

ISSUES RELATED TO SOLAR THERMAL TECHNOLOGY

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Perspective

- Draft Guidelines for Selection of New Grid Connected Solar Power Projects Under Phase I of JNNSM were issued in March 2010.
- The guidelines aimed at to facilitate a mechanism of bundling of solar power with power from cheaper unallocated quota of the GOI out of NTPC coal based power stations.
- The guidelines aimed at to
 - **Facilitate quick start up of JNNSM**
 - **Ensure serious participation for projects to be selected**
 - **Facilitate speedier implementation of the projects to meet Phase-I target, and**
 - **Enhance confidence in the project developers**

Technical Parameters

- The draft guidelines have various sections. The following sections pertain to technical parameters of ST technology:
 - Minimum and maximum capacity of each project
 - Qualification criteria for short listing – technical criteria
 - Qualification criteria for short listing – land arrangement
 - Qualification criteria for short listing – water arrangement
 - Domestic content
 - Commissioning

**THE FEEDBACK RECEIVED IS MIXED.
QUITE OFTEN, IT IS BOTH WAYS.**

**A CONSOLIDATION OF FEEDBACK IS
BEING PRESENTED, SECTION WISE.**

Minimum and Maximum Capacity of Each Project

(Clause 4)

- Minimum size of 20 MW and maximum size of 100 MW is supported.
- However, it is also suggested that
 - Eliminate the Plant size restrictions
 - Minimum may be increased to 30 MW
 - Maximum may be reduced to 50 MW
 - New emerging technologies (viz. solar dish-Stirling, CLFR) should also be supported.
- In this background, is there a justification for restriction of minimum plant size?

Qualification Criteria for Short-Listing of New Projects – Technical Criteria

(Clause 6b)

- It could be one year; some have also agreed for two years at the scale being envisioned. A minimum capacity of 3MW is also proposed.
- Demonstration of steam production, instead of electricity generation, should also be considered eligible.
- Technical and eligibility parameters should be separate for solar field and power block.
- There should not be any condition for EPC contractor to have proven experience.
- Domestic contractors having experience in similar size in power sector should also be eligible.
- Developer must have translated the technology and design to the specific locations in India and have established necessary EPC relationships to execute the project.

Qualification Criteria for Short-Listing of New Projects – Land Arrangement

(Clause 6c)

- Land requirement may be considered as 2.5 hectare/MW. Leasehold should be for 99 years. Land use change should be emphasized.
- Acquiring 50% of the required land at the time of EoI involves large capacity outlay for the developers, making a part of it redundant as full allocation is not promised.
- Requirement of land tie-ups should be made pre-condition to MoU, rather than EoI. Availability of land could be a condition at the time of PPA.
- In-principle sanction letter from the State Government be obtained by the developer, which is to be duly endorsed by the concerned SNAs of the State, mentioning the details of the site location.
- Land agreement with the dealer may also be considered for acceptance.

Qualification Criteria for Short-Listing of New Projects – Water

(Clause 6e)

- MNRE should ensure that the developers are not forced to make sub-optimal choices, and therefore
 - should encourage State Governments to set up solar parks
 - take a proactive stance to share cost of reaching water in these parks.
 - Should interact with State authorities to give priority to these projects and issue approvals within a time bound manner.

Domestic Content

(Clause 7)

- For Phase I, this requirement may be removed, and the choice of technology and procurement of equipment should be left to the developer as he has to ensure satisfactory project performance as well as appropriate revenue generation for the complete life of 25 years.
- Suggestions are also received to reduce it to 10% in Phase-I and thereafter increasing it up to 30 % for subsequent Phases.
- However, majority of the responses agrees with the stipulation with the suggestion that 30% of the total project cost should be utilized for this purpose which would include the cost of domestic equipment and services, such as, structural works, land development and civil construction.
- The Government may evolve a transparent and administratively simple mechanism to monitor the condition of domestic content.

Domestic Content

(Clause 7)

- To promote investment into the risky projects of local manufacturer, incentives could be provided by the Government (viz. complete waiver of all duties/taxes such as Custom, CVD, Excise, GST & other cess & duties, 10 years Income Tax holiday and concessional land and infrastructure support through establishment of Solar Parks).

Commissioning

(Clause16)

- Period of commissioning must be fixed from the date the financial closure and date of PPA.
- Further, an exception to this rule for the approvals from the state authorities not being made available in time must be provided.
- In case of failure to achieve completion as envisaged, Performance Guarantee furnished by the Project Developer may be encashed to the extent of applicable liquidated damages, as stipulated in the PPA.
- 6-9 months would be required for financial closure and it should be allowed for.
- To ensure that the projects are bankable, a clear visibility about the applicability of tariff is needed in case the project slips beyond March 31, 2013.

Thanks