</sup> January 2018 to leverage solar energy potential of the State of Assam for augmenting the installed solar power capacity by deploying resources provisioned under state and central schemes, policies and programs.

On comparison of the provisions of policy notified by the State Govt. and the existing regulations AERC (Grid interactive Solar PV Systems) Regulations, 2015 certain differences is observed.

Section 108 of the Electricity Act, 2003 provides that,

*(1) In the discharge of its functions, the State Commission shall be guided by such directions in matters of policy involving public interest as the State Government may give to it in writing.*

*(2) If any question arises as to whether any such direction relates to a matter of policy involving public interest, the decision of the State Government thereon shall be final.*

Government of Assam (GoA) vide letter no. PEL.65/2014/299 dated 7<sup>th</sup> March 2019 directed the Commission to make necessary changes in AERC (Grid Interactive Solar PV Systems) Regulations, 2015.

NOW, THEREFORE, in exercise of the powers conferred by section 181, read with sections 61, 66, 86(1)(e) and 181 of the Electricity Act, 2003 (Act 36 of 2003) and all other powers enabling it in this behalf, the Assam Electricity Regulatory Commission after previous publication, makes the following Regulations for the Grid Interactive Solar Photovoltaic (PV) systems.

## REGULATIONS

### 1. SHORT TITLE AND COMMENCEMENT:

- 1.1. These regulations may be called the “Assam Electricity Regulatory Commission (**Grid Interactive Solar PV Systems**) Regulations, 2019”.
- 1.2. These regulations shall extend to the whole of the State of Assam.
- 1.3. These regulations shall come into force from the date of their publication in the Assam Gazette.

### 2. DEFINITIONS AND INTERPRETATIONS:

- 2.1. In these regulations, unless the context otherwise requires –
  - a) “**Act**” means the Electricity Act, 2003 (36 of 2003) and subsequent amendments thereof;
  - b) “**Average Power Purchase Cost**”(APPC) means the Weighted Average Pooled Price at which the distribution licensee has purchased the electricity including the cost of self-generation , if any, in the previous Financial Year from all the energy suppliers on long-term and medium-term basis, but excluding the energy purchased from the renewable energy sources and Transmission charges till the periphery of Distribution system of the licensee,
  - c) “**Agreement**” means an agreement entered into by the Distribution licensee and the consumer;
  - d) “**Banked energy**” means the residual energy injected to the Grid after self consumption from a solar system.
  - e) “**Billing cycle or billing period**” means the period for which regular electricity bills as specified by the Commission, are prepared for different categories of consumers by the licensee;
  - f) “**Check meter**” means a meter installed in addition to the main meter, which can be utilized in case of defects in the main meter.
  - g) “**Commission**” or “**AERC**” means the Assam Electricity Regulatory Commission constituted under the Act;
  - h) “**Consumer**” means any person who is supplied with electricity for own use by a licensee or the Government or by any other person engaged in the business of supplying electricity to the public under this Act or any other law for the time being in force and includes any person whose premises are, for the time being, connected for the purpose of receiving electricity with the works of a distribution licensee, the Government or such other person, as the case may be;

- i) **“Contracted load”** or **“contract demand”** means the maximum demand in kVA , agreed to be supplied by the licensee and indicated in the agreement executed between the licensee and the consumer. In case, no agreement is made, the connected load will be provisionally treated as contract load,. till the Agreement is made.
- j) **“Distribution licensee (DISCOM)”** or **“licensee”** means a person granted a license under Section 14 of the Act authorizing him to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply;
- k) **“Electricity Supply Code”** means the AERC (Electricity Supply Code and Related Matters) Regulations, 2017’ and subsequent amendments thereof;
- l) **“Eligible consumer”** means a consumer of electricity in the area of supply of the distribution licensee, who uses a grid interactive solar PV system installed in the Consumers premises, to offset part or all of the consumer's own electrical requirements, given that such systems can be self-owned or third party owned;
- m) **"EXIM Meter"** means bi-directional Export - import Energy Meter for recording of bi- directional flow of energy at consumer interconnection Point;
- n) **“Financial year”** or **“year”** means the period beginning from first day of April in an English calendar year and ending with the thirty first day of the March of the calendar year;
- o) **“Grid Interactive Solar Photovoltaic system”(GISPV)** means a system that connects the power generating plant (commonly Solar) in an electricity consumer’s premises to an utility grid to facilitate supply excess electricity generation from the plant after meeting the need of the consumer to the distribution company’s grid and also to draw electricity from the distribution utility’s grid to meet shortfall in requirement in case of inadequate electricity generation by the generating plant. “Import-export” of energy to utility grid or “Net energy” consumed or injected is measured by “EXIM metering” or “Net metering” as the case may be depending on the agreement.
- p) **“Interconnection Point”** means the interface of the Solar power generating facility with the network of distribution licensees and the ‘Interconnection Point’ for such facility shall be the outgoing terminals of the meter, if the meter is fixed after the Distribution Licensee’s cut-outs/ switchgear in the premises of the Eligible Consumer or the Distribution Licensee’s cut-outs/ switchgear, if the meter is fixed before the Distribution Licensee’s cut-outs/ switchgear.  
Provided that, in the case of consumers being supplied electrical power at the High Tension (HT) level, the “Interconnection Point” shall mean the interface of the Solar PV system with the outgoing terminals of the Distribution Licensee’s metering cubicle placed before such Consumer’s apparatus.
- q) **“Invoice”** means a Monthly Bill / Supplementary Bill or a Monthly Invoice/ Supplementary Invoice raised by the distribution licensee to the consumer.
- r) **“Islanding”** means a condition that prevents injection of solar power to the grid automatically, in case of grid failure.

- s) **“KWp”** means Kilo Watt peak rating of Solar Panel under Standard Test Conditions (STC);
- t) **“NET Meter”** means an appropriate energy meter capable of recording both import and export of electricity, for recording the net import and net export of electricity, as the case may be;
- u) **“Obligated entity”** means the entity mandated under clause (e) of subsection (1) of section 86 of the Act to fulfill the renewable purchase obligation and identified under AERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010’;
- v) **“Premises”** means areas on the land, building or infrastructure or part or combination thereof in respect of which a separate meter or metering arrangements have been made by the licensee for supply of electricity;
- w) **‘Rooftop solar photovoltaic system (RTSPV)’** means the photovoltaic system installed on the rooftop or ground of the consumer premises upto a capacity of 1000Kw, that uses sunlight for direct conversion into electricity through photovoltaic technology;
- x) **“Renewable Energy Certificate (REC)”** means the certificate issued in accordance with the procedures approved by the Central Electricity Regulatory Commission;
- y) **‘Settlement period’** means the period from first day to the last day of the transaction of energy. The same may be monthly or yearly depending upon the nature of agreement entered into between the consumer and utility. However, settlement under Net metering system shall be made within one year or thirty first of the March of the next year, whichever is earlier;
- z) **“Tariff order”** in respect of a licensee means the most recent order issued by the Commission applicable for that licensee indicating the rates to be charged by the licensee from various categories of consumers for supply of electrical energy and services.
- aa) **“Third party owner”** means a developer who is generating solar energy on a rooftop from the Rooftop solar PV system but does not own the rooftop but enters into a lease / commercial agreement with the rooftop owner;

2.2. Assam Electricity Regulatory Commission (Grid Interactive Solar PV Systems) Regulations, 2015 is repealed and replaced by **Assam Electricity Regulatory Commission (Grid Interactive Solar PV Systems) Regulations, 2019.**

2.3. All other words and expressions used in these Regulations although not specifically defined herein above, but defined in the Act, shall have the meaning assigned to them in the Act. The other words and expressions used herein but not specifically defined in these Regulations or in the Act but defined under any law passed by the Parliament applicable to the electricity industry in the State shall have the meaning assigned to them in such law.

**3. SCOPE AND APPLICATION:**

- 3.1. These Regulations shall apply to the distribution licensee/ licensees and consumers of electricity of distribution licensee/ licensees in the State of Assam.
- 3.2. A Solar Grid Interactive system installed in premises may be owned by consumer or a Third party.
- 3.3. The eligible consumer may install the solar system which,
  - a) Shall be within the permissible rated capacity as defined under these Regulations.
  - b) Shall be located in the consumer premises.
  - c) Shall interconnect and operate safely in parallel with the distribution licensee network.

**4. GENERAL PRINCIPLES:**

The distribution licensee may adopt the provision of either NET metering or EXIM metering arrangement in accordance with the policy directions of GoA, for the consumers, who intends to install grid connected solar system, in the area of supply of the licensee on non-discriminatory and first come first serve basis. The metering arrangement as adopted by the Distribution licensee shall be final and will be applicable to all consumers under that Distribution licensee.

**5. CAPACITY TARGETS FOR DISTRIBUTION LICENSEE:**

- 5.1 The available capacity of a particular distribution transformer, to be allowed for connectivity under these Regulations, shall not be less than the limits as specified by the Commission from time to time.
- 5.2 The distribution licensee shall update distribution transformer level capacity available for connecting rooftop solar systems under NET/EXIM metering arrangement on yearly basis and shall provide the information on its website as well as to the Commission.

**6. ELIGIBLE CONSUMER, INDIVIDUAL PROJECT CAPACITY AND INTERCONNECTION VOLTAGE:**

- 6.1. All eligible consumers of electricity in the area of supply of the distribution licensee can participate in the grid interactive Solar PV system.
- 6.2. The inter-connecting voltage level of the GIS for various capacity ranges shall be as per relevant provision of the AERC (Electricity Supply Code and related matters Regulations) 2017 as amended from time to time.
- 6.3. The Solar panel capacity of Grid Interactive Solar System to be installed at any eligible consumer premises shall be between of 1 kWp to 1000 kWp restricted to
  - For **LT category** consumers, the solar panel capacity of any individual consumer will be limited to 80% of the connected load/contract demand wherever interconnection with the grid is technically feasible.

Provided that the cumulative solar panel capacity of all such LT category consumers connected to a distribution transformer will be limited to 20 % of the peak capacity of the Distribution Transformer.

- For **HT category** consumers, the solar panel capacity of any individual consumer will be limited to 80% of the connected load/contract demand wherever interconnection with the grid is technically feasible.

Provided that the cumulative solar panel capacity of all such HT category consumers connected to a 33/11KV Sub-station will be limited to 20 % of the peak capacity of the Sub- station.

Provided that, there shall be no restriction on State Generating Companies or Distribution licensee installing bigger plants, subject to their compatibility with the system and necessary safety measures taken.

## **7. INTERCONNECTION WITH THE GRID SPECIFICATIONS, STANDARDS AND SAFETY REQUIRMENTS:**

(1) The distribution licensee shall ensure that,-

- a. The interconnection of the solar energy system with the distribution system of the licensee conforms to the specifications and standards as provided in the Central Electricity Authority (Technical Standards for connectivity of the Distributed Generation Resources) Regulations, 2013, as amended from time to time;
- b. The interconnection of the solar energy system with the distribution system of the licensee conforms to the relevant provisions of the Central Electricity Authority (Measures relating to Safety and Electric Supply), Regulations, 2010, as amended from time to time;
- c. The NET meter or EXIM meter installed shall conform to the standards, specifications and accuracy class as provided in the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, as amended from time to time and are installed in such a way that they are accessible for reading.

(2) The licensee shall, while ascertaining the feasibility and eligibility of interconnecting a Grid Interactive system of a consumer shall duly consider conformity of the above mentioned requirement.

The supplier will inform the eligible consumer the specifications and such other details of the components including the meter and the protective devices required to be installed along with the solar energy system.

(3) The licensee shall also provide in advance to an interested prospective eligible consumer a copy of the 'RTSPV Connecting Agreement' annexed as Annexure I of these Regulations, where 'technical, interconnecting, safety and other requirements' to be fulfilled by the consumer in respect of setting up of such system are incorporated.

(4) The eligible consumer is to obtain the necessary clearance/approval for commissioning a Grid Interactive system, from the State Electrical Inspectorate, depending on size of solar generator and voltage of supply as required under

Regulation 32 and Regulation 43 respectively of the Central Electricity Authority (Measures related to safety and electric supply regulations) 2010, and Rules and Regulations notified by the State Government’.

## **8. ENERGY ACCOUNTING AND SETTLEMENT:**

In pursuance to the selection of metering arrangement by the Distribution licensee, as provided in regulation 4, the energy accounting shall be as under:

### **NET METERING ARRANGEMENT**

8.1. For each billing period [Regulation 2.1 (d) ] the licensee shall give the consumer a statement of accounts of electricity showing the following particulars, along with the electricity bill -

- (i) Quantum of banked electricity carried forward from the previous billing period;
- (ii) Quantum of electricity injected into the distribution system by the eligible Consumer;
- (iii) Quantum of electricity supplied by distribution licensee to the eligible consumer;
- (iv) Quantum of net electricity which has been billed for payment to the eligible Consumer;

Provided that in the event the electricity injected exceeds the electricity consumed during the billing period, such excess injected electricity shall be carried forward to next billing period as electricity credit and may be utilized to net electricity injected or consumed in future billing periods;

Provided further that in the event the electricity supplied by the distribution licensee during any billing period exceeds the electricity generated by the eligible consumer’s solar system, the distribution licensee shall submit a bill for the net electricity consumption after taking into account any electricity credit balance remaining from previous billing periods;

Provided also that the excess electricity measured in kilo-watt hour may only be utilized to offset the consumption measured in kilo-watt hour and may not be utilized to compensate any other fee and charges imposed by the distribution licensee as per the instructions of the Commission.

Provided, also that the distribution licensee in addition to electricity tariff shall be eligible to raise invoice for any other charges as allowed by the Commission.

8.2. At the end of the ‘settlement period’ [Regulation 2.1 (v) ] , in case there is excess electricity injection by the eligible consumer to the licensee, the licensee shall pay for the same at the Average Power Purchase Cost (APPC) of electricity as approved by the Commission.

Provided, also that at the beginning of each settlement period, cumulative carried over injected electricity will be reset to zero.

**EXIM METERING ARRANGEMENT**

- 8.3. The energy consumed during a month by the consumer from the grid shall be billed as per prevailing tariff applicable for the category.
- 8.4. The amount due to the consumer on account of injection of solar energy to the grid shall be arrived at by considering 100% of the APPC rate. This amount shall be adjusted from the monthly bill.
- 8.5. No payment shall be made by DISCOM for any excess energy injected from the RTS Plant to the grid beyond 90% of the energy consumed from the grid during the billing cycle.
- 8.6. Provided also that at the beginning of each settlement period, cumulative carried over injected electricity will be reset to zero.
- 8.7. In case of any dispute in billing it would be settled as per provision of the AERC 'Guidelines for Redressal of consumer Grievances' 2004 as amended from time to time.

**9. SOLAR RENEWABLE PURCHASE OBLIGATION (RPO):**

- i. The quantum of electricity generated from the solar energy system of an eligible consumer under EXIM metering arrangement, shall qualify for accounting towards the Renewable Purchase Obligation (RPO) of such eligible consumer if he is an obligated entity under Assam Electricity Regulatory Commission (Renewable Purchase Obligation and its Compliance) Regulation, 2010.
- ii. The quantum of electricity generated from the solar energy system of an eligible consumer under NET metering arrangement, shall qualify for accounting towards the Renewable Purchase Obligation (RPO) of the distribution licensee under Assam State Electricity Regulatory Commission (Renewable Purchase Obligation and its Compliance) Regulation, 2010.

**10. ELIGIBILITY TO PARTICIPATE UNDER RENEWABLE ENERGY CERTIFICATE MECHANISM:**

Eligible Consumer under EXIM metering arrangement shall be eligible to participate under REC mechanism as specified under Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 and subsequent amendments thereof.

**11. WHEELING AND OPEN ACCESS:**

The grid solar system under NET/ EXIM metering arrangement, whether self-owned or third party owned installed on eligible consumer premises, shall be exempted from wheeling and cross subsidy surcharges when open access is allowed to the concerned entity.

**12. TARIFF FOR GISPV:**

The Commission may determine suitable tariffs for GISPV (separate Tariff for Projects with and without capital subsidy) as per guidelines provided by the MNRE, Government of India and provisions in the connected Regulations of the Commission.

**13. METERING ARRANGEMENT:**

- 13.1. NET meter/ EXIM meter shall be installed at the interconnection points of the eligible consumers with the network of the distribution licensee.
- 13.2. Solar meter shall be installed at the delivery point of the solar energy system to measure the total solar electricity generated.
- 13.3. The meters shall be of accuracy class 0.5 or better or as per the specifications notified by the competent authority.
- 13.4. The solar meter and NET meter shall preferably have the facility for downloading meter readings using meter reading instrument (MRI) or wireless equipment or such other devices.
- 13.5. Supply and installation of meters, action on defective meter, and other matters related to meters shall be as per provisions of the AERC (Electricity Supply Code) Regulations, 2017 as amended from time to time.
- 13.6. The meters shall be tested, installed and sealed in accordance with the provisions of Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, as amended from time to time.
- 13.7. The meters installed shall be jointly inspected and sealed on behalf of both the parties and shall be tested and installed only in the presence of the representatives of the consumer and the distribution licensee:
- 13.8. The meter reading taken by the distribution licensee shall form the basis of commercial settlement and a copy of the meter reading statement of the net meter and solar meter shall be handed over to the consumer as soon as meter reading is taken.

**14. CONNECTION OF METERS AND PROTECTIVE DEVICES:**

The safety requirements like provision of 'islanding' in case of grid failure and isolation of battery power supply when grid is connected should have to be incorporated and diagram of actual installation indicating all components shall be conspicuously displayed in a SPV plant.

**15. AGREEMENT:** An agreement will be signed between the eligible consumers and DISCOM regarding setting up of the system under NET metering/ EXIM metering. An Agreement format annexed as Annexure I.

**16. OVERRIDING EFFECT:**

**Notwithstanding anything contained to the contrary in the following Regulations –**

- (a) AERC (Co-generation and Generation of Electricity from Renewable Sources of Energy) Regulations, 2015 and
- (b) AERC(Terms and Conditions for Determination of Tariff from Renewable Energy Sources) Regulations, 2017 and
- (c) AERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010 and
- (d) AERC (Electricity Supply Code) Regulations, 2017,

These Regulations will have overriding effect in respect of 'Grid Interactive Solar PV Systems.

**17. POWER TO REMOVE DIFFICULTIES:**

If any difficulty arises in giving effect to any of the provisions of these regulations, the Commission may, either suo motu or on an application made to it, by general or special order, direct the licensee/ generator or any other person to take suitable action, not being inconsistent with the Act, which appears to the Commission to be necessary or expedient for the purpose of removing the difficulty.

**18. ISSUE OF ORDERS AND DIRECTIONS:**

Subject to the provisions of the Act and these regulations, the Commission may, from time to time, issue orders and practice directions with regard to the implementation of these regulations and procedure to be followed for such implementation and matters incidental or ancillary thereto.

**19. POWER TO RELAX:**

The Commission may by general or special order, for reasons to be recorded in writing, and after giving an opportunity of hearing to the parties likely to be affected may relax any of the provisions of these Regulations on its own motion or on an application made before it by an interested person

**20. POWER TO AMEND:**

The Commission may from time to time add, vary, alter, suspend, modify, amend or repeal any provisions of these Regulations

**21. SAVING OF INHERENT POWERS OF THE COMMISSION:**

Nothing contained in these Regulations shall limit or otherwise affect the inherent powers of the Commission to adopt a procedure, which is at variance with any of the provisions of these regulations, if the Commission, in view of the special circumstances of the matter or class of matters and for reasons to be recorded in writing, deems it necessary or expedient to depart from the procedure specified in these regulations.

**22. INTERPRETATION:**

All issues arising in relation to interpretation of these regulations shall be determined by the Commission and the decision of the Commission on such issues shall be final.

(By order of the Commission)

**S. K. ROY,**  
Secretary,  
Assam Electricity Regulatory Commission.

**Annexure-I****NET Metering/ EXIM metering Connection Agreement**  
**(Undertaking to be provided in Assam Stamp Paper worth Rs.100/-)**

This Agreement is made and entered into at (location)\_\_\_\_\_ on this (date)\_\_\_\_\_ day of (month)\_\_\_\_\_ between.

The Eligible Consumer, by the name of \_\_\_\_\_ having premise at (address)\_\_\_\_\_ as first party

**AND**

\_\_\_\_\_ Distribution Licensee (herein after called as Discom) represented by \_\_\_\_\_ and having its registered office at \_\_\_\_\_ (address)\_\_\_\_\_ as second party of the agreement.

Whereas, the eligible consumer has taken the responsibility to set up or facilitate the requisite Photovoltaic system of capacity \_\_\_\_\_ and sought connectivity to the Discoms under NET metering/ EXIM metering arrangement.

And whereas, the Discoms agrees to benefit the eligible consumer for the electricity generated from the grid Interactive SPV plant into the power system of Discoms as per conditions of the agreement and AERC (Grid Integrative Solar PV Systems) Regulations, 2019 as amended from time to time.

Both the party hereby agrees to as follows:

**1. Eligibility**

- 1.1 Eligible consumer is required to be aware, in advance, of the standards and conditions his system has to meet for being integrated into grid/distribution system.
- 1.2 Eligible consumer agrees that connection of Photovoltaic system to DISCOM's distribution system shall be bound by requirements of state Distribution Code and/or DISCOM's conditions of service. The grid shall continue to perform with specified reliability, security and quality as per the Central Electricity Authority Technical Standards for Connectivity of Distributed Generated Resources Regulations, 2014' of the Central Electricity Authority as amended from time to time.
- 1.3 The Eligible consumer shall also agree to conform to the specifications and standards applicable to the solar PV systems as may be prescribed by the Ministry New and Renewable Energy sources Govt. of India from time to time.

**2. Technical and Interconnection Requirements**

- 2.1 Eligible consumer agrees that he has installed or will install, prior to connection of Photovoltaic system to DISCOM's distribution system, an isolation device (both automatic and inbuilt within inverter and external manual relays) and agree for the Discom to have access to and operation of this, if required, for repair and maintenance of the distribution system.

- 2.2 Eligible consumer agree that in case of a power outage on DISCOM's system, photovoltaic system will shut down, unless special transfer and isolating capabilities have been installed on photovoltaic system.
- 2.3 All the equipment connected to distribution system must be complaint with relevant international (IEEE/IEC) or Indian standards (BIS) and installations of electrical equipment must comply with Indian Electricity rules, 1956 and Central Electricity Authority (Measures of Safety and Electricity Supply) Regulation, 2010.
- 2.4 Eligible consumer agrees that Discom will specify the interface/inter-connection point and metering point.
- 2.5 Eligible consumer agrees to adhere to following power quality measures as per International or Indian standards and/or other such measures provided by Commission/Discom.
- a. **Harmonic current:** Harmonic current injections from a generating station shall not exceed the limits specified in IEEE 519.
  - b. **Synchronization:** Photovoltaic system must be equipped with a grid frequency synchronization device.
  - c. **Voltage:** The voltage-operating window should minimize nuisance tripping and should be under operating range of 80% to 110% of the nominal connected voltage. Beyond a clearing time of 2 seconds, the Photovoltaic system must isolate itself from the grid.
  - d. **Flicker:** Operating of Photovoltaic system shouldn't cause voltage flicker in excess of the limits stated in the relevant sections of IEC standards or other equivalent Indian standards, if any.
  - e. **Frequency:** When the Distribution system frequency deviates outside the specified conditions (50.5 Hz on upper side and 47.5 Hz on lower side), the Photovoltaic system shouldn't energize the grid and should shift to island mode.

- f. DC Injection:** Photovoltaic system should not inject DC power more than 0.5% of full rated output at the interconnection point or 1% rated inverter output current into distribution system under any operating conditions.
- g. Power Factor:** While the output of the inverter is greater than 50%, a lagging power factor of greater than 0.9 should operate.
- h. Islanding and Disconnection:** The Photovoltaic system in the event of voltage or frequency variations must island/disconnect itself within IEC standard on stipulated period.
- i. Overload and Overheat:** The inverter should have the facility to automatically switch off in case of overload or overheating and shall restart when normal conditions are restored.
- j. Paralleling device:** Paralleling device of Photovoltaic system shall be capable of withstanding 220% of the nominal voltage at the interconnection point.

2.6 Eligible consumer agrees to furnish all the data such as voltage, frequency and breaker, isolator position in his system, as and when required by the Discom. He may also try to provide facilities for online transfer of the operational data.

2.7 The Eligible consumers shall not use a 'hybrid inverter' i.e a 'solar inverter' provision of feeding power to the grid.

### **3. Safety**

3.1 Eligible consumer shall comply with the provisions of Central Electricity Authority (Measures Relating to Safety and Electricity Supply) Regulations 2010 and relevant provisions of National Electrical Code particularly those related to Solar PV installations.

3.2 Eligible consumer agrees that the design, installation, maintenance and operation of the photovoltaic system are performed in a manner conducive to the safety of the photovoltaic system as well as the DISCOM's distribution system.

3.3 Due to DISCOM's obligation to maintain a safe and reliable distribution system, eligible consumer agrees that if it is determined by Discom that eligible consumer's photovoltaic system either causes damage to and/or produces adverse effects affecting other distribution systems consumers or DISCOM's assets, eligible consumer will have to disconnect photovoltaic system immediately form

the distribution system upon direction from the Discom and connect the problem at his own expense prior to a reconnection.

**4. Clearances and Approvals**

4.1 The eligible consumer agrees to attain all the necessary approvals and clearances (environmental and grid connected related) before connecting the photovoltaic system to the distribution system.)

**5. Access and Disconnection**

5.1 Discom shall have access to metering equipment and disconnecting means of photovoltaic system, both automatic and manual, at all time.

5.2 In emergency or outage situation, where there is no access to a disconnecting means, both automatic and manual, such as a switch or breaker, Discom may disconnect service to the premise.

**6. Liabilities**

6.1 Eligible consumer and Discom will indemnify each other for damages or adverse effects from either party's negligence or intentional misconduct in the connection and operation of photovoltaic system or DISCOM's distribution system.

6.2 Discom and eligible consumer will not be liable to each other for any loss of profits or revenues, business interruption losses, loss of contract or loss of goodwill, or for indirect, consequential, incidental or special damage, including, but not limited to, punitive or exemplary damages, whether any of the said liability, loss or damages arise in contract, or otherwise.

6.3 Discom shall be liable for delivery or realization by eligible consumer for any fiscal or other incentive provided by the central government.

**7. Commercial Settlement**

7.1 All the commercial settlement under this agreement shall follow Regulations of Assam Electricity Regulatory Commission.

**8. Connection Costs**

8.1 The eligible consumer shall bear all costs related to setting up of photovoltaic system including metering and interconnection costs. The eligible consumer agrees to pay the actual cost of modifications and upgrades to the distribution facilities required to connect photovoltaic system in case it is required.

8.2 Cost for interconnection equipment including the isolators, meters etc. are also to be borne by the eligible consumer.

**9. Termination**

9.1 The eligible consumer can terminate agreement at any time by providing Discom with 90 days prior notice.

9.2 Discom has the right to terminate Agreement on 30 days prior written notice, if eligible consumer breaches a term of this Agreement and does not remedy the breach within 30 days of receiving written notice from Discom of the breach.

9.3 Eligible consumer agrees that upon termination of this Agreement, he must disconnect the photovoltaic system from DISCOM's distribution system in a timely manner and to DISCOM's satisfaction.

In the witness, where of Mr. \_\_\_\_\_ for an on behalf of \_\_\_\_\_ (Eligible consumer) and Mr. \_\_\_\_\_ for and on behalf of \_\_\_\_\_ (Discom) agree to this agreement.

\_\_\_\_\_