

F. No. 32/645/2017-SPV Division (Part-3)
Government of India
Ministry of New and Renewable Energy

Block no. 14, CGO Complex,
Lodi Road, New Delhi -110003

Date: 04 February 2021

Office Memorandum

Subject: Amendment in Specifications and Testing Procedure for Standalone Solar Pumps

Ministry vide Order dated 17.07.2019 issued Specifications for Solar Photovoltaic Water Pumping Systems and Guidelines on Testing Procedure for Solar Photovoltaic Water Pumping System which are applicable to solar water pumping systems installed under Pradhan Mantri Urja Suraksha evam Utthaan Mahabhiyaan (PM-KUSUM) Scheme.

2. Representations have been received from stakeholders requesting to allow use of solar modules of individual module capacity different from that tested with the solar water pumping system by NABL accredited testing laboratory, without having to go through retesting of the solar water pumping system. Further, the condition mentioned in the specifications related variation in overall SPV array wattage has also been reviewed.

3. In view of above, after examination of the matter, following amendments are hereby conveyed in Testing Guidelines and Specifications for solar water pumping systems:

(i) Clause 13 of the "Guidelines on Testing Procedure for Solar Photovoltaic Water Pumping System" issued vide Order dated 17.07.2019 on "Use of Other Brand of Solar Modules" has been amended and replaced with the provisions given below:


In case a test lab has tested and issued approval certificate for a particular model of SPV pumping system using a particular model of SPV Modules, the applicant may use different models of SPV Modules for the same model of SPV pumping system without going for retesting of complete SPV pumping system with different model of SPV Modules, provided the test lab certifies that the qualitative characteristics of proposed model of SPV Module are not inferior to the SPV Module with which the SPV pumping system was tested. In addition, the total wattage capacity of the Solar Array with proposed model of SPV Modules shall be equal or higher than wattage capacity specified by the MNRE for that model of SPV pumping system. The proposed model of SPV module shall also meet following conditions:

- *Solar Array Maximum voltage V_{mpp} with other SPV module shall be within $\pm 2\%$ of earlier SPV module.*
- *Modules Efficiency and Fill Factor shall qualify minimum requirement of MNRE specifications.*
- *Module to module mismatch in an Array shall meet the MNRE specifications.*
- *SPV module shall follow the quality control order issued by MNRE from time to time.*

(ii) Clause 3.3.9 of the "Specification for Solar Photovoltaic Water Pumping Systems" issued vide Order dated 17.07.2019 regarding variation in overall SPV array wattage has been amended and replaced with the provisions given below:

Any array capacity above the minimum array wattage requirement as specified in these specifications for various models of solar pumping systems is allowed.

3. This is issued with approval of the Competent Authority.



(Shobhit Srivastava)
Scientist-D

To

All concerned