Tamil Nadu Electricity Regulatory Commission

Draft (Grid Interactive Solar PV Energy Generating Systems) Regulations, 2024.

Notification No. TNERC/_____ xx-xx-2024

(Comments invited by 15.07.2024)

WHEREAS under Section 61 the Electricity Act, 2003 (Central Act 36 of 2003), the State Electricity Regulatory Commission shall specify the terms and conditions for Grid Interactive Solar PV Energy Generating Systems of given capacity and category;

AND WHEREAS the Tamil Nadu Electricity Regulatory Commission has specified the Tamil Nadu Electricity Regulatory Commission (Grid Interactive Solar PV Energy Generating Systems) (GISS) Regulations, 2021 in Notification No.TNERC / GISS Regn. 23-1/ dated 07-10-2021 and the same has been published at pages 165-183 of part VI – section 2 of the Tamil Nadu Government Gazette, dated the 20th October 2021;

AND WHEREAS various orders / guidelines have been issued by the Ministry of Power / Government of India, Tamil Nadu Electricity Regulatory Commission from time to time. Taking cue from such orders / guidelines, developments, past experience, feedback of stakeholders and to give more clarity to the existing provisions / widen the promotional measures, it is decided to repeal the said Tamil Nadu Electricity Regulatory Commission (Grid Interactive Solar PV Energy Generating Systems) (GISS) Regulations, 2021 and notify a revised comprehensive Regulation governing the matters related to Grid Interactive Solar PV Energy Generating System along with the Battery Energy Storage System.

NOW THEREFORE, in exercise of the power conferred under Section 61(h) read with the Section 86(1)(e) and clause (zp) of Sub-section (2) of section 181 of the Electricity Act, 2003 (Central Act 36 of 2003) and all other powers enabling in that behalf, the Tamil Nadu Electricity Regulatory Commission hereby makes the Tamil Nadu Electricity Regulatory Commission (Grid Interactive Solar PV Energy Generating Systems) (GISS) Regulations, 2024.

Notice is hereby given that the draft Regulations will be taken into consideration after the expiry of thirty days from the date of publication of this notification in the TNERC website and that any objection or suggestion, which may be received from any person before the expiry of the aforesaid period, will be considered by the Commission.

Objection or suggestion if any may be addressed in duplicate to the Secretary, Tamil Nadu Electricity Regulatory Commission, 4th floor, SIDCO Corporate Office Building, Thiru-Vi-Ka Industrial Estate, Guindy, Chennai – 600 032.

1. Short title, and commencement

1.1 These Regulations may be called the Tamil Nadu Electricity Regulatory Commission (Grid Interactive Solar PV Energy Generating Systems) Regulations, 2024.

1.2 These Regulations shall extend to the whole of the State of Tamil Nadu.

1.3 These Regulations shall be applicable for contracted demand of following limits:

a) less than 1MW for net metering, group net metering, net billing/net feed-in , and gross metering.

b) 5 kW and more for virtual net metering.

1.4 These Regulations are applicable to eligible consumers, prosumers and generators, Licensees, Government /local bodies and any person who uses the supporting Licensee's grid for his GISS

The Regulations shall come into force from the date of the publication in the Tamil Nadu Government Gazette**.**

2. Definitions

2.1. In these Regulations, unless the context otherwise requires,

a) **"Act"** means the Electricity Act, 2003 (36 of 2003) as amended from time to time ;

b) **"Agreement"** means a connection agreement entered into between the Distribution Licensee and the consumer / prosumer / generator;

c) "**Area of supply"** means the geographic area within which the licensee, for the time being, is authorized by its License to supply electricity;

d) **"Billing Cycle" or "Billing Period"** means the period for which the electricity bill is raised by the concerned Distribution Licensee;

e) "**Check Meter"** means a meter, used for accounting and billing of electricity in case of failure of net meter or interface meter;

f) **"Commission"** means the Tamil Nadu Electricity Regulatory Commission constituted under the Act;

g) **"Contracted Load or "Sanctioned Load**" means the load specified in the agreement between the consumer and the Licensee engaged in the business of supplying electricity to him;

h) **"Contracted demand "** means the demand specified in the agreement between the consumer **/** generator and the Licensee engaged in the business of supplying electricity to him;

i) **"Contracted capacity"** means the solar plant capacity (capacity of GISS) sanctioned by the licensee and included in the contracted agreement signed between the licensee and the eligible consumer / prosumer / generator; the contracted capacity shall be reckoned by the maximum demand recorded as the AC output of the GISS.

j) **"Days"** means clear working days;

k) **"Distribution licensee" 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;

l) **"Electricity Supply Code"** means the Tamil Nadu Electricity Supply Code,
2004 and subsequent amendments thereof;

m) **"Eligible Consumer"** means a consumer of electricity in the area of supply of the Distribution Licensee including government / local bodies or a generator who uses or intends to use a Grid Interactive Solar PV System subject to conditions in capacity / category / voltage level specified in the regulations;

n) **"Generic Tariff"** means the Generic Tariff approved or adopted by the Commission for generation from different Renewable Energy sources in accordance with the Tamil Nadu Electricity Regulatory Commission (Power Procurement from New and Renewable Sources) Regulations, 2008 as amended from time to time;

o) **"Generator"** means any person or Government or Distribution Licensee company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person, who owns or operates or maintains a generating station with or without Battery Energy Storage System;

p) **"Generate"** means to produce electricity from a generating station or Battery energy storage system for the purpose of giving supply to any premises or enabling a supply to be so given;

q) **"Generating Station" or "Station"** means any station for generating electricity, including any building and plant with step-up transformer, switchgear, switch yard, cables, Battery Energy Storage System or other appurtenant equipment, if any, used for that purpose and the site thereof;

r) **"Financial Year"** or **"Year"** means the period beginning from first (1st) of April in an English calendar year and ending on thirty first (31st) of March of the next year;

s) **GISS** means "**Grid Interactive Solar Photovoltaic Power Plant / System**" installed on the rooftops or land of consumer / prosumer / generator premises that uses sunlight for direct conversion into

electricity through photo voltaic technology by means of parallel operation with interactive support of Licensee's grid ***;***

t) **"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; For the billing purpose, the energy consumed by the generator or prosumer is accounted at the applicable retail tariff and total energy sold to Licensee is accounted for at a tariff determined by the Commission from time to time;

ta) **"Group Net Metering"** means an arrangement whereby surplus energy generated / injected from a GISS or Battery Energy Storage System (BESS) charged through Renewable Energy System is exported to the grid through Net Meter and the exported energy is adjusted in more than one electricity service connection(s) of the same consumer located within the same distribution licensee's area of supply.

u) **"Inter-connection Point"** means the interface of the GISS with the outgoing terminals of the meter / Distribution Licensee's cut-outs/ switchgear fixed in the premises of the Eligible Consumer:

Provided that, in the case of an eligible consumer connected at the High Tension (HT) level, the 'Inter-connection Point' shall mean the connecting point of the GISS with the outgoing terminals of the Distribution Licensee's metering cubicle placed before such Consumer's equipment / apparatus in consumer's yard at which point the interconnection is established between the GISS and the grid / distribution system.

(ua) "Interface line" means the electric line between the interconnection point and the nearest point at which the electric line could technically be connected to the existing grid or distribution system***.***

v) **"kWp"** means kilo Watt peak ; **"MWp"** means Mega Watt peak;

w) **"Net meter" or "bidirectional meter"** means an energy meter which is capable of recording both import and export of electricity;

x) **“Net-metering”** means a mechanism whereby solar energy exported to the Grid from Grid Interactive 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;

y) **“Net work charges”** means and includes all charges besides incidental charges incurred by the Licensee for creating, developing and maintaining the network for its functions and operations that includes providing the essential grid support to the Grid interactive Renewable Energy Systems for its dependant parallel operation without which such Grid interactive system cannot operate independently; Net work charges is payable by any solar power generator connected with supportive Licensee grid, including the status where the generated power is used for his own use.

z) **“Net-billing or Net feed-in”** means a single bidirectional meter used for net-billing or net feed-in at the point of supply Grid Interactive Solar PV Energy Generating Systems are valued at two different tariffs,

Where-

(i) the monetary value of the imported energy is based on the applicable retail tariff;

(ii) the monetary value of the exported solar energy is based on feed-in tariff determined by the Commission;

(iii) The monetary value of the exported energy is deducted from the monetary value of the imported energy to arrive at the net amount to be billed (or credited / carried over);

aa) **“Obligated Entity”** means an entity required to fulfill a Renewable Purchase Obligation (‘RPO’) as specified by the Commission in Regulations governing such Obligation (‘the RPO Regulations’);

ab) **"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;

ac) **"Premises"** means and includes roof-tops or any areas on the land, building
or infrastructure or part or combination thereof in respect of which a separate
meter has been provided by the Distribution Licensee for the supply of electricity;

ad) **"Renewable Energy Generation Meter"** means a unidirectional energy meter installed at the point at which the electricity generated by solar energy generating system for the purpose of accounting and settlement;

Provided that a separate Renewable Energy Generation Meter shall be installed for each source of Renewable Energy in case of hybrid or combination of such sources;

ae) **"Renewable Energy certificate''** shall be as defined in Tamil Nadu Electricity Regulatory Commission (Renewable Purchase Obligation) Regulations, 2010;

af) **"Settlement Period"** means the period beginning from the first day of April of a calendar year and ending with the thirty-first day of March of the following calendar year;
Provided for a newly commissioned solar power system, the first settlement period shall be from the date of commissioning to March of next year;

ag) **"Virtual Net Metering"** means an arrangement whereby entire energy generated/injected from a GISS or Battery Energy Storage System (BESS) charged through Renewable Energy System, is exported to the grid from renewable energy meter / gross meter and the energy exported is either (i) adjusted in the total consumption of fully subsidized consumers or (ii) adjusted in more than one electricity

connection(s) of participating consumers located within the same distribution licensee's area of supply. Participating consumers are the consumers whose service connections are selected by the GISS consumer / generator / prosumer on his own option, for the purpose of adjustment of energy generated from such GISS.

Words and expressions used in this Regulation but not defined either in this Regulation or the Act or the Electricity (Rights of Consumer Rules), 2020 as amended or any other Regulations of the Commission or the General Clauses Act, 1897 (Central Act 10 of 1897) shall have the same meanings as commonly understood in the Engineering and Commercial parlance."

3 Scope and Applicability

3.1 These Regulations shall apply to the distribution licensee, government / local bodies and consumers of electricity of distribution licensee availing supply from it in its area of supply and any generator setting up GISS based solar power generating station in the State of Tamil Nadu;

3.2 These Regulations shall be applicable to all existing and upcoming new Grid Interactive Solar PV energy Generating Systems with or without battery energy storage systems.

3.3 The Eligible Consumer or generator may install GISS (Grid Interactive Solar PV System) based solar power generating station under net - metering or group net-metering or net-billing or gross – metering or virtual net metering arrangement which,

a) shall be within the permissible rated capacity as defined under these Regulations;

b) shall interconnect and operate safely in parallel with the distribution licensee network and pay applicable charges in accordance with all relevant codes and regulations;

4 Eligible consumers , generators, Licensee, government/local bodies and individual project capacity:

4.1 **Net-metering :** All domestic consumers under tariff IA, ID and IE (services for common purposes in multi-tenants) and service connections under tariff IIC (actual places of public worship) are eligible for Net metering mechanism upto the level of sanctioned load ***/*** contracted demand of their respective service connection irrespective of voltage level;

4.1.1 Above categories of consumers have an additional option of choosing the net- feed in mechanism.

4.1.2 Above categories of consumers who have been provided with the solar net-feed in facility shall have option to migrate to the solar net-metering mechanism and vice versa; Such migration between these two options is permissible twice in a financial year.

4.2 **Group Net Metering (GNM)** Domestic consumers under tariff IA are also eligible for Group Net Metering involving service connection(s) of the same consumer located anywhere within the same distribution licensee's area of supply, up to the level of sanctioned load / contracted demand of the service connection in which the GISS is installed.

Migration between the group net metering and Net metering or net-feed in mechanism and vice versa is permissible once in a financial year.

4.3 **Net billing or Net feed-in** : All categories of consumers (except Hut & Agriculture) irrespective of load, tariff and voltage level are eligible for net-billing or net feed-in mechanism up to the level of sanctioned load / contracted demand of their service connection (or) 999kW whichever is lower;

4.4 **Gross- metering**: The existing and new consumers of all categories except Low Tension category up to 150 kW and generators are eligible for gross metering mechanism irrespective of tariff. The minimum size of the Solar System that can be set up under Gross Metering mechanism shall be above 150 kW up to a maximum capacity of 999 kW;

4.4.1 New consumers or generators who desire to set up GISS based solar power generating station in a premises or in an own or leased open area and sell entire generated power to Licensee are eligible for gross metering mechanism up to a maximum capacity of 999 kW. The sanctioned load/ contracted demand do not arise for such cases. If power from grid is required for purposes like security in night hours etc., the same shall be eligible with separate accounting and billing under appropriate retail tariff;

Provided that the installation of gross-metered GISS solar systems on the eligible consumer premises intending to inject its total generated power from generating station into the Licensee grid shall use separate interface line for evacuation of power to the nearest High Tension network . Such interface line for evacuation of power up to the nearest HT network of same voltage including any building and plant with step-up transformer, switchgear, switch yard, cables or other appurtenant equipment, if any, used for that purpose shall be laid and maintained by the eligible consumer ***/***generator at his own cost;

4.4.2. For the above type of direct connectivity to the nearby feeder, metering shall be done at the HT side of the GISS at the plant end. The metering point shall be the delivery point for the purpose of reckoning the energy delivered to the Licensee.

4.4.3 The eligible consumer/ generator shall facilitate the Licensee to remotely control the incoming switch and breaker to the GISS station for instant operation during emergency to ensure safety and grid stability. The eligible consumer/generator shall also provide Automatic Meter Reading facility;

4.4.4 In case a dedicated feeder were to be erected between the GISS and the Sub-station to suit the feasibility / requirement of the parties concerned, the metering / delivery point shall be at the Sub-station end.

In both cases, the entire erection and maintenance of interconnection infrastructure between the GISS and grid along with the metering system shall be at the cost of eligible consumer / generator / developer.

4.5 Virtual net – metering (VNM): Distribution Licensee, Government /Local bodies are eligible for Virtual Net Metering. The minimum capacity of the GISS set up under VNM shall be 5kW .The VNM can be a CAPEX model or RESCO model. Under CAPEX model the cost of land (either own or leased) and plant shall be borne by the Licensee / Government / local body. Under RESCO model the land (either own or leased) shall be provided by either by RESCO or by Licensee / Government / local body and the cost of plant, evacuation of power and metering arrangement shall be borne by the RESCO.

4.6. The Solar plant capacity in all categories shall be represented by the output capacity on AC side and shall be reckoned by the recorded demand in Gross generation meter/ inverter.

4.7 Addition of capacity of DC panel is left to the option of eligible consumer / prosumer / generator to the extent of the equivalent sanctioned GISS plant capacity (AC output capacity) which will be reckoned by the AC output demand reached and recorded in the Gross Generation meter for the given billing cycle. For less than 10 kW systems, the demand reached shall be assessed from the inverter reading or from the generation meter if installed. Also, the applicant shall have the option to install higher capacity of inverter up to the sanctioned load / contracted demand of the service connection, to meet his possible future needs.

4.8. The applicant shall own or be in legal possession 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 GISS is proposed to be installed. Possession resulting from rent or lease agreement shall also be included within the meaning of legal possession;

4.9. Existing consumers/ prosumers of all categories or generator are eligible for additional capacities of the respective GISS subject to the condition

that the net demand after addition, shall not exceed the ceiling limit stipulated in this regulation;

4.10. Consumers/ prosumers / generators with pending arrears / outstanding due with the Distribution Licensee shall not be eligible for provisions under this regulation;

5 Metering arrangement

5.1 Net-metering mechanism , Net billing or feed-in , group net metering and virtual net metering mechanism:

An eligible consumer under the net metering, Net billing or feed-in ,Group net metering and Virtual net metering mechanism shall be entitled to use the power generated from the GISS at his premises and inject the surplus power to the distribution system of the Licensee at the interconnection point;

At inter connection point, a single bidirectional energy meter to record the energy import from the Licensee grid and energy export to the Licensee grid shall be provided. This shall be a digital four quadrant vector summation energy meter configured for bidirectional energy measurement whereby both imported and exported active energy readings and allied parameters are programmed to be displayed. If the eligible consumer is within the ambit of Time-of-Day (ToD) Tariff, the bidirectional energy meter to be provided shall have programmable ToD (time-of-the-day) registers with a minimum of four energy import ToD registers and four energy export ToD registers;

5.2 Gross-metering mechanism: A renewable energy generation unidirectional meter to record the gross solar energy generation shall be provided by the generator. This meter is to be installed immediately after the solar grid inverter. A single bidirectional energy meter to record the energy export to the Licensee grid and energy import from the Licensee grid if any for the limited purpose of essential usages of generation plant like security, office etc shall be provided at the delivery point as stipulated in sub-regulation 4.4.

5.3 If the eligible consumer or generator is within the ambit of Time-of-Day (ToD) Tariff, the energy meter shall have programmable ToD (time- of-the-day) registers with a minimum of four energy export ToD registers. The total solar power generated and sold to licensee is accounted for preferential tariff determined by the Commission from time to time. The energy consumed from Licensee grid if any by the prosumer or generator shall be accounted and billed under applicable retail tariff.

5.4 In case of multiple GISS units under one service connection, individual generation meter for each inverter /set of inverters in each spot/place/building of the premise shall be installed. The readings of the generation meters shall be assessed individually to be added together (both energy and demand recorded for each billing cycle) to one value of gross generation to be reckoned as the unit consumed and demand reached for the respective billing cycle of the service connection concerned for all billing purpose;

5.5 For consumers up to the sanctioned load of 10 kW, the generation of solar energy shall be computed based on energy recorded in the inverter in lieu of installation of gross meter for such assessment. If any dispute arises over such method of computation of energy and assessment of demand, the aggrieved party can install the generation meter at his cost to enable actual assessment of readings relating to the generation;

5.6 For existing consumers of more than 10 kW the Licensee shall install generation meter at consumer's cost after issuing notice to consumer to make facility to install the generation meter . Consumers shall also have option to purchase and supply the meter on his own in accordance with provisions of the Supply Code of the Commission**.** For new applicants of more than 10kW, the generation meter with demand recording facility shall be installed at the cost of the applicant as a part of GISS system. For Gross generation metering, a unidirectional meter with AMR facility shall be installed at the cost of the applicant. The rating and specification of the generation meter shall be communicated to the applicant by the Licensee along with the sanction/ approval of the demand /connectivity;

5.7 HT (11 kV and above) Consumers shall install and connect GISS with or without storage system at their LT Bus Bar System*;*

Provided that, in such cases, the bi-directional Meter shall be installed on the HT side of the Consumer's Transformer;

5.8 Energy meters shall be of appropriate class and accuracy as specified by the Licensee and shall comply with applicable CEA (Central Electricity Authority) and BIS (Bureau of Indian Standards) standards;

6 Billing and accounting process

6.1 Net metering :

The solar energy exported to the Grid from grid connected solar photovoltaic system is deducted from energy imported from the grid in units to arrive at the net imported or exported energy. The exported energy shall be reckoned by the actual export of units recorded in the meter. The quantum of exported energy shall not be limited by computation based on CUF. The net imported or exported energy is billed or credited or carried over to the next billing cycle(s) on the basis of the retail tariff. This process shall continue until the end of the settlement period. At the end of the settlement period, credit i.e the net units of surplus generation available if any shall get lapsed;

6.1.1 In case of the service connection is covered in the billing cycle comprising the months of March and April, the exported energy during this particular billing cycle shall be computed proportionately for the month of March and April each. Such proportionate unit corresponding to the month of March shall be accounted for the settlement period ending on the thirty-first day of that March. The balance unit corresponding to month of April shall be accounted to the next settlement period of following year beginning with first day of that April.

6.2 Net billing or Net feed-in:

The monetary value of the imported energy is debited based on the applicable retail tariff; The monetary value of the exported energy is credited based on the feed-in tariff determined by the Commission. The monetary value of the exported energy is deducted from the monetary

value of imported energy to arrive at the net amount to be billed. If the cumulative credit amount exceeds the debit amount during any billing cycle, the net credit is carried over to the next billing cycle. At the end of a 12-month settlement period, the consumer has the option either to receive payment of the net credit balance (if any) or have such credit balance carried-over to the next settlement period;

6.2.1 In case of consumer opting to receive payment, the same shall be credited to his account within a month on receipt of details of account in his name. No document is necessary to be given by the consumer.
Licensee shall make provisions in the billing software to facilitate seamless process of the refund.

6.2.2. In case of the service connection is covered in the billing cycle comprising the months of March and April, the surplus net unit available at the end of April shall be computed proportionately for the month of March and April each. Such proportionate unit corresponding to the month of March shall be accounted for the settlement period ending on the thirty-first day of that March. The balance proportionate unit corresponding to month of April shall be accounted to the next settlement period of following year beginning with first day of that April.

6.3 Gross -metering :

Gross metering is permitted for eligible consumer or generator who opt to sell the entire generated solar energy to the distribution licensee. An eligible consumer or generator under the gross metering scheme shall inject the entire power generated from the GISS station to the distribution system of the distribution licensee to the nearest HT network of same voltage. The exported solar energy is credited to the generator at the preferential tariff determined by the Commission. The imported energy from Licensee grid if any by the generator for their limited purpose of essential usage if any, shall be billed under existing industrial retail tariff and amount so billed shall be debited from the total amount to be credited.

6.3.1 The net amount shall be credited in the Generator/consumers electricity

bill for every billing cycle or paid or credited to the solar generator/ GISS station owner if the generator/ station owner is not a consumer; In case the generator opts for the amount to be credited to his bank account, the due account details shall be furnished by the generator to the Licensee.

6.3.2 Net work charges are not applicable to Gross metering mechanism.

6.4 Group net metering (GNM):

Where the export of units during any billing period in a domestic service connection exceeds the import of units at the connection where GISS is located, such surplus units injected into the grid can be adjusted against the energy consumed in the bi-monthly bill of service connection(s) of same consumer in a sequence indicated in the priority list along with sharing ratio provided by the consumer;

For illustration if the consumer opting for Group Net metering indicates in his application three service connections of other locations standing in his name as 01, 02 and 03, the exported energy from the his mother service connection where GISS is installed , shall be adjusted first in service connection 01 ,then 02 and finally 03. If the sharing ratio is indicated as 50% of the exported energy in service connection 01, 40% in 02 and balance 10% in 03, for an gross exported energy of say 200 units (after deducting a line loss of 7% in kind) in a billing cycle the adjustment to be made in service connections 01,02 and 03 shall be 100 units , 80 units and 20 units respectively.

If only one service connection is of other location say 01 is indicated, the entire 200 units exported from his mother service connection shall be adjusted in service connection 01.

6.4.1 During every assessment, the surplus exported energy from the mother service connection shall be given as energy credit in units in the billing account of the participating service connection(s) in the aforesaid ratio. Such credited units shall be adjusted against the consumption assessed in the respective participating service connection(s) preferably in the same billing cycle or ensuing billing cycle.

The mother service connection and participating service connection(s) of same consumers shall be mapped in the Licensee portal in such a way that the exported units from the mother service connection are programmed to be credited to the participating service connection in the given ratio in every billing cycles automatically.

6.4.2 The sequence of priority for adjustment shall be deemed to have begun after adjustment of units at the mother service connection where the GISS is installed ;

6.4.3 The priority list along with the sharing ratio for adjustment of the surplus exported energy with other electricity connection(s) may be revised by the consumer at the maximum of twice in every financial year settlement period at the with an advance notice of one month.

6.4.4. A revised agreement shall be executed incorporating such change.

6.4.5 For cases where the billing cycles of the concerned service connections do not match with each other, the procedure as laid in the following illustration shall be adopted:

In case of the mother service connection in which the GISS installed is covered in the billing cycle comprising the months of March and April, the surplus net unit available at the end of April shall be computed proportionately for the month of March and April each. Such proportionate unit corresponding to the month of March shall be accounted for the settlement period ending on the thirty-first day of that March. The balance proportionate unit corresponding to month of April shall be accounted to the settlement period of following year beginning on the first day of that April. However the surplus units accumulated through the settlement period till the end of March shall get lapsed at the end of settlement period.

6.4.6 In case of any of the participating service connection(s) in the priority list not falling in the same billing cycle of the mother service connection in which the GISS is installed, the adjustment of export units shall be done in the trailing billing cycle of the such service connection(s) in the same ratio.

6.4.7 Where during any billing cycle, if any surplus is available even after adjusting the entire export units of mother service connection with all other participating electricity service connection(s) of the same consumer, such surplus units injected by the consumer shall be carried over to the next billing cycle(s) and adjusted in the same manner as specified in the above sub-regulations.This process shall continue until the end of settlement period. At the end of settlement period, the net units of surplus generation if any shall get lapsed.

6.4.8 . Line loss charges of 7% in kind shall be applicable for the exported units which get adjusted in other services of same consumers in Group-Net Metering (GNM) irrespective of their locations in the given area of the Licensee. The 7% of energy towards line loss shall be deducted from the exported units in the mother service connection itself where the GISS is installed and the sharing ratio of participating service connection shall be computed for the balance units after such deduction. The billing program shall be done by the Licensee accordingly.

6.4.9. In case the mother service connection and the participating service connections are fed by the same Distribution Transformer, the line loss is not applicable and no deduction shall be made towards line loss.

6.5 Virtual net metering (VNM) :

VNM is applicable to Distribution licensee and Government / local bodies for their buildings and also for the solar park/plant set up in their own/leased open land for the purpose of adjustment of energy against their own consumption or against the consumption of subsidized categories as the case may be.

6.5.1 The energy adjustment shall be reckoned after deducting the line loss of 7% in kind and banking charges of 8% in kind. This deduction shall be done in the export side accounting.

6.5.2 The wheeling charges is applicable for the balance energy wheeled to other participating service connection after deducting the above quantum of units. This shall be done in the import side accounting.

The wheeling charges shall be as determined by the commission from time to time.

6.5.3 The unutilized banked energy remaining at the end of control period shall be paid at the rate of 75% of the SECI/ recent tender rate.

6.5.4 GISS can be set up by the Distribution Licensee, government/local bodies in its own or leased open land, terrace, floating solar on water bodies, etc., with or without Battery Energy Storage System. The energy so generated and metered at metering point may be adjusted from the annual consumption of subsidised categories after deducting the line loss, banking charges and wheeling charges as stipulated above. The subsidy for the quantum of energy so adjusted shall not be claimed by the Distribution Licensee from the Government. Only the cost of wheeling as determined by the Commission from time to time shall be claimed from the Government after deducting line loss and banked energy.

6.5.5. The energy generated from a GISS set up by government / local bodies may also be credited as opted by the applicant(s) , in the electricity bill of each participating service connection(s) belonging to the respective government office / local bodies as per the priority list and ratio of generation from the GISS as indicated in the application and entered in the agreement between the Licensee and the government department/local bodies.

6.5.6 The consumer, developer, government department/undertaking/local bodies shall have the option to change the share of credit of electricity from the GISS subject to the ratio of procurement from GISS indicated in the application and entered in the agreement once in every financial year of settlement period at the beginning of the settlement period with an advance notice of one month. A revised agreement shall be executed incorporating such change.

6.5.7 Where any of the participating service connection is disconnected due to any reason under any law for the time being in force, the unadjusted units remaining at the end of settlement period shall be paid by the Licensee/ adjusted from the dues payable to the Licensee.

6.5.8 Where the units credited during any billing period of any participating service connection exceeds the import of units by that service connection, such surplus credited units shall be carried forward in the next billing period as energy credits for adjustment against the energy consumed in subsequent billing periods within the settlement period of each participating service connection(s). The unadjusted units remaining at the end of settlement period shall be paid at the rate of 75% of the SECI/ recent tender rate by the Licensee/ adjusted from the dues payable to the Licensee.

6.5.9 For the purpose of carry forward of surplus or set off of energy credits the energy units shall be moderated as per the relevant rebate/Surcharge percentage of ToD tariff applicable for the relevant year.

6.5.10 In case of mismatching of billing cycles among the service connections of VNM, the procedure specified under group metering shall be applicable for the respective conditions under virtual net metering also.

6.5.11 The energy generated by VNM is eligible to be accounted towards RPO obligation of the Distribution Licensee concerned.

6.5.12 The applicable generators of more than one MW under VNM shall comply with Deviation Settlement Mechanism 2024 of the Commission as amended and all other relevant regulations.

6.11 General:

6.11.1 For the categories covered under ToD tariff, the electricity consumption in any time slot (peak hours, off-peak hours, normal hours etc.) shall be first compensated with the electricity generation in the similar time slot in the same billing cycle of the participating service connection(s). Peak hour generation can be adjusted to normal hour or half peak hour consumption. Any surplus generation/ over consumption in any time slot in a billing cycle shall be accounted as if the surplus generation/ energy credits occurred during the off peak time block. Excess consumption shall be charged at the tariff applicable as determined by the Commission from time to time.

6.11.2 Any other charges determined by the Commission from time to time shall be leviable to the eligible consumer / prosumer / generator; Licensee is not authorised to collect any charges without specific approval of the Commission.

6.12 For the purpose of billing the import, export and net energy, the units and other allied parameters recorded in the respective import and export and net register of the consumer bidirectional meter shall be reckoned respectively. The maximum demand recorded in the gross generation meter or inverter, as the case may be, shall not exceed the contracted demand / contracted plant capacity of GISS in any billing cycle. If the demand exceeds the sanctioned limit in any billing cycle, the quantum of exported units recorded in the bi-directional meter during the respective blocks/ slots in case of gross metering and respective billing cycle in case of net-metering , net billing, and group net metering , virtual net metering proportionate to the portion of demand that exceeded over the sanctioned limit, shall be treated as inadvertent injection in to the grid and shall not be eligible for payment by the Licensee;

7 Technical Requirements

7.1 The Distribution Licensee shall permit Net metering, Net feed-in or Gross metering **,** group metering and virtual metering arrangement, as the case may be, on a non-discriminatory and Distribution Transformer wise 'first come, first serve' basis to eligible Consumers/generators who have installed or intend to install Grid Interactive Solar energy Generating System (GISS) connected to the Network of such Distribution Licensee. The interconnection with the Licensee grid shall conform to the standards as provided in CEA (Technical Standards for Connectivity to the Grid) Regulation, 2007 as amended from time to time and CEA (Technical Standard for Connectivity below 33 kilo volts) Regulation, 2013, Grid Codes and the Tamil Nadu Electricity Distribution Code as amended from time to time as applicable;

7.2 The distribution licensee will enhance and update its metering and billing system in line with the requirement of this regulation such that relevant

parameters pertaining to billing and payment under all metering **/** billing mechanisms are properly assessed, clearly furnished in the electricity consumers' bills. The inverter reading shall be invariably assessed and entered to reckon the gross generation, wherever the gross generation meter is still not installed. The consumer shall render required access and facility to assess the inverter reading. Distribution licensees will make available online all of the above billing data for each consumer, along with a sample bill explaining the various billing components;

7.3 The solar plant capacity under any category shall not exceed the sanctioned load/contracted demand

7.4 The cumulative contracted demand of all GISS put together connected to a Distribution Transformer, shall not exceed the rated capacity of that distribution transformer.

7.5 The cumulative contracted demand of all GISS under Gross Metering mechanism or any other scheme in HT voltage levels connected to a Power transformer shall not exceed the total limit of that power transformer capacity plus its average minimum sustained load from 6am to 6pm during the previous one year.

7.6 Distribution licensees shall update the status of the cumulative solar energy system capacity connected and solar energy generated by each GISS at each distribution transformers and power transformers on their website every month;

8 Inter-Connection with the Grid, Standards and safety.

8.1 In case of net metering or net billing, the inter connection point shall be the outgoing terminal of the bi-directional meter at consumer's premises i.e., prosumer side of the meter. In case of gross metering, the inter connection point shall be the point connecting the GISS with the Licensee's outgoing terminal of the Licensee's metering system . In case of net metering or net billing or GNM mechanism, the installation solar systems on eligible consumer premises will utilize the same service

line and installation for injection of excess power into the grid, which is currently being used by the consumer for drawal of power from the distribution licensee. In case of gross metering mechanism, the installation of gross-metered solar systems on the eligible consumer or generator premises intending to inject its total generated power into the grid shall use separate interface line for evacuation of power. Such interface line up to the nearest HT network from the interconnection point shall be laid and maintained by the eligible consumer at his own cost as laid down under Sub- regulation 4.4. Required diagram to show the scheme of such connection depicting the interconnection point and interface line shall be submitted along with the application;

8.2 The Distribution Licensee shall ensure that the inter-connection of the Renewable Energy Generating System with its Network conforms to the specifications, standards and other provisions specified in the CEA (Technical Standard for Connectivity below 33 kilovolts) Regulations, 2013, the CEA (Measures relating to Safety and Electric Supply), Regulations, 2010, and the Tamil Nadu Electricity Grid Code 2005, as amended from time to time;

8.3 The Eligible Consumer**/**generator may install a Renewable Energy Generating System with or without storage:

Provided that, if an Eligible Consumer/ generator opts for connectivity with storage, the inverter shall have appropriate arrangement to prevent the power from flowing into the grid during the absence of grid supply to prevent electrical accidents, and that an automatic as well as manual isolation switch shall also be provided;

The Licensee shall inspect, demonstrate and satisfy himself that such safety features are provided in the service and function as stipulated to prevent battery supply feed into grid, when grid supply fails or switched off;

8.4 The consumer / prosumer / generator shall be responsible for the safe operation, maintenance and rectification of any defect in the GISS up to the point of bidirectional meter beyond which point such responsibility,

shall be that of the Licensee; In respect to meter, while the consumer/generator is responsible for safe custody of meter and its operation, the Licensee is responsible to ascertain the healthiness of meter.

For gross generation consumers/ generators such responsibility up to the point of interface with grid network shall be that of consumer/ generator as the case may be;

Provided further that the Renewable Energy Generation Meter shall be maintained by the Distribution Licensee at the cost of prosumer/ generator ;

8.5 No GISS is permissible for operation without approval of distribution licensee. In case any GISS plant is found to be running in parallel with the supply system of the distribution licensee without approval of the Licensee , either for his own use or otherwise, it shall be deemed as unauthorized use the supply of such consumer shall be disconnected with 3 days notice and the supply shall be restored only after the plant is isolated from the supply system of the licensee and the twice the network charges applicable for such period of unauthorized usage is paid in full with PBSC for the units generated from the date of installation of the GISS or the date of notification of this regulation whichever is later. Such consumer may apply for GISS connectivity but his application will be kept at the bottom of the list of applicants. Such consumer will be permitted to resume the operation of the GISS only if after allotting the capacity to all successful applicants above him, capacity is still available for allotment;

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

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

8.7 The solar power generator and equipment shall meet the requirement specified in the CEA's (Technical Standards for connectivity below 33 kilo volts) Regulations 2013 and as amended from time to time. The

responsibility of operation and maintenance of the solar power generator including all accessories and apparatus lies with the solar power generators. The design and installation of the GISS should be equipped with appropriately rated protective devices to sense any abnormality in the system and carryout automatic isolation of the GISS from the grid. The inverters used should meet the necessary quality requirements. The protection logics should be tested before commissioning of the plant. Safety certificates for the installation should be obtained from the appropriate authorities, wherever applicable;

8.8 The automatic isolation of the GISS should be ensured for no grid supply and low or over voltage conditions and within the required response time. Adequate rated fuses and fast acting circuit breakers on input and output side of the inverters and disconnect/Isolating switches to isolate DC and AC system for maintenance shall be provided. The consumer should provide for all internal safety and protective mechanism for earthing, surge, DC ground fault, and transients etc. as per the CEA regulation/standards;

8.9 The inverter should be a sine wave inverter suitable for synchronizing with the distribution licensee's grid. The inverter shall have features of filtering out harmonics and other distortions before injecting the energy into the system of the Distribution Licensee as per latest IEEE standards and regulations;

8.10 Any battery backup shall be restricted to the consumer's network and the consumer shall be responsible to take adequate safety measures to prevent battery power/Diesel Generator (DG) power/backup power extending to distribution licensee's LT grid on failure of distribution licensee's grid supply;

8.11 To prevent back feeding and possible accidents when maintenance works are carried out by distribution licensee's personnel in his network, suitable isolator / isolating disconnect switches which can be locked by distribution licensee personnel should be provided. This is in addition to automatic sensing and isolating on grid supply failure etc and in addition to internal disconnect switches. In the event of distribution licensee LT

supply failure, the GISS has to ensure that there will not be any solar power being fed to the LT grid of distribution licensee. The consumer / prosumer / generator is solely responsible for any accident to human being/animals whatsoever (fatal/non-fatal/departmental/non departmental) that may occur due to back feeding from the GISS when the grid supply is off. The distribution licensee reserves the right to disconnect the consumer installation at any time in the event of such exigencies to prevent accident or damage to men and material;

8.12 The consumer / prosumer / generator shall abide by all the codes and regulations issued by the CEA/Commission to the extent applicable and in force from time to time. The consumer shall comply with CEA/TNERC/CEIG/ distribution licensee's requirements to the extent it is applicable with respect to safe, secure and reliable function of the GISS and the grid. The power injected into the grid shall be of the required quality in respect of wave shape, frequency, absence of DC components etc;

8.13 The GISS shall restrict the harmonic generation, flicker within the limit specified in the Indian Electricity Grid Code and relevant regulations issued by the Commission and the Central Electricity Authority and;

8.14 Grid Connected Renewable Energy Generating Systems connected behind the Consumer's meter, and not opting for any metering mechanism set out in this regulation shall be allowed only after prior intimation to the respective Distribution Licensee; The systems operating without such approval shall be treated as unauthorized usage and liable for disconnection and charges as set out in Regulation 8.5.

Provided that the consumer / prosumer / generator shall be responsible for ensuring that all necessary safeguarding measures as specified by Central Electricity Authority (CEA) are taken;

Provided further that the Commission may determine additional Fixed Charges or Demand Charges and any other Charges for such Grid Connected systems excluding Non-fossil fuel-based Cogeneration Plants, in the retail Tariff Order, if the Distribution Licensee proposes such additional Fixed Charges or Demand Charges and any other

Charges for such systems, in its retail supply Tariff Petition, supported by adequate justification;

Provided also that in case the Consumer installs Renewable Energy Generating Systems behind the Consumer's meter without statutory approval of the respective Distribution Licensee and proper agreement , the total additional liabilities in terms of additional Fixed Charges / ~~or~~ Demand Charges, network charges and any other Charges for such systems, shall be levied at twice the determined rate for such period of default;

8.15 The Licensee shall not be responsible for any accident resulting in injury to human beings or animals or damage to property that may occur due to back-feeding from the GISS when the grid supply is off. The Licensee shall have the right to disconnect the installation at any time in the event of such exigencies to prevent accident or damage;

9 Metering Infrastructure

9.1 All meters installed at the Renewable Energy Generating System shall comply with the CEA (Installation and Operation of Meters) Regulations, 2006 and subsequent amendments thereof;

9.2 All meters shall have Advanced Metering Infrastructure (AMI) facility with RS 485 (or higher) communication port;

9.3 The bi-directional metering arrangement shall include a single-phase or a three-phase bi-directional meter, as may be required by the eligible consumer/ generator , located at the point of inter-connection as ascertained by the Distribution Licensee;

9.4 Existing Meter in the premises of the eligible Consumer shall be replaced by the bi-directional meter at the cost of the Consumer, in accordance with the provisions of the Electricity Supply Code;

9.5 If the eligible Consumer/***generator*** is within the ambit of Time-of-Day ('ToD') Tariff, both the Generation meter and bi-directional meter installed shall be capable of recording ToD consumption and generation;

9.6 The Distribution Licensee shall be responsible for the testing, installation,

and maintenance of the metering equipment, and its adherence to the applicable standards and specifications;

9.7 The Eligible Consumer/ generator shall procure, at his own cost, a Renewable Energy Generation Meter conforming to the applicable CEA Regulations and install as an integral part of the system at specified location to measure the energy generated from the GISS;

9.8 The Renewable Energy Generation Meter shall be maintained by the Distribution Licensee at the cost of the eligible consumer/ generator;

Provided the eligible consumer/generator shall have the option to procure the net meter/ generation meter and present the same to the Licensee for testing and installation. In case meters are provided by the Licensee, the consumer shall pay the entire cost of the meters. No meter rent shall be charged from the consumer.

9.9 The metering point shall be as follows:

(a) When the Generating station is connected to the nearby 11kV/22kV/33kV feeder directly, metering shall be done at the HT side of the GISS, where the power is injected into the nearest HT line of the Licensee.

(b) When the GISS is connected to the sub-station by a dedicated feeder, the metering shall be done at substation end.

For both of above two methods, for the purpose of (i) interconnection with Grid and (ii) metering, the Generator shall abide by the relevant CERC/SERC Regulations, Grid Code, Central Electricity Authority Regulations and TNERC Regulations as amended from time to time and as per the requirement specified by the Licensee.

The installed meters shall be jointly inspected and thereafter sealed by the Licensee in the presence of the consumer;

9.10 All the meters under all mechanisms of this regulation such as Bidirectional meter, Renewable Energy Generation Meter etc., shall be installed at such locations in the premises of the Eligible Consumer that would enable easy and safe access to the Distribution Licensee for inspection and meter reading at any time;

9.11 In case of Renewable Energy Generating System GISS with capacity above 20 kW, a Check Meter of appropriate class may be installed by the Distribution Licensee for the Renewable Energy Generation Meter;

Provided that installation of Check Meter shall be optional for Renewable Energy Generating System with capacity up to and including 20 kW;

9.12 The meter reading taken by the distribution licensee shall form the basis of commercial settlement;

10 Net work / wheeling charges:

10.1 Net work / wheeling charges shall be applicable to the consumers/ generators/ prosumers categorised under net metering or group net metering or net billing or net feed in mechanism or virtual net metering and any generator who uses the grid for his GISS to generate electricity**,** as determined by the Commission under regulation 70 of TNERC (Terms and conditions for determination of Tariff) Regulations 2005, from time to time;

10.2 The extent of concession if any, to any category of consumers under proper justification shall be determined by the Commission from time to time;

10.3 The network charges is exempted for the quantum of export units. For the purpose of accounting the network charges, the exported units shall be subtracted from the total generated units recorded in the generation meter and the balance generated units shall be reckoned for network charges.

10.4 The consumers/generators shall be granted connectivity to Grid to operate their GISS up to sanctioned/contracted demand by installing a reverse power relay at their cost as specified by the Licensee so that the captive solar power so generated does not enter into the grid. Dedicated feeder is not required in such cases. Connectivity shall be permitted in the existing feeder to which the applicant’s service connection is connected. The consumers/generators shall pay the applicable network charges to the Licensee for the entire generated units of solar power at the rate

specified and in accordance with the orders issued by the Commission from time to time. The parallel operation charges shall not be applicable for such operation. The consumers/generators shall install a solar generation meter at their cost.

10.5 Network charges is part of components of electricity charges.

11 General Conditions

11.1 The seniority of applications under all categories of this regulation shall be considered on first come, first serve basis;

11.2 At the end of each settlement period, the Distribution Licensee shall furnish the capacity of GISS installed under each category , the impact of such solar systems on the grid and on the other factors of the distribution licensee . Any amendment, if required, may be considered after due consideration of comments/ objections/ recommendations of the various stakeholders;

11.3 The Distribution Licensee shall update the Distribution Transformer-wise, Power Transformer wise capacity available and the cumulative capacity of the Renewable Energy Generating Systems installed under Net Metering / Net Feed-in / Gross Metering / GNM / VNM arrangements monthly, and provide the information on its website every month;

11.4 The Distribution Licensee shall make available the application form for new plants as well as additional capacities of existing plants and Agreement formats on its website, along with the applicable procedure within two months of notification of these Regulations;

11.5 In case the prosumer / generator leaves the system or changes the Supply Licensee, the excess electricity shall be considered in the following manner:

a) The unadjusted units as on date of leaving the system or changing the Supply Licensee shall be compensated at the Generic Tariff, and adjusted along with the final bill settlement with the existing Supply Licensee;

b) Any injection of electricity without entering into a new Net Metering

Agreement with the new Supply Licensee shall be considered as inadvertent injection and shall not be paid for by the new Supply Licensee;

11.6 The distribution licensee will enhance and update its metering and billing system in line with the requirement of all provisions of this regulation **.** The relevant parameters pertaining to solar energy gross generation, export, import, net units, demand, banked units **,** adjustment in other service connections etc., are assessed and furnished clearly in the electricity consumers' bills. Distribution licensees will make available online all of the above billing data for each consumer, along with a sample bill explaining the various billing components and charges ;

11.7 The distribution licensee shall implement online applications of both Licensee portal and the national portal for all categories of Grid interactive solar generation scheme both for new and additional capacities. The status of all applications received online or offline shall be displayed. The licensee shall maintain section wise data base of applications received, approval status, installation and commissioning details;

12 Energy accounting during meter defect / failure / burnt

12.1 In case of defective/failure/burnt condition of any meter, the Distribution Licensee shall replace the meter as specified in the Electricity Supply Code;

12.2 The electricity generated by the Renewable Energy Generating System during the period in which the meter is defective shall be determined based on the readings of the Check Meter or the reading / consumption recorded in the inverter.

12.3 In case of defect of both meter and inverter, if the recorded data are retrievable from the internal storage of the meter, billing shall be done based on the data so retrieved;

12.4 In case of data not being retrievable, the consumption during the period in which the Meter is defective shall be determined as specified in the Electricity Supply Code. The details of meter, nature of defect, action

taken to retrieve the data and reason for non retrieval of data shall be documented by a competitive authority and preserved to be produced at any time in future;

13 Renewable Purchase Obligation

The commitment of obligated entities and other terms of RPO obligations shall be as per the RPO Regulation of the Commission, amended from time to time.

14 Eligibility under Renewable Energy Certificate mechanism

The eligibility for issuance of renewable energy certificate shall be as per the eligibility criteria specified under Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, as amended from time to time;

15 Procedure for Application and Registration

15.1 The distribution licensee shall implement a web-based application processing system for processing the applications of GISS, for both new and additional plant capacities; The web portal of the Distribution Licensee shall have seamless integration with National portal

15.2 The distribution licensee shall facilitate the process for setting up GISS system at consumers' premises. In this regard, the licensee shall prominently display on its website and in all its offices, the following:

i) Detailed standardized procedure for installation & commissioning of GISS;

ii) Single point of contact to facilitate the eligible consumers in installation of GISS system from submission of application form to commissioning;

iii) **C**omplete list of documents required to be furnished along with such applications;

iv) Applicable charges to be deposited by the applicant as approved by the Commission;

v) Empanelled list of service providers for the benefit of consumers who want to install roof top solar PV system through service providers;

vi)Empanelled list of meter vendors;

vii)Financial incentives to the prosumers, as applicable under various schemes and programmes of the Central and State Government;

viii) Standard Connection Agreement(s);

15.3 The Eligible Consumer shall apply to the concerned Distribution Licensee for connectivity of the Grid Interactive Solar System with the Licensee's Network along with following registration fee either through online or submit the application in the prescribed form (Annexed) at the section office;

Sl.No.	Description	Registration fee
1	LT – up to 20 kW	Rs.500
2	LT – above 20 kW and up to 150 kW	Rs.500 up to 20kW and Rs.100 thereafter for every 20kW or part thereof.
3	HT- above 150 kW and up to 500KW	Rs.5000
4	HT- above 500 kW to less than 1 MW	Rs.10000

15.4. In case the application form submitted in hard copy form, the same shall be scanned and uploaded on the website as soon as it is received;

15.5. Acknowledgement with the registration number for that application shall be generated and intimated to the applicant within three working days of receipt of application. In case of applications being received online, the acknowledgement with the registration number shall be generated and communicated to the applicants through email; Licensee shall ensure that applications made in the centralized national portal are reflected in the Licensee portal and transferred to the concerned circle/section office and other nodal points for seamless process chain. There shall be an alert pop up in the system monitoring as and when the timeline is breached in the process for prompt remedial action.

15.6. In case of any deficiencies in the application form, the same shall be intimated within 3 working days from the date of receipt of application. The consumer shall rectify the defects and resubmit within 7 days to retain the registration number. Acknowledgement shall be generated/ given for receipt of rectified application also .If the application form is not resubmitted with rectification within 7 days the application shall stand cancelled and the registration fee shall be forfeited;

15.7. The application shall be deemed to be received on the date of submission of application in full shape without defects/ on rectification of defects;

15.8. Technical feasibility for GISS up to 10kW capacity is exempted. The section officer of the Licensee shall be delegated to sanction up to 10kW without having to transfer the application to the next level officer. The sanction up to 10kW shall be communicated to the applicant by the section officer within ten days of registration of application.

Technical feasibility is required only for capacities of more than 10kW. The distribution licensee shall evolve technical feasibility for GISS of more than 10kW within 15 working days from the date of registration of application;

15.9. The technical feasibility shall be conducted on the following aspects and any other factors which the licensee considers appropriate :

i AC Voltage level at which connectivity is sought;

ii Sanctioned Load / Contract Demand of the Applicant;

iii Rated Output AC Voltage of the proposed GISS

iv Capacity of feeding Distribution / Power Transformer;

If found technically feasible, the Distribution Licensee shall, within 5 working days of the completion of the feasibility study, convey its approval for installing the GISS. The approval shall indicate the Contracted capacity of the System, and shall be valid for a period of 6 months from the date of approval, or such extended period as may be agreed to by the Distribution Licensee;

If found not technically feasible the reason for the same shall be intimated to the applicant within 20 working days from the date of registration of the application;

In case there is any requirement of up-gradation of distribution infrastructure like augmentation of line, distribution Transformer capacity, the same shall be carried out separately by the Distribution Licensee at his cost without linking such process with the application process of the GISS.

Such expenditure shall be included in the revenue requirement of the Distribution licensee

15.10 The Applicant shall, within the period of validity of such approval, submit installation certificate of GISS along with relevant details (such as technical specifications, test reports received from manufacturer / system provider, safety certificate from CEIG as may be applicable etc.), and hand over the Generation / consumer meter with a request to the Distribution Licensee (if the applicant opts to purchase and supply the meter and the same ~~is~~ had not been already tested at Manufacture's site and sealed by the Licensee before delivery to open market) for the testing and commissioning of the GISS;

15.11 The Distribution Licensee shall carry out testing of generation meter/consumer meter, hand over the generation meter back to the applicant to be installed in the GISS by the applicant, install the bidirectional meter simultaneously and commission the GISS.

In case of applicant not opting to purchase and supply the meter, the Licensee shall supply the bidirectional meter.

In both cases the installation of meter, signing of connection agreement and successful commissioning of GISS shall be completed within fifteen days from the date of submission of installation certificate by the applicant.

15.12 The applicant and Licensee shall enter in to agreement in the prescribed format after the solar system is installed but before it is synchronized with the network;

15.13 The commissioning test of the GISS shall be carried out in the presence of representatives of consumer/owner of GISS, and concerned officer of the distribution licensee. The commissioning certificate shall be signed by all the above named parties;

15.14 The Commissioning certificate must contain the following details:

i. Details of Solar PV panels including name of the manufacturer, type, size/capacity, number of the panels, etc.;

ii. Details regarding inverter, such as Make, rating, type, sl.no etc.,

iii. Contracted capacity of the GISS;

iv. Details of meter**(s)** installed such as Make, type~~s~~ ,rating, accuracy, serial number, seal number etc.;

15.15 The formats of contract agreement and installation certificate shall be placed in the web portal of the licensee;

15.16 The application tracking mechanism based on the unique registration number shall be provided by the distribution licensee through web-based module or any other mode to monitor the status of processing of the application like receipt of application, date of approval of the Licensee, date of submission of installation certificate by the applicant, meter installation, commissioning, etc;

15.17 Consumer shall have the option of purchasing the requisite meter from authorised vendors which has been tested and sealed by the licensee or the meter shall be tested at licensee's lab with time limit stipulated or got tested by the consumer at other authorised lab;

15.18 The timelines as specified in these regulations shall be adhered to by the Licensee;

16. Access and Disconnection

16.1 The consumer/prosumer/generator shall provide access to the Licensee to the metering system and disconnecting devices of GISS both automatically and manually;

16.2 In an emergent or outage situation, if the Licensee is unable to access the disconnecting devicesof the Renewable Energy Generating System, both

automatically and manually, the Licensee shall have the power to disconnect power supply to the premises to ensure safety.

17. Connection Agreement

17.1 The Distribution Licensee and Eligible Consumer/generator shall enter into a Connection Agreement after approval of connectivity of the GISS with the distribution Network but before commencement of actual generation from the System;

17.2 A model Connection Agreement is provided at Annexure, which the Distribution Licensee may modify suitably, subject to consistency with these Regulations;

17.3 The Connection Agreement shall remain in force for twenty five years:

Provided that the prosumer / generator may terminate the Agreement at any time by giving 90 days' notice to the Distribution Licensee;

17.4 Any prosumer / generator, who intends to discontinue the connection agreement with the distribution licensee shall be allowed, subject to a written notice to the distribution licensee made at least one month in advance.

Provided further that the Distribution Licensee may terminate the Agreement by giving 30 days' notice, if the prosumer / generator breaches any term of the Agreement and does not remedy such breach within 30 days, or such other longer period as may be provided, of receiving notice from the Licensee of such breach, or for any other valid reason to be communicated in writing:

Provided also that the Distribution Licensee may terminate the Agreement by giving 15 days' notice in case the prosumer / generator fails to pay his dues in a timely manner or indulges in any malpractices:

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

17.5 Any unbilled energy generation as on the date of termination of the agreement shall be paid within one month from the date of termination of agreement by the distribution licensee;

17.6 The prosumer / generator shall, upon termination of the Agreement, disconnect forthwith his GISS from the Distribution Licensee's Network;

17.7 The Agreement may be extended by in slabs of five years after the expiry of 25 years and Licensee and prosumer shall get the agreement extended till the GISS installation generates power to its prolonged life period;

18. Power to issue directions

Subject to provisions of the Act, the Commission may from time to time issue such directions and orders as considered appropriate for implementation of these Regulations;

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 for reasons to be recorded;

21 . Power to remove difficulties

If any difficulty arises in giving effect to the provisions of these Regulations, the Commission may, by an order, make such provisions, not inconsistent to the provision of the Act and these Regulations, as may appear to be necessary for removing such difficulty;

22. Repeal and Savings

22.1 Save as otherwise provided in these Regulations, "Tamil Nadu Electricity Regulatory Commission - (Grid Interactive Solar PV Energy Generating

Systems) (GISS) Regulations, 2021 " shall stand repealed from the date of commencement of these Regulations.

22.2 Notwithstanding such repeal, anything done or purported to have been done under the repealed Regulations so far as it is not inconsistent with these Regulations shall be deemed to have been done or purported to have been done under these Regulations.

22.3 The existing consumers/ generators as on the date of coming into force of these Regulations under an existing agreement or contract shall be entitled to avail the concessions and exemptions and other terms and conditions, as stipulated under the new Regulation 2024 .

22.4 These Regulations are in addition to and not in derogation of the other Regulations / Codes issued by the Commission.

(By order of the Tamil Nadu Electricity Regulatory Commission)

Sd/- 13.06.2024
(Dr.C.VEERAMANI)
Secretary,
Tamil Nadu Electricity Regulatory Commission.

Form – 1

Application Form for Installation of Grid- Connected Solar Energy Generating System

To:
The Section Officer/Designated
Officer Distribution Licensee
[name of office]

Photo of applicant(s)

I. I / we herewith apply and request for Grid – Connected Solar Energy generating system to be connected to the service connection of following details:

1. Name(s) of applicant(s) in full	
2. Address of the premises at which the solar energy generation system is to be installed	
3. Address for communication	
4. Service connection number	
5. Service connection tariff	
6. Sanctioned Load / Contracted Demand	
7. Mobile number(s)	
8. Email ID	
9. Proposed AC capacity of the solar system to be installed	
10. Roof Top or Ground Mounted	
11. Net Metering / Net Feed-in / Gross Metering/group net metering/virtual net metering	

12. Solar grid inverter make, type and capacity	
13. Solar grid inverter has automatic isolation protection (Y/N)?	
14. Has a Solar Generation Meter been installed (Y/N)?	
15. Make capacity sl.no of the Generation meter	
16. Expected date of commissioning of solar PV system.	

II. I / We agree to pay the required charges as demanded in accordance with the Rules, Codes and Regulations.

III. I / We agree to install the plant in accordance with the protection and Safety Standards as mandated in the Regulations relating to Safety.

IV. I / We agree to enter in to the agreement as per the regulation.

V. I agree to bear the entire cost of erection of separate service line, to inject the total generated power in to the grid in case of gross metering arrangement.

VI. In case of group net metering, the energy generated in the primary service connection in which the solar power is generated sequence of adjustment of shall be first compensated with the consumption of primary service and surplus energy exported if any after such compensation, the sequence of service of same consumer in the area of distribution licensee shall be as per the following priority list:

Sl no of priority	Consumer name of service connection	Service connection number	Tariff	Sharing ratio	Address of the building with the service connection

VII. In case of virtual net metering the energy generated in the primary service connection shall be adjusted in the following participating services :

Percentage of generate units to be adjusted	Consumer name of service connection	Service connection number	Tariff	Address of the building with the service connection

Date:

Name:

Signature:

Grid – Connected Solar Energy Application Acknowledgement

Received an application for Grid – Connected Solar Energy Generating System,

Name(s).

Date:

Service Connection number:

Application registration no.:

Solar Plant Capacity:

Net Metering / Net Feed-in / Gross Metering :

Name of Officer:

Signature

Designation/TANGEDCO

List of documents attached with application form (to be uploaded):

1. Copy of ownership / lease deed in case of ground mounted solar energy generating system.
2. Proof of payment of registration fee.
3. Diagram showing the layout of premises, metering location and service line configuration etc., in case of gross metering.

FORM – 2

Grid Interactive PV Solar Power Generation Station (GISS)- Agreement

This Agreement is made and entered into at (location) …….. on this (date)……..day of (month)…… of…… (year) between the Eligible Consumer/ prosumer / Generator, residing at (address) as first party……

……

…….

AND

…….Distribution Licensee (herein after called as Licensee) and having its registered office at (address)……...

……

…..as second party of the agreement

And whereas, the Licensee agrees to permit to connect the eligible consumer's/ prosumer's /Generator's GISS (Grid Interactive PV Solar Power Generation Station) of Contracted Capacity of …..…… watts at the premises of …….....and as per conditions of this agreement and regulations / orders issued by the Tamil Nadu Electricity Regulatory Commission, from time to time for Net Metering / Net Feed-in / Gross Metering/Group net metering/Virtual net metering Mechanism.

Both the parties hereby agree to as follows:

1. Eligibility

Eligibility for Net Metering / Net Feed-in / Gross Metering/ Gross Metering/Group net metering/Virtual net metering shall be as specified in the relevant Regulations / Codes / Orders of the Tamil Nadu Electricity Regulatory Commission as amended. Eligible consumer /prosumer /generator is required to be aware, in advance, of the standards and conditions with which his system has to operate safely with coupled integration with the grid / distribution system of the Licensee.

2. Technical and Interconnection Requirements

The eligible consumer/prosumer/generator agrees that his GISS plant /station shall conform to the standards and requirements specified in the following Regulations and codes as amended from time to time.

(i) CEA's (Technical Standards for connectivity below 33kilo volts) Regulations, 2013.

(ii) Central Electricity Authority (Installation and Operation of Meters) Regulation 2006.

(iii) Central Electricity Authority (Measures of Safety and Electric Supply) Regulation 2010.

(iv) Tamil Nadu Electricity Regulatory Commission's (Grid Interactive Solar Energy Generating Systems) Regulation 2021

(v) Tamil Nadu Electricity Distribution Code.

(vi) Tamil Nadu Electricity Supply Code.

2.2 Eligible consumer / prosumer/ generator agrees that he has installed or will install, prior to connection of GISS to Licensee's distribution system, an isolation device (both automatic and inbuilt within inverter and external manual relays) and agrees for the Licensee to have access to and operation of this, if required and for repair & maintenance of the distribution system.

2.3 Eligible consumer/ prosumer/ generator agrees that in case of a power outage on Licensee's system, GISS will shut down, automatically and his plant will not generate power.

2.4. All the equipment connected to distribution system must be compliant with relevant international (IEEE/IEC) or Indian standards (BIS) and installations of electrical equipment protective devices, earthing standard etc., must comply with Central Electricity Authority (Measures of Safety and Electricity Supply) Regulations, 2010 as amended from time to time.

2.5. Eligible consumer/ Prosumer / generator agrees that Licensee will specify the interface / interconnection point and metering point.

2.6. Eligible consumer/ prosumer / generator and licensee agrees to comply with the relevant CEA regulations in respect of operation and maintenance of

the plant, drawing and diagrams, site responsibility schedule, harmonics, synchronization, voltage frequency, flicker etc.,

2.7. Due to Licensee's obligation to maintain a safe and reliable distribution system, eligible consumer/prosumer/generator agrees that if it is determined by the Licensee that eligible consumer's/ prosumer's/ generator's GISS either causes damage to and / or produces adverse effects affecting other consumers or Licensee's assets, eligible consumer/prosumer/generator will have to disconnect his GISS immediately from the distribution system upon direction from the Licensee and correct the problem at his own expense prior to a reconnection.

2.8 Both parties of this agreement are mandated by the Tamil Nadu Electricity Regulatory Commission's (Grid Interactive Solar Energy Generating Systems) Regulation 2021 and all relevant regulations, codes and orders of the Tamil Nadu Electricity Regulatory Commission.

3. Clearances and Approvals

The eligible consumer/ prosumer/generator agrees to obtain all the necessary approvals and clearances (environmental and grid connected related) before connecting the GISS to the distribution system.

4. Access and Disconnection

4.1. The eligible consumer/ prosumer/generator shall provide access to Licensee to metering equipment and disconnecting devices of GISS, both automatic and manual, at all times.

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

4.3. Upon termination of this agreement the eligible consumer/prosumer/generator shall disconnect the solar system forthwith from the network of the licensee.

5. Liabilities

5.1. Eligible consumer/prosumer/generator and Licensee will indemnify each other for damages or adverse effects from either party's negligence or intentional misconduct in the connection and operation of GISS or Licensee's distribution system.

5.2. Licensee and eligible consumer/prosumer/ generator 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 damages, including, but not limited to, punitive or exemplary damages, whether any of the said liability, loss or damages arise in contract, or otherwise.

5.3. Licensee shall not be liable for delivery or realization by eligible consumer/prosumer/generator for any fiscal or other incentive provided by the Central / State government beyond the scope specified by the Commission in its relevant Order.

6. Commercial Settlement

6.1. The tariff contracted to be paid by the Licensee to the eligible consumer/ prosumer / generator under this agreement by

…….Metering mechanism is Rs……. (Rupees……..) as per the orders of the TNERC, Number……. ……. Dated……

6.1.1 Metering System, Billing and all other charges that includes network / wheeling charges, banking charges, charges of line loss etc., **a**nd the commercial settlement under this agreement shall be as per the regulations / codes / orders of TNERC amended from time to time.

6.1.2 In case of Group Net Metering, the energy generated by the Renewable Energy Generating Station shall be offset against the energy consumption of the same consumer from the Distribution Licensee in the following manner:

Where the export of units during any billing period in a domestic service connection exceeds the import of units at the connection where GISS is located, such surplus units injected into the grid can be adjusted against the energy consumed in the bi-monthly bill of service connection(s) of same consumer in a sequence indicated in the priority list along with sharing ratio provided by the consumer;

For illustration if the consumer opting for Group Net metering indicates in his application three service connections of other locations standing in his name as 01, 02 and 03, the exported energy from the his mother service connection where GISS is installed , shall be adjusted first in service connection 01 ,then 02 and finally 03. If the sharing ratio is indicated as 50% of the exported energy in service connection 01, 40% in 02 and balance 10% in 03, for an gross exported energy of say 200 units in a billing cycle (after deducting line loss in

kind) the adjustment to be made in service connections 01,02 and 03 shall be 100 units , 80 units and 20 units respectively.

If only one service connection is of other location say 01 is indicated, the entire 200 units exported from his mother service connection shall be adjusted in service connection 01.

The sequence of priority for adjustment shall be deemed to have begun after adjustment of units at the mother service connection where the GISS is installed ;

6.1.3 The priority list along with the sharing ratio for adjustment of the surplus exported energy with other electricity connection(s) may be revised by the consumer at the maximum of twice in every financial year settlement period at the with an advance notice of one month.

A revised agreement shall be executed incorporating such change.

6.1.4 For cases where the billing cycles of the concerned service connections do not match with each other, the procedure as laid in the following illustration shall be adopted:

In case of the mother service connection in which the GISS installed is covered in the billing cycle comprising the months of March and April, the surplus net unit available at the end of April shall be computed proportionately for the month of March and April each. Such proportionate unit corresponding to the month of March shall be accounted for the settlement period ending on the thirty-first day of that March. The balance proportionate unit corresponding

to month of April shall be accounted to the settlement period of following year beginning on the first day of that April. However the surplus units accumulated through the settlement period till the end of March shall get lapsed at the end of settlement period.

6.1.5 In case of any of the participating service connection(s) in the priority list not falling in the same billing cycle of the mother service connection in which the GISS is installed, the adjustment of export units shall be done in the trailing billing cycle of the such service connection(s) in the same ratio.

Where during any billing cycle, if any surplus is available even after adjusting the entire export units of mother service connection with all other participating electricity service connection(s) of the same consumer, such surplus units injected by the consumer shall be carried over to the next billing cycle(s) and adjusted in the same manner as specified in the Regulation. This process shall continue until the end of settlement period. At the end of settlement period, the net units of surplus generation if any shall get lapsed.

6.1.6 Line loss charges of 7% in kind shall be applicable for the exported units which get adjusted in other services of same consumers in Group-Net Metering (GNM) irrespective of their locations in the given area of the Licensee. The 7% of energy towards line loss shall be deducted from the exported units in the mother service connection itself where the GISS is installed and the sharing ratio of participating service connection shall be computed for the balance units after such deduction. The billing program shall be done by the Licensee accordingly.

6.2.1 In case of Virtual Net metering , GISS can be set up by the Distribution Licensee, government/local bodies in its own or leased open land, terrace, floating solar on water bodies, etc., with or without Battery Energy Storage System. The energy so generated and metered at metering point may be adjusted from the annual consumption of subsidised categories after deducting the line loss, banking charges and wheeling charges as stipulated above. The subsidy for the quantum of energy so adjusted shall not be claimed by the Distribution Licensee from the Government. Only the cost of wheeling as determined by the Commission from time to time shall be claimed from the adjusted after deducting line loss and banked energy.

6.2.2. The energy generated from a GISS set up by government / local bodies may also be credited as opted by the applicant(s) , in the electricity bill of each participating service connection(s) belonging to the respective government office / local bodies as per the priority list and ratio of generation from the GISS as indicated in the application and entered in the agreement between the Licensee and the government department/local bodies.

6.2.3 The consumer, developer, government department/undertaking/local bodies shall have the option to change the share of credit of electricity from the GISS subject to the ratio of procurement from GISS indicated in the application and entered in the agreement once in every financial year settlement period at the beginning of the settlement period with an advance notice of one month. A revised agreement shall be executed incorporating such change.

6.2.4. Where the any of the participating service connection is disconnected due to any reason under any law for the time being in force, the unadjusted units remaining at the end of settlement period shall be paid by the Licensee/ adjusted from the dues payable to the Licensee.

6.2.5 Where the units credited during any billing period of any participating service connection exceeds the import of units by that service connection, such surplus credited units shall be carried forward in the next billing period as energy credits for adjustment against the energy consumed in subsequent billing periods within the settlement period of each participating service connection(s). The unadjusted units remaining at the end of settlement period shall be paid by the Licensee/ adjusted from the dues payable to the Licensee.

6.2.6 For the purpose of carry forward of surplus or set off of energy credits' the energy units shall be moderated as per the relevant rebate/Surcharge percentage of ToD tariff applicable for the relevant year.

6.2.7 In case of mis matching of billing cycles among the service connections of VNM, the procedure specified under group metering shall be applicable for the respective conditions under virtual net metering also.

6.2.8 The energy generated by VNM is eligible to be accounted towards RPO obligation of the Distribution Licensee concerned.

6.2.9 The applicable generators of more than one MW under VNM shall comply with Deviation Settlement Mechanism 2024 of the Commission as amended and all other relevant regulations.

For the categories covered under ToD tariff, the electricity consumption in any time slot (peak hours, off-peak hours, normal hours etc.) shall be first compensated with the electricity generation in the similar time slot in the same billing cycle of the participating service connection(s). Peak hour generation can be adjusted to normal hour or half peak hour consumption. Any surplus generation/ over consumption in any time slot in a billing cycle shall be accounted as if the surplus generation/ energy credits occurred during the off peak time block. Excess consumption shall be charged at the tariff applicable as determined by the Commission from time to time.

7 Connection and maintenance Costs

7.1. The eligible consumer/ prosumer/generator shall bear all costs related to setting up of photovoltaic system including metering and interconnection and infrastructure for power evacuation costs.

7.2. The eligible consumer/prosumer/generator agrees to pay the actual cost of modifications and upgrades to the service line/ power evacuation line required to connect GISS in case it is required.

7.3. In case of gross metering arrangement, the eligible consumer/ generator shall bear entire cost of erection and maintenance of separate service line to be laid to evacuate its total generated power into the grid.

8 Period of Agreement and Termination

8.1. This agreement shall be for a period of twenty five years, but may be terminated prematurely by mutual consent.

8.2. The eligible consumer / prosumer/ generator can terminate agreement at any time with Licensee by providing 90 days prior notice.

8.3. Licensee has the right to terminate agreement on 30 days prior written notice, if eligible consumer/prosumer/generator breaches terms of this agreement and does not remedy the breach within 30 days from the date of receiving written notice from the Licensee.

8.4. Licensee has the right to terminate agreement after giving 15 days' notice in case the eligible consumer /prosumer/ generator fails to pay his dues in a timely manner or indulges in any malpractices.

8.5. Eligible consumer/prosumer/generator agrees that upon termination of this agreement, he must disconnect the GISS from Licensee's distribution system in a timely manner and to Licensee's satisfaction.

9. Dispute Resolution

9.1 Apart from the terms and conditions of this agreement Parties of this agreement is governed and obligated by all provisions of the Commission's GISS Regulation 2024. Any dispute arising under this Agreement shall be resolved promptly, in good faith and in an equitable manner by both the Parties.

9.2 The Eligible Consumer shall have recourse to the concerned Consumer Grievance Redressal Forum constituted under the relevant Regulations in respect of any grievance regarding billing, which has not been redressed by the Licensee.

In the witness, whereof of Mr. …….. for and on behalf of … ……..

(Eligible consumer/Prosumer/generator) and Mr. …… for and on behalf of……..

(Licensee) sign this agreement in two originals.

Eligible Consumer/prosumer/generator	Distribution Licensee
Name	Name

Explanatory Statement

The GISS Regulation, 2021 framed by the Commission was notified vide Notification No. TNERC /GISS Regn.23-1 / Dated 07.10.2021. Consequent to further developments, the following additions/ revisions are considered necessary.

1. Provision of Group Net Metering (GNM) is introduced to domestic consumers to widen the options of the Roof Top Solar plant as a promotional measure.
2. Concept of Virtual Net Metering (VNM) is introduced for government and local bodies to leverage feeder level solarisation and promote distributed generation.
3. The criteria of Distribution / Power Transformer capacities to connect GISS is revised to utilise the optimum capacity of the equipment to accommodate the solar generation.
4. The simplified procedure of connectivity to grid and metering points for distributed generation is made more simple and clear.
5. The requirement of feasibility study up to the GISS capacity of 10kW is exempted in line with Electricity (Rights of consumers) amendment 2024.
6. Various time lines specified in the principal regulation from receipt of application to Commissioning of the GISS are reduced to align with the Electricity (Rights of consumers) amendment 2024.
7. Option of consumers to purchase meters on their own is facilitated in line with the provision of the Supply Code and to avoid unnecessary delay in commissioning the plants.

8. The ambiguity involved by limiting the export power based on computation of CUF is removed, so that the entire export energy is accounted irrespective of CUF.
9. The inverter capacity is allowed to be higher than the contracted capacity of the GISS to accommodate future needs.
10. Net work charges is exempted for the quantum of export power. Captive usage of solar power up to the contracted capacity without export of power and dedicated feeder, by opting network charges instead of parallel operation charges, as ordered by the Commission in M.P.No1 of 2022 Dt 01.03.2022, is provisioned.
11. The issue of CUF based of computation of units to determine the network charges by the licensee is to be set right to bring transparency of the billing process by the Licensee and to address the consumer complaints.
12. Provisions and methodology of billing and accounting the Group Net Metering, Virtual Net metering, computing the energy credit at the end of settlement period are incorporated to make the billing method with more clarity.
13. The billing and accounting mechanism in general for all categories of net metering / net billing / gross metering / GNM and VNM have to be made more and elaborate for seamless and proper adoption of the Licensee and to reduce consumer complaints in this regard.
14. Battery storage is provisioned in all categories to encourage storage of power during solar hours to be recycled during off solar hours.

15. Provision to levy the unauthorised usage of GISS is introduced to arrest the revenue loss to Licensee and to avoid scope for electrical accidents and loss of lives of working staff.

The proposed GISS Regulation, 2024 of the Commission in repeal of the erstwhile GISS Regulation, 2021 seeks to incorporate the above provisions.

Sd/- 13.06.2024
(Dr.C.VEERAMANI)
Secretary,
Tamil Nadu Electricity Regulatory Commission.