

Minutes of Meeting on Standards for Off-grid/ Stand-alone Solar Photovoltaic (PV) Power Plants/Systems to be deployed under JNNSM

The committee met under the chairpersonship of Shri Tarun Kapoor, Joint Secretary, MNRE on 28th November 2014 to discuss the issues concerned with the standards, testing, and authorized test centers for the Off-Grid systems. The participants include senior officers of MNRE, NISE, testing labs STQC, CPRI, TUV, ETDC. A detailed list is enclosed at **Annexure-I**. Initiating the discussion Director (GP) explained the issues in implementing the Off-Grid programme as per the present standards and explained the details to the members and item wise requirement for each standards, and Director (OSS) provided a table containing the status of STQC labs in the country. The following decisions were taken with the consent of all present. The details are given below:

1. Facility added by Each Testy Centers
 - a. UL Labs :- Testing facility for 50kWp grid tied inverter is under progress and currently have facility for testing inverters up to 30 KVA (with battery). Already placed an order for facility of testing Pumping system
 - b. ERTL (East), Kolkata :- They have added a facility of testing Lithium based Batteries
 - c. CPRI, Bangalore :- Testing facility for pumps will be ready by March 2015
 - d. TUV, Bangalore :- Informed that testing facility is ready for testing of pumps.
 - e. CPRI and ETDC Banglore have Testing facilities for batteries having capacity upto 2000Ah and 200Ah respectively. TUV has informed their test facility for batteries up to 2000Ah, will be ready within a month in Gurgaon and Bangalore.
 - f. UL has developed testing facility for thin film solar modules. UL was requested to provide the details of capacity and procedures of testing of thin film modules.
2. NISE to circulate standard format for testing of Lighting systems so that same testing protocol can be followed.
3. TUV and UL Labs has to circulate Inverter and battery testing formats so that same protocol can be followed for these tests also.

4. NISE to circulate Testing of Pump format to all Test Labs.
5. Committee also suggested that testing of VFD should also be introduced.
6. Committee suggested to form a sub-committee (minimum 3 members) to empanel new test Labs for testing of Systems/ components as per MNRE specifications and having members from MNRE, NISE, any other MNRE accredited test Lab and an expert from the Industry.
7. All test centers were told that they provide their detail testing procedures, methodology equipment used and testing formats system wise to NISE. After scrutinizing all the information provided by test centres. NISE will prepare a compendium for standard uniform testing protocol, methodology and report formats to keep uniformity in testing of solar systems/components.

Annexure 1

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16.	Dr. O.S.Sastry Director, MNRE	NISE
17.	Dr. G.Prasad Director,	MNRE
18.	Dr. S.K Sharma Scientist D,	MNRE
19.	Shri Tarun Singh Scientist B,	MNRE