

**SOLAR POWER POLICY - 2009**

**Government of Gujarat  
Energy and Petrochemicals Department  
G.R. No. SLR-11-2008-2176-B  
Sachivalaya, Gandhinagar.  
Dated the 6<sup>th</sup> January 2009**

**PREAMBLE:**

The challenges of climate change and global warming continuously threaten the world community. The Government of Gujarat has taken note of the growing recognition of impacts of climate change at the local, national and global levels. The Government recognized the urgent need to tackle challenges that arise on account of these impacts through integrated policy prescriptions and programmes aimed at mitigation of impacts and adaptation to reduce vulnerability of systems. The Government is also cognizant of the cross - cutting nature of impacts with enormous cost implications for tackling them and that these costs could escalate if preventive action is not taken immediately.

Gujarat has been in the forefront of industrial development in India and has shown significant leadership in other spheres of economics and social development too. It is essential to sustain this leadership through preventive and other value added interventions. The aim of these interventions is to reduce the spread and depth of externalities and reduce vulnerability in multiple spheres of economic development.

The exhaustible reserves of fossil fuels and their volatile market prices further contribute towards energy insecurity of nations. Government recognizes the central role of energy in this context and need to have a policy for "efficient use of conventional energy, proactively establish and promote sustained use of new and non - conventional energy sources and applications to reduce emissions and related impacts of climate change". This is also essential to prevent avoidable erosion of natural carbon - energy resources the state is endowed with. Based on this "climate efficient initiative" the State has decided to promote energy efficiency measures, adopt preventive management techniques and build capacities in which all concerned stakeholders to contribute and sustain successful transitions to a more energy efficient future duly emphasizing the local relevance of alternatives.

This multi-pronged approach will not only reduce the growing economic and environmental burdens at the present but will help ensure energy security for sustainable growth and development in the future too. Taking lead in this initiative the state has

decided to tap the vast potential in the state for solar energy. In this context, the State of Gujarat proposes to pioneer a movement towards adoption and promotion of cleaner sources of power as a potential solution to the mounting global energy crisis, in the interest of future generations.

The State is endowed with high solar radiation levels with 300 days of clear Sun, with conducive arid condition and minimal Sun tracking, especially in the barren wasteland areas. The State Government proposes to encourage solar power generation projects as a means for socio-economic development of these backward regions through livelihood creation for the local population. These areas have the potential to transform into an 'Integrated Solar Generation Hub' for the entire nation.

In view of the above, it is necessary to have a comprehensive policy to actively promote solar power, as an additional and alternative source of energy. After careful consideration, therefore, the State Government is pleased to resolve to introduce the Solar Power Policy – 2009, as under:

**OBJECTIVES:**

The State Government introduces the Solar Power Policy – 2009 with the following objectives:

- Promoting generation of green and clean power in the State using Solar energy.
- To put in place an appropriate investment climate, that could leverage the Clean Development mechanism (CDM).
- Productive use of the wastelands, thereby engendering a socio-economic transformation.
- Employment generation and Skill Enhancement of local youth.
- Promotion of R&D and facilitation of technology transfer.
- Establish core technical competence in professionals in the State to initiate and sustain use and effective management of newer applications.
- Promotion of local manufacturing facilities.
- Creation of environmental consciousness among citizens.

**RESOLUTION:**

**1. Title:**

This policy shall be known as the "Solar Power Policy – 2009"

**2. Operative Period:**

This policy will come into effect from the date of issuance and shall remain in operation up to 31.03.2014. Solar Power Generators (SPGs) installed and commissioned during the operative period shall become eligible for the incentives declared under this policy, for a period of twenty five years from the date of commissioning or for the life span of the SPGs, whichever is earlier.

**3. Installed Capacity:**

A maximum of 500 MW SPG shall be allowed for installation during the operative period of the Policy.

**4. Capacity Cap:**

The minimum Project capacity of a SPG, in case of Solar Photovoltaic (SPV) and Solar Thermal (ST) shall be 5 MW each.

**5. Eligible Unit:**

Any company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person will be eligible for setting up of SPGs, either for the purpose of captive use and / or for selling of electricity, in accordance with the Electricity Act – 2003, as amended from time to time.

The entity desiring to set up Solar Power Project, either for sale of power and /or for captive use of power within the State, shall submit a proposal, with requisite details, as may be specified to the Nodal Agency, for qualifying for setting up of the Project. The qualifying entity shall be decided by a Project Approval Committee, as defined at Annexure-1.

**6. Restriction for use of fossil fuel**

No fossil fuel viz: coal, gas, lignite, naphtha, wood etc. shall be allowed to be used in a Solar Thermal Power Project.

**7. Wheeling Charges:**

The wheeling of electricity generated from the SPGs, to the desired location/s for self use within the State, shall be allowed at a wheeling charge of 2% of the energy fed to the grid, till the wheeling charge is determined by Gujarat Electricity Regulatory Commission (GERC) and thereafter at the wheeling charge as determined by GERC order(s), as amended from time to time.

**8. Exemption from payment of Electricity Duty:**

Electricity generated from the SPGs and used for self consumption / sale to third party / sale to licensees shall be exempted from payment of Electricity Duty.

**9. Exemption from Demand Cut:**

Exemption from demand cut to the extent of 50% of the installed capacity of SPGs, assigned for captive use purpose, shall be allowed.

**10. Sale of Energy :**

The energy generated from a Solar Power Project, shall be sold to the Distribution licensees in the state at levelised fixed tariff per Unit as mentioned below for the period of 25 years, under a Power Purchase agreement, to be specified by the GUVNL and / or distribution licensee.

Sr. No	Particulars	Tariff for Photovoltaic Projects (Rs. /kWh)	Tariff for Thermal Projects (Rs. /kWh)
I	Projects commissioned before 31.12.2010	13.00 ( for first twelve years) 3.00 (from 13 <sup>th</sup> to 25 <sup>th</sup> year)	10.00 (for first twelve years) 3.00 (from 13 <sup>th</sup> to 25 <sup>th</sup> year)
ii.	Other projects commissioned before 31.03.2014	12.00 ( for first twelve years) 3.00 (from 13 <sup>th</sup> to 25 <sup>th</sup> year)	9.00 (for first twelve years) 3.00 (from 13 <sup>th</sup> to 25 <sup>th</sup> year)

Benefits of this policy will not be available to projects set up under the MNRE incentive scheme for Solar Power Generation.

Further, any subsidy/ incentive received by SPG developer from any source shall be reduced from above mentioned rate for purchase of power from SPG developers except the benefit of Accelerated Depreciation under Income Tax Act.

**11. Security Deposit**

The Developer shall be required to provide Bank Guarantee @ Rs. 50 lacs per MW at the time of signing of Power Purchase Agreement with GUVNL and/ or Distribution licensee and in case the Developer fails to achieve Commercial Operation within time period mentioned in Power Purchase Agreement, the Bank Guarantee shall be forfeited. The bank guarantee shall be refunded, if the

developers achieve commercial operation within time period mentioned in Power Purchase Agreement.

**12. Plant and Machinery:**

Only new Plant and Machinery shall be eligible for installation under this Policy.

**13. Metering of Electricity:**

The electricity generated from the SPGs, shall be metered on a monthly basis jointly by Gujarat Energy Development Agency (GEDA)/ Gujarat Energy Transmission Company Limited (GETCO) at the sending sub-station of 66 kV or above, located at site. For the purpose of energy accounting, Solar based generation projects will have to provide ABT compliant meters at the interface points. Interface metering shall conform to the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006.

**14. Grid Connectivity and Evacuation facility up to GETCO substation:**

The evacuation facility from the Solar Substation/Switch yard to the GETCO substation shall be initially approved by GETCO after carrying out the system study. The power by the SPG shall be injected at 66 kV.

The transmission line from the switch yard of the Solar Substation to the GETCO Substation shall be laid by GETCO. They should be integrated by installing RTUs by solar project developer so that the penetration can be monitored at the connectivity substation by the SLDC on real time basis.

**15. Open Access for third party Sale:**

If Open Access is granted to any developer or beneficiary they shall have to pay the applicable Open Access charges and losses as approved by GERC from time to time. However, the Cross Subsidy Surcharge shall not be applicable for Open Access obtained for third party sale within the State.

**16. Renewable Purchase Obligation:**

The quantum of power that can be injected in the grid from all renewable resources i.e. purchase by distribution licensees plus captive consumption plus third party sale should be restricted to 10% of the total consumption. (The 10% will be total injection of power from all the renewable sources i.e. Wind power, Bagasse based Co-generation, Biomass, Micro / Mini / Small Hydel, Solar power etc). This will be subject to the further detailed Regulations pronounced by

Gujarat Electricity Regulatory Commission (GERC) from time to time. Out of the above 10% overall limit GERC may decide the sub-limits for procurement of power from each renewable source.

**17. Forecasting and Scheduling:**

The SPG based generation shall not be covered under scheduling procedure for Intra State ABT. However, the actual energy injected in the grid during particular time block of 15 minutes shall be post-facto considered in drawl schedule for sale of power to licensee / Third party or for giving set-off against the consumption of recipient unit in case of wheeling.

**18. Reactive Power Charges :**

The drawl of reactive power shall be charged as per the GERC order, as amended from time to time.

**19. Penalty for non fulfilling power purchase obligation:**

Distribution licensees in the State of Gujarat are mandated to purchase Solar power as per limit/ sub-limit specified by Commission from time to time.

Distribution licensee failing to meet the minimum Solar power purchase / wheel for captive consumption or third party sale obligation specified by Commission is liable to pay penalty at a rate of Rs. 12/kWh to Gujarat Energy Development Agency (GEDA), which will be passed on to the distribution licensee who procure / wheel for captive consumption or third party sale, in the ratio of their solar power purchase during the year.

Penalty shall not be levied on distribution licensee in case of non availability of adequate generation from Solar power Projects in the state of Gujarat.

**20. Sharing of Clean Development Mechanism(CDM) benefit:**

The Solar Power Project Developer will pass on 50% of the gross benefits of CDM to the Distribution licensee with whom PPA is signed.

**21. State Govt. Facilitation and Nodal Agency :**

GEDA and Gujarat Power Corporation Ltd. (GPCL) shall be the State Govt. nodal agencies for facilitation and implementation of the Solar Power Policy – 2009.

These nodal agencies will facilitate and assist the project developers and undertake the following activities to achieve the objects of the Policy:

- a) Identification of suitable locations for Solar projects and prepare a land bank and the requirement of Creation/ Up gradation of connecting infrastructure to the project site i.e. roads etc.;
- b) Facilitation in arranging Right of Way, Water Supply, and in obtaining clearances and approvals which are in the purview of the State Government;
- c) Recommending the project (subject to qualification) to avail benefits under any policy declared or to be declared by Government of India;
- d) Promote Research and Development activities for cost effective, sustainable and environment friendly technologies in collaboration with internationally and nationally reputed institutions;
- e) Engage the services of national/global experts/consultants for Research and Development of solar and other renewable technologies;
- f) Carry out awareness campaign on energy conservation and use of Renewable sources of energy at all levels i.e. village, Taluka, District etc. through schools, colleges, educational institutions, community centers and civil society organizations;
- g) Along with project developers, develop appropriate manpower skills by tying up with training or educational institutions through Public Private Partnership (PPP).

**22. Mid Term Review :**

State Govt. may undertake a mid term review of this policy after a period of 3 years or as and when the need arises in view of any technological breakthrough or to remove any inconsistency with Electricity Act 2003, rules and regulations made there under or any Govt. of India policy.

**23. Power to remove difficulties :**

If any difficulty arises in giving effect to this policy, the Project Approval Committee is authorized to issue clarification as well as interpretation to such provisions, as may appear to be necessary for removing the difficulty either on its own motion or after hearing those parties who have represented for change in any provision

Notwithstanding anything contained in this resolution, the provisions of the Electricity Act – 2003, and the GERC Regulation(s) / order(s), as issued from time to time, shall prevail, for the purpose of the implementation of this policy.

This issues with the concurrence of the Finance Department's note dated 2.1 2009 on this Department's file of even number.

By order and in the name of the Governor of Gujarat.



(Avantika Singh Aulakh)

Deputy Secretary to the Government of Gujarat  
Energy and Petrochemicals Department

**Copy to:**

- \*The Principal Secretary to H.E The. Governor of Gujarat, Raj Bhavan, Gandhinagar.
  - The Secretary, Ministry of Power, GoI, Shram Shakti Bhavan, New Delhi
  - The Secretary, Ministry of New & Renewable Energy, CGO Complex, New Delhi
  - The Principal Secretary to the Hon. C.M. Sachivalaya, Gandhinagar
  - The P.S. To Hon. MOS (E&P), Sachivalaya, Gandhinagar
  - The Chariman, CERC, New Delhi
  - The Chairman, Central Electricity Authority, New Delhi
  - The Deputy Secretary to the Chief Secretary, Sachivalaya, Gandhinagar
  - The Secretary, GERC Ashram Road, Nehrubridge, Ahmedabad
  - \*The Registrar, Gujarat High Court, Ahmedabad
  - \*The Secretary, Vigilance Commission, Gandhinagar
  - The Principal Secretary, Finance Department, Sachivalaya, Gandhinagar
  - The Resident Commissioner, Gujarat State, New Delhi
  - \*The Secretary, Gujarat Legislature Secretariate, Sachivalaya, Gandhinagar
  - All Departments of Secretariat, Sachivalaya Gandhinagar
  - All Branches of Energy & Petrochemicals Department
  - The Chairman, Power Finance Corporation Limited, New Delhi
  - The Chairman & Managing Director Gujarat Power Corporation Ltd., Gandhinagar
  - The Chairman, Gujarat Urja Vikas Nigam Limited, Vadodara
  - The Chairman & Managing Director, Pashchim Gujarat Vij Company Limited, Rajkot
  - The Managing Director, Gujarat State Electricity Corporation Limited, Vadodara
  - The Managing Director, Gujarat State Generation Ltd., Gandhinagar
  - The Managing Director, Uttar Gujarat Vij Company Limited, Mehsana
  - The Managing Director, Madhya Gujarat Vij Company Limited, Mehsana
  - The Managing Director, Daxin Gujarat Vij Company Limited, Surat
  - The Managing Director, GETCO, Vadodara
  - The Director, Gujarat Energy Development Agency, Gandhinagar
  - The Chief Electrical Inspector & Collector of Electricity Duty, Gandhinagar
  - The Chief Executive Officer, Torrent Power Limited, LalDarwaja, Ahmedabad
  - The Managing Director, Gujarat Paguthan Energy Corpopration Pvt.. Limited, Ashram Road, Ahmedabad
  - The National Thermal Power Corporation Limited, Zapor, Gandhar, Dist. Bharuch
  - The National Thermal Power Corporation Limited, Kawas, Hazira, Gandhar, Dist. Surat
- \* By letter



## ANNEXURE-I

The entity desiring to set up Solar Project for selling of electricity to distribution licensee in State of Gujarat must fulfill the following minimum Financial and Technical criteria and required to submit its proposal to a Project Approval Committee for approval of the Project:-

(a) FINANCIAL CRITERIA

- i. **Internal Resource Generation:** Rs. 1.20 Crore or equivalent US\$\* per MW of the capacity, computed as five times the maximum internal resources generated during any of the last five years business operations;
- ii. **Net worth:** Rs. 2.00 Crore or equivalent US\$\* per MW of the capacity. The above computation shall be derived from any of the past three years annual accounts.
- iii. **Annual Turnover:** Rs. 4.80 Crore or equivalent US\$\* per MW of the capacity. The above computation shall be derived from any of the past three years annual accounts

\* The US\$-Indian Rupee Exchange rate shall be considered as the corresponding TT buying rate specified by the State Bank of India seven days before the last date of submission of proposal to GEDA.

Above financial parameters shall be defined and computed in following manner:

- Internal Resources Generation
  - = Profit After Tax (PAT)
  - Add: Depreciation and Amortization
  - Add: Decrease in Net Current Assets (excluding cash)
  - Add: Any other non cash expenditure (including deferred tax)
  - Subtract: Scheduled Loan repayments and increase in net current assets (excluding cash)

Provided, when an existing loan has been repaid through the proceeds of a new loan, then to the extent the proceeds of the new loan have been used to repay the existing loan, such repayment of existing loan shall not be considered for the purposes of computation of Internal Resource Generation.

- Net worth
  - = Equity share capital
  - Add: Reserves
  - Subtract: Revaluation Reserves
  - Subtract: Intangible Assets
  - Subtract: Miscellaneous Expenditures to the extent not written off and carry forward losses
  
- Annual Turnover : Annual Gross Revenue Earned

For the purposes of financial criteria only unconsolidated audited annual accounts shall be used. Entity shall furnish documentary evidence duly certified by qualified auditors in support of their financial capability.

(b) TECHNICAL CRITERIA

Any entity in order to technically qualify shall essentially be required to have collaboration with proven technology supplier of solar power projects.

The entity must have experience of developing any projects in the last 10 years whose aggregate capital costs must not be less than the amount equivalent to Rs. 3.00 Crore per MW of the capacity. Out of these projects, the capital cost of at least one project should be equivalent or more than Rs. 0.50 Crore per MW of the capacity. For this purpose, capital expenditure on projects that have been completed at least 7 (seven) days before the submission date of proposal shall be considered.

Developing Project means successful commissioning of a project in which the entity held a equity stake of not less than 26% at the time of commissioning.

For the purposes of technical criteria only unconsolidated audited annual accounts shall be used. Entity shall furnish documentary evidence duly certified by qualified auditors in support of their technical experience respectively.

The entity shall submit their proposal for obtaining approval for setting up Solar Power Project for selling of electricity to distribution licensee in State of Gujarat to the Technical Committee.

The Project Approval Committee consisting of following members shall approve the Solar Power Projects based on the financial and technical criteria:

I	Principal Secretary, EPD	Chairman
ii	Managing Director, GUVNL	Member
iii	Director, Technical, GUVNL	Member
iv	Director, GEDA	Member Secretary

The Chairman of the Committee is empowered to co-opt subject matter expert/s, if required.

The Committee shall consider the developer's financial soundness and required tie up with the equipment suppliers of proven technology.