

COMBINED SUMMARY OF CERC & SERCS REGULATIONS/TARIFF ORDERS

Net Metering

Sl. No.	Description	Assam	Bihar	Delhi	Gujarat	Haryana
	Title	Grid Interactive Solar PV	Rooftop Solar Grid Interactive	Net Metering	Rooftop Solar PV Grid Interactive	Rooftop Solar Grid Interactive
1.	Order Dated	Grid Interactive Solar PV Systems Regulations, 2015, Dated 2 nd May, 2015	Rooftop Solar Grid Interactive Systems Based on Net-Metering Regulations, 2015. Dated 6 th , July 2015	Net Metering for Renewable Energy Regulations, 2014 dated 2 nd , September 2014	Net Metering Rooftop Solar PV Grid Interactive Systems - Regulations-2016, Dated 1st February 2016	Rooftop Solar Grid Interactive System based on Net Metering Regulations, 2014 dated 25 th November 2014 and Amendment dated 9.6.2015.
2.	Applicability	Distribution licensee and consumers of licensee of the State of Assam. Solar Grid Interactive system installed in the premises owned by consumer or a 3 rd party Eligible consumer to install solar system under net metering arrangement	Distribution Licensee and consumers of Licensee of the State of Bihar. System to be located in the consumer premises.	Distribution Licensee and consumers who are buyer of energy/electricity from the distribution licensee in its area of supply	Distribution licensee and consumers of electricity of distribution licensee availing supply from it in its area of supply, or consumers receiving electricity from its own generating source/third party but situated in the distribution licensee area. The Eligible Consumer may install the Rooftop Solar PV System under net metering arrangement which not be less than one Kilo Watt peak (1kWp).& located in the consumer's premises and to interconnect and operate safely in parallel with the distribution licensee network.	Distribution Licensee and consumers of Licensee of the State of Haryana System to be located in the consumer premises Consumers who have already installed Rooftop Solar system Net metering not available for Open Access consumers
3.	Eligible Consumer and Individual Plant Capacity	Aggregate Solar panel capacity of Grid interactive system installed at any consumer premises to be between of 1 kWp to 1000 kWp, restricted to 40 % of contract demand of the consumer with the licensee, subject to feasibility of inter-connection of the Solar system to the grid	All eligible consumers in the area of supply of the Distribution Licensee Capacity of the solar energy system to be installed at the premises of any eligible consumer to be between one kWp and one MWp	Capacity of RE system to be installed at the Premises of any consumer shall not be less than one kilo watt peak	Distribution licensee and consumers of electricity of distribution licensee availing supply from it in its area of supply, or consumers receiving electricity from its own generating source/third party but situated in the distribution licensee area. The Eligible Consumer may install the Rooftop Solar PV System under net metering arrangement which not be less than one Kilo Watt peak (1kWp).& located in the consumer's premises and to interconnect and operate safely in parallel with the distribution licensee network.	All eligible consumers in the area of supply of the Licensee The maximum Rooftop Solar system capacity at consumer premises shall not exceed his connected load in case of LT connection and contract demand in case of HT connection Maximum installed capacity shall not exceed 1 MWp for a single eligible consumer

4.	Interconnection with the Grid:	Net meter and solar meter to conform to the standards, specifications and accuracy class as provided in the CEA Regulations	Net meter and solar meter to conform to the standards, specifications and accuracy class as provided in the CEA Regulations Producer may install grid interactive SPV with or without battery backup	Interconnection of RE system with licensee system and meters to conform to the standards, specifications and provisions as provided in CEA Regulations Generator may install grid interactive RE system with or without battery backup	Interconnection with the network of the licensee to be as per CEA Regulations. A variation in the rated capacity of the system within a range of (5%) allowed. For System, the connectivity load to be connected with the grid: Up to 5 kW - 240 V, Single phase Above 5 kW and up to 18.65 kW - 415 V, Three phase Above 18.65 kW and up to 100 kW / kVA - 415 V, Three phase Above 100 kW / kVA -- HT / EHT level	Interconnection of Rooftop Solar system with licensee network and meters to conform to the standards, specifications and provisions as provided in CEA Regulations
5.	Wheeling & Cross Subsidy surcharge	Exempted when open access is allowed	Exempted from Banking, Wheeling and cross subsidy surcharge Consumer with net metering cannot avail Banking facility	Exempted from Banking, Wheeling, cross subsidy and other charges for five years	Rooftop SPV System under net metering, whether self/ third party owned installed on Consumer's premises exempted from Transmission Charge, Transmission Loss, Wheeling Charge, Wheeling Loss, Cross Subsidy Surcharge and Additional Surcharge Banking allowed	
6.	Metering Arrangement	Net meter to be installed at interconnection point of the consumers with the network of the Distribution Licensee. Solar meter to be installed at the delivery point of the Solar energy system Check meters to be installed for Solar systems having capacity more than 20 kWp	Net meter to be installed at interconnection point of the consumers with the network of the Distribution Licensee. Solar meter to be installed at the delivery point of the Solar energy system Check meters mandatory for Rooftop Solar systems having capacity more than 20 kW In case the consumer is under the ambit of time of day tariff, meters compliant of recording time of day consumption /generation to be employed	Net Meter may be single/ three phase as per requirement. Cost of RE Meter to be borne by licensee and that of Net Meter by consumer Net Meters at the consumers premises to be under the ambit of time of day tariff	i. Metering to be as per CEA Regulations, 2006 as amended. ii. Bi-directional meters to be provided by the licensee at consumer's cost. iii. Industrial, Commercial and Other consumers to have ABT compliant meter. iv. Main Solar Meters shall be of 0.2s class accuracy with facility for recording meter readings v. Check meters mandatory for Rooftop SPV Systems having capacity more than 20 kW. optional.	Cost of new/additional meter(s), including the cost of replacement, to be borne by the eligible consumer. Meters to be installed and maintained by the licensee

COMBINED SUMMARY OF CERC & SERCS REGULATIONS/TARIFF ORDERS

Net Metering

Sl. No.	Description	Himachal Pradesh	Jammu & Kashmir	Jharkhand	Karnataka
	Title	Rooftop Solar PV Grid Interactive	Rooftop Solar PV Grid Interactive	Rooftop Solar PV Grid Interactive	Grid Interactive Solar Rooftop and Small Solar Photovoltaic Power
1.	Order Dated	Rooftop Solar PV Grid Interactive Systems based on Net Metering Regulations, 2015. Dated 31.7.2015	Grid Interactive Rooftop Solar Photo Voltaic Systems based on Net Metering Regulations- 2015 Dated 15.10.2015.	Rooftop Solar PV Grid Interactive Systems and Net/Gross Metering Regulations, 2015 Dated 6.7.2015	Determination of tariff and other norms for Solar Rooftop and Small Photovoltaic Power Plants. Order S/03/1 Dated 2nd May, 2016
2.	Applicability	Distribution licensee and consumers of Distribution licensee	Distribution Licensee and consumers of Licensee in the State of Jammu & Kashmir System to be located in the consumer premises. Also applicable to consumers who have installed the system before commencement of these Regulations	Distribution Licensee, consumers of Licensee and third party owners of gross metering in the State of Jharkhand System to be located in the consumer premises.	Applicable to all new grid connected solar rooftop and small solar photovoltaic power plants, entering into Power Purchase Agreement (PPA) and commissioned on or after 2nd May, 2016 and upto 31st March, 2018.
3.	Eligible Consumer and Individual Plant Capacity	All eligible consumers in the area of supply of the Licensee Maximum Capacity of Rooftop SPV by an eligible consumer: LT (1 ϕ) - 5 kWp LT (3 ϕ) - 15 kWp HT/EHT - 1 MWp	All eligible consumers in the area of supply of the Licensee Installed capacity for a single eligible consumer to be between one kWp and one MWp Third party owned Rooftop SPV net metering may consist developer or intermediaries leasing out SPV system to interested Rooftop owners	Any consumer/third party owner claiming AD benefits on rooftop SPV system shall only be eligible to avail net metering arrangement Eligible consumer/third party owner availing gross metering not eligible for net metering within the same premises. Eligible consumer availing net metering not eligible for gross metering arrangement within the same premises. Capacity of any consumer/third party owner shall be more than one kWp and not exceed 100% of sanctioned load / contract demand	The Commission had proposed to continue with net-metering concept for all consumers, other than domestic consumers. In the case of domestic consumers, the Commission had proposed to adopt gross metering concept The Commission, decides to allow installed capacity of SRTPV and Small Solar PV plants up to 150% of the sanctioned load .

4.	Interconnection with the Grid	Interconnection system and meters to conform to the standards, specifications and provisions as provided in CEA Regulations Producer may install grid interactive SPV with or without battery backup	Interconnection of Rooftop Solar PV system with licensee's Distribution system and meters to conform to the standards, specifications and provisions as provided in CEA Regulations Connectivity with the grid – consumer having connected load: Up to 5 kW - 240 V- Single phase Above 5 kW and Up to 100kW - 415 V-Three phase Above 100 kW - HT/EHT level	Interconnection of Rooftop SPV system with licensee system and meters to conform to the standards, specifications and provisions as provided in CEA Regulations Cost of evacuation system and interconnection to be borne by the consumer/third party owner Connectivity with the grid – Consumer having connected load : Up to 5 kW - 230 V- Single phase Above 5 kW and Up to 50 kW - 415 V-Three phase Above 50 kW and Up to 1MW - 11 kV -Three phase	Interconnection system to conform to the standards, specifications and provisions as provided in CEA Regulations Developer responsible for evacuation facility upto the interconnection point. and STU / Distribution Licensee beyond that
5.	Wheeling & Cross Subsidy surcharge	Exempted from Banking, Wheeling, Cross subsidy charges for five years	Rooftop Solar system under net metering both self/third party owned, installed on eligible consumer premises, exempted from various provisions of JKSERC (Terms & Conditions for Intra State Open Access) Regulations - 2015	SPV system under gross / net metering, whether self/ third party owned installed on consumer premises exempted from wheeling and cross subsidy charges	The Wheeling, Banking and Cross Subsidy surcharge shall be applicable as per Commission's Order dated 18th August, 2014.
6.	Metering Arrangement	Eligible consumer to install and maintain the Solar Meter at his cost Net meter to be installed and maintained, at the cost of eligible consumer by the Distribution Licensee	Net meter to be installed at interconnection point of the consumers with the network of the Distribution Licensee. For existing consumers, the consumer meter to be replaced with net meter Solar meter to be installed at solar facility after inverter Check meters mandatory for Rooftop Solar systems having capacity more than 250 kW Cost of new/additional meter(s), to be borne by the eligible consumer and installed & owned by the licensee In case the consumer is under the ambit of time of day tariff, meters compliant of recording time of day consumption /generation to be employed	Meter(s) at the consumer premises to be procured, installed and maintained by the Licensee at eligible consumer cost. Installation of check meters to be mandatory for rooftop SPV system having rated capacity more than 50 kWp. For installations having rated capacity up to 50 kWp, consumer/ Licensee may install check meter at their own cost Distribution Licensee to own the check meter	Net metered energy is to be billed at tariff determined by the Commission. In case of installed capacity in excess of allowable capacity, the energy injected during any month, in excess of the allowable installed capacity shall be billed at Average Pooled Power Purchase cost notified by the Commission. Gross energy generated by the Solar Rooftop plant will be allowed to be injected into the grid payable at the tariff to be fixed by the Commission.

COMBINED SUMMARY OF CERC & SERCS REGULATIONS/TARIFF ORDERS

Net Metering

Sl. No.	Description	Madhya Pradesh	Maharashtra	Meghalaya	Odisha
	Title	Grid connected Net Metering	Net Metering	Rooftop Solar Grid Interactive	Rooftop Solar PV- Net Metering
1.	Order Dated	Grid connected Net Metering Regulations, 2015 (G - 39 of 2015). Dated 23.10.2015	Net Metering for Roof-top Solar Photo Voltaic Systems Regulations 2015 Dated 10.9.2015	Rooftop Solar Grid Interactive systems based on Net metering Regulations 2015 Dated 25.02.2015	Net /Bi-directional metering & their Connectivity with Rooftop SPV Projects on the Rooftop of Government/PSU owned Buildings Dated 26.11.2014
2.	Applicability	Distribution licensee to offer net metering to the consumer in its area of supply till the cumulative capacity does not exceed 10 MW System to be located in the consumer premises or common facility area in multi storied buildings.	Eligible Consumers who have installed, intend to install a Roof-top SPV System connected to Licensee Network	Distribution Licensee and consumers of electricity of Licensee in the State of Meghalaya System to be located in the consumer premises.	Rooftop owner to install Rooftop Solar system at his own cost Turnkey installers may lease Rooftop systems to individual building owners
3.	Eligible Consumer and Individual Plant Capacity	Eligible consumer who intends to install net metering in its area of supply Permissible individual rated capacity - 112 kW at LT Third party sale not allowed	Capacity of Roof-top SPV System to be connected at Consumer's premises shall not exceed his Contract Demand / Sanctioned load Capacity limits for connectivity of Rooftop SPV to licensee network: Less than 8 kW/40 A – 230/240 V- single phase Less than 150kW/187 kVA (Municipal Corporation areas) Less than 80kW/100 kVA(in other areas) – 400/415 V-Three phase Above 150 kW/187 kVA and less than 1000 kVA (in Mumbai Metropolitan Region) Above 80kW/ 100 kVA and less than 1000 kVA (in other areas) – 11 kV and above (HT)	Capacity of RE system at the consumer premises shall not be less than 1kW peak. Maximum cumulative capacity of 1 MW allowed to eligible consumers under net metering, on yearly basis, in the area of supply of the licensee	Capacity of an individual Rooftop PV system to be the sanctioned load of the consumer subject to 1MW for a single Net metering point Net metered Rooftop Solar systems to utilize the same service line and installation being used by the consumer for drawl of power from utility network for injection of excess power into the Grid.

4.	Interconnection with the Grid:	Interconnection of RE system with licensee network and meters to conform to the standards, specifications and provisions as provided in CEA Regulations Cost related to augmentation to be borne by the consumer	Interconnection system and meters to conform to the standards, specifications and provisions as provided in CEA Regulations Consumer may install grid interactive SPV with or without battery backup	To be as per the technical standards for connectivity laid down by CEA/ Competent authority Until then interconnection shall be as per the contracted load and/ or voltage level applicable to the consumer as per the provisions of Electricity Supply Code.	Interconnection for net metering to conform to the standards, specifications and provisions as provided in OERC(Conditions of Supply) Code & CEA Regulations
5.	Wheeling & Cross Subsidy surcharge	RE system under net metering, whether self/ third party owned installed on consumer premises exempted from banking, wheeling and cross subsidy			
6.	Metering Arrangement	Cost of new/additional meter(s), including installation to be borne by the eligible consumer. Meters to be installed by the licensee In case the consumer is under the ambit of time of day tariff, meters compliant of recording time of day consumption / generation to be employed	Net Meter to be at the of inter-connection point, as ascertained by the Distribution Licensee Net Meter at the Eligible Consumer premises to be procured and installed by the Licensee at its own cost Licensee to be responsible for supply, installation, testing and maintenance of the metering equipment Solar Generation Meter to be maintained by the Distribution Licensee at its cost. If Consumer is within the ambit of Time-of-Day(ToD) Tariff, the Net Meter shall be capable of recording ToD consumption and generation	To be as per the installation & operation of meters for Rooftop Solar systems under net-metering arrangement to be notified by the competent authority. Until then net meters of accuracy class 1.0 or better shall be installed. In case the consumer is under the ambit of time of day tariff, meters compliant of recording time of day consumption/generation to be employed Cost of meter(s) to be borne by the eligible consumer and installed and owned by the Distribution licensee	Generator to install two meters, MRI and AMR compliant, one for Solar generation and other for Import / Export measurement Existing Net meter already installed allowed to continue Meters to be as per CEA Regulations Cost of meter(s) and connectivity to be borne by the consumer and installed & tested by the Distribution Licensee. Check meter to be installed for the Solar system having capacity more than 20kW.

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Net Metering

Sl. No.	Description	Punjab	Rajasthan	Uttar Pradesh	GOA & Union Territories (Andaman, Chandigarh, Dadra & Nagar Haveli, Daman & Diu, Lakshadweep & Puducherry)
	Title	Rooftop Solar PV Grid Interactive	Rooftop and Small Solar Grid Interactive	Rooftop Solar PV Grid Interactive	Rooftop Solar PV- Net Metering
1.	Order Dated	Grid Interactive Rooftop Solar Photo Voltaic Systems based on Net Metering) Regulations-2015. Dated 7.5.2015	Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems Regulations 2015 Dated 26.02.2015	Rooftop Solar PV Grid Interactive Systems Gross/Net Metering- Regulations – 2015 Dated 20.03.2015	Grid Connected Solar Power Regulations 2015 dated 8 th May 2015
2.	Applicability	Distribution Licensee and consumers of electricity of Licensee in the State of Punjab System to be located in the consumer premises. Also applicable to consumers who have installed the system before commencement of these Regulations	Distribution Licensee and Consumers of electricity of Licensee in the State of Rajasthan Rooftop Solar System to be located in the consumer premises.	Distribution Licensee and consumers of electricity of Licensee and third party owners of Gross metering arrangement in the State of Uttar Pradesh System to be located in the consumer premises.	Grid connected ground mounted Solar PV and Solar Thermal power projects of capacity equal to or more than 500 kWp and Rooftop Solar PV equal to or more than 1 kWp but not more than 500 kWp at one location owned by one Individual or entity Net metering applicable to generators having an electrical service connection for all consumer categories of the Licensee
3.	Eligible Consumer and Individual Plant Capacity	All eligible consumers in the Licensee area of the supply may participate in Rooftop SPV subject to target capacity. Maximum capacity shall not exceed 80% of the sanctioned load/contract demand of the consumer Installed capacity to be not less than 1 kWp and not exceed 1MWp for a single consumer Third party owned net metering model also allowed	All eligible consumers in the Licensee area of the supply Maximum Rooftop SPV capacity shall not exceed 80% of the sanctioned load/contract demand of the consumer Installed capacity to be more than 1 kWp and not more than 1 MWp for a eligible consumer Connected load of consumer for connectivity with grid Up to 5 kW 240 V-1 phase Above 5 kW Up to 50kW - 415 V-3 phase Above 50 kW – HT/EHT level	Any consumer/third party owner claiming AD benefits on the Rooftop SPV system only eligible to avail net metering arrangement Eligible consumers may install Rooftop SPV system under either gross / net metering arrangement Consumer/third party availing gross metering arrangement not allowed to apply for net metering within the same premises Consumer availing net metering not allowed to apply for gross metering arrangement within the same premises. Peak capacity of consumer shall not exceed 100% of the sanctioned load/contract demand of the consumer	All eligible consumers in the Licensee area of the supply A Rooftop Owner can lease out / rent the Rooftop Space to a Solar Developer on a mutual commercial arrangement Maximum Rooftop Solar System capacity to be installed at any eligible consumer premises shall be governed by the eligibility of interconnection with the Grid for that eligible consumer as per provisions of JERC Maximum capacity of Solar project to be not more than the sanctioned connected Load /Contract Demand of the consumer, and the minimum capacity not less than 1 kWp.

				<p>Peak capacity of consumer shall not exceed 100% of the sanctioned load/ contract demand of the consumer</p> <p>Capacity of consumer /third party owner shall be more than 1 kW peak</p> <p>Connected load of consumer for connectivity with grid</p> <p>Up to 5 kW 230 V-1 phase</p> <p>Above 5 kW Up to 50 kW- 415 V-3 phase</p> <p>Above 50 kW Up to 1 MW - 11 kV -3 phase</p>	
4.	Interconnection with the Grid	<p>Interconnection system and meters to conform to the standards, specifications and provisions as provided in CEA Regulations</p> <p>Grid interactive SPV may be installed with or without battery backup</p>	<p>Interconnection system to conform to the standards, specifications and provisions as provided in CEA Regulations</p>	<p>Interconnection system and meters to conform to the standards, specifications and provisions as provided in CEA Regulations</p> <p>Cost of evacuation and interconnection of the Rooftop SPV system with the distribution system to be borne by the eligible consumer/third party owner</p>	<p>As per National & International Standards specified by MNRE & CEA's Technical Standards for Connectivity of Distributed generation Resources- Regulation 2013.</p> <p>Solar Generator may establish Grid interactive Solar Power plant in the Rooftop / Elevated surface without battery or with battery backup</p>
5.	Wheeling & Cross Subsidy surcharge	<p>Rooftop Solar system under net metering both self/third party owned, installed on eligible consumer premises, exempted from various provisions of PSERC (Terms & Conditions for Intra State Open Access) Regulations – 2011</p>	<p>Rooftop Solar system under net metering, whether self/ third party owned installed on consumer premises exempted from banking, wheeling charges and cross subsidy surcharge</p>	<p>Rooftop Solar system installed at consumer premises exempted from wheeling and cross subsidy surcharge</p>	<p>Solar plant, whether self /third party owned installed on eligible entity's premises, exempted from electricity Banking, Wheeling charges and losses and Cross Subsidy for use of electricity within the respective territories.</p> <p>No Banking allowed for Ground Mounted Solar Plant</p>
6.	Metering Arrangement	<p>Solar meter to be installed at generation point by Solar Energy System and delivered to the main panel.</p> <p>Meters to be installed and maintained by the Distribution Licensee at the cost of the eligible consumer</p> <p>In case the consumer is under the ambit of time of day tariff, meters compliant of recording time of day consumption / generation to be installed</p>	<p>Metering system to be as per the Regulations for installation & operation of meters for Rooftop Solar systems under net-metering arrangement specified in these regulations</p> <p>Net meter to be installed at the interconnection point of the Eligible Consumer with the network of the Licensee:</p> <p>For the existing consumers, consumer meter to be replaced with the net meter</p> <p>Consumers having ABT compliant meters not required to install additional net meter</p> <p>Solar meter to be installed at the solar facility after the inverter</p>	<p>Meter(s) to be procured, installed and maintained by the Licensee at the consumer premises at consumer cost</p> <p>Installation of check meters mandatory for Rooftop SPV system having rated capacity more than 50 kWp.</p> <p>For rated capacity up to 50 kWp, consumer/Licensee may install check meter at their own cost.</p>	<p>Meters to be arranged by the Consumer /generator, as per the approved specification</p> <p>Existing service connection meter to be replaced with a Bi-directional energy meter by the Distribution Licensee</p> <p>All grid connected Projects to have electricity meters with features to record energy for 45 days data storage for injection into the Grid through Solar meter</p> <p>All projects with capacity of above 25 kWp to have communication Port for exchanging real time information with the Distribution Licensee</p>