

Ref.: Solar/Gen/11-12/142 dated 07.12.2011

Sub: Tender JREDA/SPV/SPP/Rajbhawan/02/2011-12 dated 01.12.11

1. Module IEC

The module to be supplied must IEC or MNRE approved. The standard rating of quality solar cell is 0.5 Volt and that for a battery is 12 Volts. The peak charging level of battery is 14.5 Volts. Considering a solar cell producing 0.47 Volt on load (after connection losses), at least 36 cells in series would be required to produce a voltage sufficient to charge a 12 V battery completely. The same is also applicable for the module which is made to charge a battery of 24 V and should have 72 cells connected in series for effective charging. The solar cells below 13% efficiency will not produce the required output or will demand more Insolation area.

2. The Power Conditioning Unit should preferably confirm IEC or MNRE approval.

The tender says it prefers IEC/ MNRE test certification. If the bidder does not have it then the supplier should give an undertaking for the performance that it will be as per the relevant standards.

3. It is very important to keep the self discharge of battery within the limit from battery health point of view. How is this irrelevant?

4. As the batteries are Lead-Acid type, the topping up in every 12 months is essentially required for the operation and performance.

5. The Control Room and Battery Room will be provided by the end user. There is a typing error. Battery Bank should be read as Battery Room under the subhead **Control Room & Battery Room.**

6. As the system is being installed at Rajbhawan, least downtime is required for the system. The bidder must judge themselves for the necessary inventory of items. The basic objective is to minimize the downtime.

7. The cost breakup is required to estimate the cost of spares or damaged parts after the CMC period is over.

8. As required Training of Manpower, it is very much relevant to train different group of people at different point of time as the same group may not be present all the time at the same place. They may be posted at different places.

