

TAMIL NADU ELECTRICITY REGULATORY COMMISSION

**Consultative Paper on “Order on Issues related to Tamil Nadu Solar Energy
Policy 2012”**

(Comments/Suggestions are invited on or before 28th December 2012)

1.0 Need for the consultative paper:

1.1 The Government of Tamil Nadu launched the “Tamil Nadu Solar Energy Policy 2012” on 20.10.2012. The objectives of the Policy are

- To achieve energy security
- To reduce carbon emissions
- To project Tamil Nadu as a Solar hub
- To generate 3000MW of Solar energy by 2015
- To achieve grid parity by 2015
- To encourage indigenous Solar manufacturing in the State
- To promote Research and Development in the Solar energy sector and hybrid systems
- To create skilled manpower and employment in the new industry.

1.2 The Government of Tamil Nadu has issued a policy direction under section 108 of the Electricity Act 2003 vide its Letter No. 12009/C2/2012 dtd 6/11/12 to the Commission for taking necessary action on the Tamil Nadu Solar Energy Policy 2012

1.2.1 Section 108 of the Electricity Act 2003 reads as follows:

“Directions by State Government

- (1) *In the discharge of its functions, the State Commission shall be guided by such directions in matters of policy involving public interest as the State Government may give to it in writing.*
- (2) *If any question arises as to whether any such direction relates to a matter of policy involving public interest, the decision of the State Government thereon shall be final.”*

1.3 In pursuant to the above, the Commission issues this consultative paper as a prelude to its Order on related issues on the “Tamil Nadu Solar Energy Policy 2012”

2.0 Definitions

(1) In this consultative paper, unless the context otherwise requires,-

- (a) **“Policy”** means the Tamil Nadu Solar Energy Policy 2012 issued by the GoTN in G.O. Ms No.121 dated 19.10.2012
- (b) **“RPO regulation”** means the Tamil Nadu Electricity Regulatory Commission (Renewable Energy Purchase Obligation) Regulations, 2010.
- (c) **“Commission”** means the Tamil Nadu Electricity Regulatory Commission
- (d) **“Obligated Consumer”** means the category of consumers who are required to fulfill the Solar Purchase Obligation as mandated in the Tamil Nadu Solar Energy Policy 2012

3.0 Solar energy

3.1. Among the various renewable sources, solar energy potential is considered to be the highest in the country. Solar energy offers clean, climate-friendly abundant and inexhaustible energy resource to mankind. The costs of solar energy have been falling rapidly and are entering new areas of competitiveness.

3.2. Tamil Nadu has reasonably high Solar insolation (5.5 – 6 kW/sq.m) with around 300 clear sunny days. Southern Tamil Nadu is considered to be one of the most suitable regions for development of solar power in the State.

4.0 Technology and Standards

4.1 The technology as envisaged and standards as prescribed in the solar energy policy 2012 shall be adopted.

5.0 Commission's proposed Order on the following related issues of the Tamil Nadu Solar Energy Policy 2012:

5.1 Solar Purchase Obligation (SPO)

5.2 As prescribed in the Solar Policy, 6% SPO starting with 3% SPO till December 2013 and 6% from January 2014 is applicable for the following category of consumers:

(a) HT Consumers (HT Tariff I to V)

This category will cover all HT consumers including:

- (i) Special Economic Zones (SEZs)
- (ii) Industries guaranteed with 24/7 power supply
- (iii) IT parks, Telecom towers
- (iv) All Colleges & Residential Schools
- (v) Building with a built up area of 20,000 sq.m or more

(b) LT Commercial (LT Tariff V)

5.2.1 The following categories of consumers will be exempted from SPO:

- (a) Domestic consumers
- (b) Huts
- (c) Cottage and tiny industries
- (d) Powerlooms
- (e) LT Industrial consumers
- (f) Agricultural consumers

5.2.2 In respect of such Solar Obligated consumers they may generate captive Solar Power in Tamil Nadu equivalent to or more than their SPO or buy equivalent to or more than their SPO from other third party developers of Solar Power projects in Tamil Nadu or purchase the same from TANGEDCO at Solar Tariff or meet the obligation through purchase of RECs as prescribed in the Tamil Nadu Solar Energy policy 2012. If the obligated consumer happens to be an open access consumer, the Solar Purchase Obligation fixed in the Tamil Nadu Solar Energy Policy 2012 may be considered as inclusive of Solar Purchase Obligation fixed in the RPO regulation.

5.2.3 The distribution licensee can reduce his purchase of solar energy to fulfill his solar RPO as fixed by the Commission in the RPO Regulations 2010, to the extent of consumption by the obligated consumers as prescribed in the Policy.

5.2.4 For purchases made by the obligated consumers from the TANGEDCO in order to meet their Solar Purchase Obligation, the TANGEDCO shall make purchases of solar power as prescribed in the Tamil Nadu Solar Energy Policy 2012 and obtain the approval of the Commission for such rates..

5.3 Net metering

5.3.1 For Domestic Rooftop Solar generators the consumer meters shall be replaced with suitable meters for net metering. The meter/meters for net metering shall be installed by the distribution licensee at the cost of the consumer/generator. The TANGEDCO shall evolve a detailed procedure for implementation of net metering for domestic roof top Solar generators and get the same approved from the Commission. The procedure shall contain makes and standards for the meters, location of meter, reading of meter, maintenance of database, period of power credit, lapsing of balance energy etc.,

5.3.2 For net metering the general practice is that the tariff has to be the same for export as well as import of energy as the billing is done on net energy basis. The tariff is inclusive of Government subsidy. Stakeholders comments are invited on the tariff to be adopted for net metering.

5.4 LT Connectivity

5.4.1 The TANGEDCO shall evolve a detailed procedure for LT connectivity and get the same approved from the Commission. The procedure shall include make and standards for inverters, harmonics standards, synchronization to the grid, safety/protection norms etc.,

5.5 Renewable Energy Certificate to be issued to solar generators under the Policy

5.5.1 The TANGEDCO shall evolve a procedure for accreditation, issuance and trading of REC for the Solar generators established in Tamil Nadu and get it approved by the Commission.

6.0 The following issues related to the above policy will be dealt with by the Commission in its “Comprehensive Order on issues related to Solar Power” for which a consultative paper will also be issued shortly, by the Commission.

- (a) Banking mechanism
- (b) Transmission and Wheeling charges
- (c) Cross subsidy surcharge
- (d) CDM benefits
- (e) Reactive power charges
- (f) Grid availability charges

- (g) Adjustment of generated energy for captive use
- (h) Scheduling and system operation charges
- (i) Application and agreement fees
- (j) Billing and payment
- (k) Payment security and security deposit
- (l) Energy Purchase and Wheeling Agreement
- (m) Scheduling of Solar energy / UI mechanism
- (n) Applicability of Merit Order
- (o) Harmonics
- (p) Evacuation of power
- (q) Any other issues

(By order of the Tamil Nadu Electricity Regulatory Commission)

(S.GUNASEKARAN)
Secretary