

GOVERNMENT OF ODISHA

Draft Solar Power Policy- 2013

Sl. No.	Description	Summary
1.	Order	Draft-Resolution
2.	Title	Odisha Solar Power Policy - 2013
3.	Operative Period	<ul style="list-style-type: none"> • Policy will come in to operation with effect from the date of resolution and will supersede the policy guidelines for power generation from non conventional energy sources -2005 with respect to the content related to Solar power generation.
4.	Nodal Agency for Clearance	<p>OREDA will act as Nodal Agency for single window clearance of the projects for following activities:</p> <ul style="list-style-type: none"> • Registration of projects • Approval of capacity of projects • Loans from IREDA/PFC/REC/Financial Institutions/Commercial Banks • Allotment of land in the Solar park. The developments, if they so wish can also set up their projects outside the Solar park for which they have arranged the land themselves. • For Solar Thermal Power Plants, water allocation from concerned department • Approval of power evacuation plan and allocation of bays etc. • Arranging other statutory clearances/approvals • Execution of PPA with GRIDCO/DISCOMs • Co-ordination with MNRE/NVVN/and other State Agencies. • Accreditation and recommending the Solar power project for registration with Central Agency under REC mechanism
5.	Objective	<ul style="list-style-type: none"> • Productive use of wastelands, thereby utilizing the non-industrialized areas that receive abundant sunshine for creation of Solar power hubs. • Creating favourable conditions to Solar manufacturing capabilities by providing fiscal incentives.
6.	Solar Energy Potential	<ul style="list-style-type: none"> • Average Solar radiation incident on Odisha ranges between 5.4 to 5.6 KWh per Sqm with a sunshine for over 300 days a year. • Average Solar radiation is of around 5 KWh per Sqm for almost all the districts. • Feasible potential for power generation in SPV and Solar thermal are estimated to be 8000MW and 2000MW respectively.
7.	Scope of Harnessing Solar Power in Odisha	<ul style="list-style-type: none"> • Generation and supply of power to State Grid through PPA • Generation and sale of power through open access • Setting up Solar power projects under REC mechanism • On grid/off-grid Roof top Solar power plants • Solar water Heating for domestic use and industrial processes • Solar air heating for industrial processes • Solar cooking • Solar pumping • Solar refrigeration • Triple effect and tri-generation • Other innovative Solar applications like sterling engine application etc.
8.	Capacity Addition/ SPO	Proposed cumulative capacity addition for the years 2014 and 2015 is estimated to be 102MW and 135MW respectively with Solar Purchase Obligation (SPO) of total energy consumption in the state as 0.25% and 0.30%.
9.	Procedure of Setting up of Solar Power Projects	
a)	On Grid PV Projects	Solar PV Systems and Solar Thermal Systems
(i)	Projects set up through Tariff based Bidding for Supplying Power to GRIDCO/ DISCOMs	<ul style="list-style-type: none"> • Developers to be selected through competitive bidding process only on basis of applications invited by OREDA from time to time. • Selected developers to approach the single window for statutory clearances such as land, water, power evacuation etc.

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(ii)	Projects set up under the REC Mechanism	<ul style="list-style-type: none"> • Setting up of Solar power projects of unlimited capacity by IPPs to be promoted under this policy. • Producers to apply to online application at www.recregistryindia.in. • OREDA to accredit the projects and issue the necessary certificates of accreditation and recommend the same for registration with Central Agency (NLDC). • Solar certificates to be issued by NLDC on the injection reports of SLDC. • Power generated from these projects to be purchased by GRIDCO / Discoms at average pooled power cost determined by OERC from time to time. • Developers to sell RE (Solar) certificates as per regulations / orders of appropriate commission.
(iii)	Projects set up for Supply/Sale of Power outside the State using Open Access	<ul style="list-style-type: none"> • Developers under this category to submit the application along with DPR to OREDA. • Projects to be examined by State Technical Committee (STC) on case to case basis. • Developers may approach single window for statutory clearances. • After clearance by STC developers to approach OERC for determination of wheeling charges etc. • OREDA to execute implementation agreement with the developer and permit developer to implement the projects. • In case of failure to sell power in open access, developers may sell power to GRIDCO / Discoms or to any third party within the state at mutually agreed tariff rates subject to approval of the same by OERC.
(iv)	IPPs for Selling Solar Power to other Obligated Entities through Mutual Tariff Agreements, or to any other Entity	<ul style="list-style-type: none"> • IPPs under this category may set up Solar power project for supplying the entire power to an obligated entity within the state so as to enable the entity fulfill its SPO or to any other entity at mutually agreed tariff subject to approval by OERC. • Developers may approach single window for statutory clearances. • After clearance by STC developers to approach OERC for determination of wheeling charges etc. • In case of failure to sell the power to the obligatory entity / other entities within the state with whom PPA were executed, developers may sell power to bulk customers outside through open access with prior approval of OERC.
(v)	CPPs for meeting Obligation by the Obligated Entities or for Normal Consumption	<ul style="list-style-type: none"> • Obligated Entities under RCPO-Regulations 2010 may setup captive solar plant solely for fulfilling their own obligations. • Developers may approach single window for statutory clearances. • After clearance by STC developers to approach OERC for determination of wheeling charges etc.
b)	Off-Grid PV Projects	<p>Solar PV Power Plants</p> <ul style="list-style-type: none"> • Rooftop Solar PV Power Plants <ul style="list-style-type: none"> – LT grid connected projects with individual capacity ranging from 0.15KW to 500KW/ standalone projects with storage batteries to meet their power requirements, for government, semi Govt., non Govt. institutes and pvt. households. – Projects under this category may export excess power during holidays and other off days to the grid at tariff determined by OERC. • Decentralized Distributed Generation for Electrification of Un-electrified Villages, Power augmentation in Electrified Villages etc. <ul style="list-style-type: none"> – NGO / Entrepreneur to be encouraged to install Solar plants to provide minimum power of 1 unit per household per day as merit good through OREDA. • Solar PV Pumps for Micro Irrigation, Drinking Water Supper, Sewage Treatment Plant and lift irrigation. • Other solar PV applications such as solar lanterns, home-lights, street lights etc. for use in stand-alone mode by individuals and communities\. • Solar PV powered Hoardings, Signage & Mobile towers. <p>Solar Thermal Plants</p> <ul style="list-style-type: none"> • The following are the major applications of solar thermal technologies: <ul style="list-style-type: none"> – Solar Water Heating Systems (SWHS) – Solar Steam Systems – Industrial Applications

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10.	Development of Solar Parks in State	State to develop Solar parks by following two different models: (i) In the first model suitable waste land to be identified for setting up of Solar power plant and sold to selected developers as per provision of IPR, Government of Odisha. (ii) In the second model OREDA to own the land and develop infrastructural facilities like approach roads, boundary wall, water, auxiliary power, power evacuation facility etc. and provide the land to selected developers on 30 years' lease basis at predetermined lease rent. (iii) OREDA may develop such parks through IDCO or PPP mode.
11.	Registration of Solar Power Projects	Every Solar power project proposed to be set up in the state (excluding those set up through competitive bidding process) has to be registered with OREDA as per the procedure: <ul style="list-style-type: none"> • OREDA to invite application for setting up Solar power plants in the state under different categories like captive consumption, REC mechanism, third party sale of power within the state, sale of power outside the state through open access. • Solar power producers shall submit their applications along with the fee to OREDA in the prescribed form. • OREDA to shortlist the proposal for approval of STC.
12.	List of Clearances for Setting up of Solar Plant	<ul style="list-style-type: none"> • Capacity allocation by STC • Pollution Control Board • MoEF clearance • Forest Clearance • Water drawl permission • Airport authority clearance • Mining clearance
13.	Clearance of Project setup under REC Mechanism by STC	State Level Screening Committee (STC) with Principal Secretary/Secretary, S&T Dept., Govt. of Odisha as Chairperson to be setup for in principle clearance of the projects setup under REC mechanism for sale of power through open access.
14.	Forecasting and Scheduling	<ul style="list-style-type: none"> • Solar energy generated for sale not to be covered under scheduling procedure for Intra State ABT. • Actual Solar energy injected in the grid during particular time block of 15 minutes to be post-facto considered in drawl schedule for sale of power to third party or for giving set-off against the consumption of recipient unit in case of wheeling.
15.	Metering of Power from Solar Plants	Metering arrangement shall be made as per CEA Regulations, 2006/the Grid Code/Metering Code and regulations issued by OERC/CERC.
16.	Grid Interfacing	Grid interfacing arrangements to be made by Solar power producers/OPTCL/DISCOMs as per the following:
(i)	Generating Plant	<ul style="list-style-type: none"> • Generating plant sub-station to be developed and maintained by developer as per the grid code and entire cost to be borne by him. • Solar plant to be integrated by installing RTUs by developer. • Solar power producers to ensure the average power factor of 0.95 (lagging) to 1.0.
(ii)	Receiving Sub-station	<ul style="list-style-type: none"> • Location for sub-station for 33kV and above grid connected solar power plants to be finalized by GRIDCO/OPTCL in consultation with OREDA • Location for sub-station for 11kV grid connected solar power plants to be finalized by DISCOMs in consultation with OREDA. • Discom to allow interconnections of Solar power plants connected to LT voltage level as per standard norms fixed by CEA/ MNRE/OERC.
17.	Grid Connectivity	<ul style="list-style-type: none"> • Solar Power producers to pay Grid connectivity charges as finalized by OREDA to DISCOMs/ GRIDCO as applicable. • Charges to be paid by the power producer to GRIDCO/DISCOMs within 3 months of final approval of the project. • Charges to include cost of complete line bay (including civil works) and interconnection with existing electrical system and associated switchgear. • In case, power producer want to supply power at a higher voltage at a later date, the modifications involved to be done by OPTCL as deposit work on behalf of power producer.

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		<ul style="list-style-type: none"> • In case, power evacuation is made through temporary arrangement, no charges to be paid by power producer for shifting to the approved evacuation system. • In case, producer connects his feeder to DISCOM sub-station and later wants to connect the feeder to OPTCL sub-station, the additional line shall be constructed by producer and substation work done by OPTCL as deposit work on behalf of the producer. • Producer to submit time frame for construction of their plant for grid connectivity along with bank guarantee equivalent to cost of bay and transmission /distribution line with an undertaking to use the system within prescribed period. • In case of delay in utilization of system, a penalty @ 12% per annum for the period of delay on amount of bank guarantee to be levied by OPTCL/DISCOM. • Bank guarantee to be returned to producer after commissioning of the project on depositing amount of penalty (if any) on account of delay in utilization of system.
18.	T&D Augmentation	<ul style="list-style-type: none"> • Grid interfacing work to be done by developer / promoter at their own cost with the approval of GRIDCO/DISTCOS • Interconnection lines and substation to be constructed and maintained by the Developers/ Promoters • GRIDCO/DISTCOS may maintain the same by mutual agreement on payment of annual charges • Main and check meters at the interconnection point to be installed by developer
19.	Wheeling	<ul style="list-style-type: none"> • Developer may use T&D network of GRIDCO/DISTCOS for carrying power to the destination of use on payment of T&D and wheeling charges as approved by OERC. • Developer may transmit power outside the state on payment of transmission/wheeling charges as determined by OERC. • No license is required for generation and distribution of electricity in rural areas.
20.	Sale of Power	<ul style="list-style-type: none"> • Developer may be allowed to sell energy to Bulk Suppliers/Distribution Licensees on the basis of a Power Purchase Agreement (PPA) with the Licensees to be approved by OERC. • Energy from the captive power plant, not utilized during the year by the Developer for his captive use to be treated as sold to GRIDCO/DISTCOS at the price to be negotiated with them and approved by OERC.
21.	Power Banking	<ul style="list-style-type: none"> • Banking of energy generated through a captive Solar power plant allowed on Annual basis as per financial year. • Unutilized energy during the year to be paid as per the rates to be negotiated between GRIDCO/DISCOM and the developer. • Banking charges to be payable as approved by OERC.
22.	Incentives and Electricity Duty	<ul style="list-style-type: none"> • Power plant generating power set up after the effective date shall be deemed to be a new industrial unit and not liable to pay Electricity duty. • Government land earmarked for industry under the "Land Bank" scheme and other Government land wherever applicable will be allotted for units generating power from nonconventional Sources.