

F. No.3-6/2015-16(R&D)
Ministry of New and Renewable Energy
(R & D Coordination Group)

Block 14, CGO Complex
Lodi Road, New Delhi-110003

24th August July 2016

**Subject: Technical Regulation for Solar Photovoltaic Systems/
Devices/Components Goods.**

The Ministry of New and Renewable Energy (MNRE) promotes development and deployment of new and renewable energy to address the growing energy needs and climate change concerns of the country. Performance testing and standardisation is essential to ensure quality and reliability of products. Indian Standards (BIS) are available for most of the renewable energy systems. Test facilities have been set up for carrying out performance testing of various renewable energy systems.

2. As per norms of Department of Commerce, Ministry of Commerce and Industry standardization of all goods and adopting technical regulation is mandatory to maintain quality to protect human health and safety. This will also ensure preventing poor quality of imported goods from entering into Indian market. In view of enhanced target of 100 GW Solar Power by 2022, the MNRE has decided to bring out technical regulation for Solar Photovoltaic Systems/Devices/Components Goods. Concurrently, the MNRE is in the process of bringing out a Lab Policy for Renewable Energy Sector for Testing, Standardization and Certification.

3. Accordingly, a draft technical regulation for SPV Systems/Devices/Components Goods has been prepared as per relevant BIS Act in consultation with Bureau of Indian Standards, New Delhi. Enclosed is the said draft technical regulation for comments of public and related stakeholders. The comments may please be provided by 26th September, 2016 (12:00 Noon) at the following address:

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MINISTRY OF NEW AND RENEWABLE ENERGY

(No. 3-6/2015-16(R&D))

ORDER

New Delhi,2016

S. O. 2357(E).- In exercise of the powers conferred by section 10(1) (p) of the Bureau of Indian Standards Act, 1986 (63 of 1986) and in pursuance of clause (fa) of rule 13 of the Bureau of Indian Standards Rules, 1987, the Central Government, after consulting the Bureau of Indian Standards, hereby makes the following Order, namely:-

1. Short title and commencement:

- (i) This Order may be called the Solar Photovoltaics/ Systems/Devices/Components Goods (Requirements for Compulsory Registration) Order, 2016.
- (ii) It shall come into force on the expiry of 180 days from the date of its publication in the Official Gazette.

2. Definitions:-

- (i) In this Order, unless the context otherwise requires,
 - a) "Act" means the Bureau of Indian Standards Act, 1986 (63 of 1986);
 - b) "Appropriate Authority" means any officer, not below the rank of Director or Scientist 'F', of the Ministry of New and Renewable Energy or its sub-ordinate or attached offices, authorized by the Secretary, Ministry of New and Renewable Energy, Government of India;
 - c) "Goods" means the Solar Photovoltaics Systems/Devices/Components goods specified in the column (2) of the Schedule;
 - d) "Rules" means the Bureau of Indian Standards Rules, 1987;
 - e) "Schedule" means the Schedule annexed to this Order;
 - f) "Series of products" means the products of the same family but varying in sizes or rating or construction;
 - g) "Specified Standard" in relation to Solar Photovoltaics Systems/ Devices/ Components Goods means the Indian Standards as specified in the column (3) of the Schedule;
 - h) "Standard Mark" means the Bureau of Indian Standards Certification Mark as specified by the Bureau to represent a particular Indian Standard.

(ii) Words and expressions used herein but not defined in the Order shall have the meaning respectively assigned to them in the Act or the rules made there under;

3. Prohibition regarding manufacture, storage, sale and distribution, etc. of Goods-

- (i) Any manufacturer, who manufacturers, stores for sale, sells or distributes Solar Photovoltaics/Systems/Devices/Components Goods shall make an application to Bureau of Indian Standards for obtaining registration for use of the "Standard Mark" in respect of the Indian Standard mentioned in column(3) of the Schedule.
- (ii) The grant of registration by the Bureau of Indian Standards shall be as per the provisions of BIS Act and Rules and Regulations made there under.
- (iii) No person shall by himself or through any person on his behalf manufacture or store for sale, import, sell or distribute Goods which do not conform to the Specified Standard and do not bear the "Standard Mark" as notified by BIS for such goods from time to time after obtaining the Unique Registration Number from the Bureau:

Provided that nothing in this Order shall apply in relation to manufacture of Goods meant for export.

Provided further that MNRE may exempt compliance of this order for 180 days for the notified goods from coming into effect of the date of notification of such goods where the manufacturers of such goods submit a copy of the performance report of the goods as per the relevant IEC standard to Appropriate Authority. For each such exemption a letter of exemption will be issued by MNRE to the applicant manufacturers.

Further, a transition period of 6 months from the publishing of logo by BIS would be available for marking requirements as notified in clause 3(1) of the Solar Photovoltaics/Systems/Devices/Components Goods (Requirements for Compulsory Registration) Order, 2016.

- (iv) The substandard or defective Goods which do not conform to the Specified Standard mentioned in column (3) of the Schedule shall be deformed beyond use and disposed of as a scrap by the manufacturer or the representative of overseas manufacturer from liaison office or branch office located in India or by any agency as authorised by the manufacturer as its authorised representative in the India.

Provided that unclaimed consignment of such goods shall be deformed and disposed of as scrap by such department or agency as may be authorised by the Appropriate Authority.

4. Power to call for information, etc.-

- (i) The Appropriate Authority or a person authorized by him, may with a view to secure compliance with this Order require any person engaged in the manufacture, store for sale, sale or distribution of any Goods to give such information as he deems necessary relating to the manufacture, storage for sale, import, sale or distribution of any Goods or require any such person to furnish to him samples of Goods.
- (ii) With the specific order each time of an authority at an appropriate senior level nominated by the Secretary in the Ministry of New and Renewable Energy, the Appropriate Authority or person authorized by him, with a view to secure compliance with this Order may also-
 - (a) inspect or cause to be inspected any books or other document and other Goods or the components or materials of any Goods kept by or belonging to or in the possession or under the control of any person engaged in the manufacture, storage for sale, import, sale or distribution of Goods;
- (iii) The provisions of the code of Criminal Procedure, 1973 (2 of 1974) relating to search and seizure shall so far as may be, applied to searches and seizures under this clause.

5. Drawing and testing of sample:-

- (i) Where the Goods have different sizes, ratings, varieties etc., such Goods shall be grouped and may be granted series approval for a Series of Products based on testing of representative models.
- (ii) A decision concerning series approval shall be taken by the Ministry of New and Renewable Energy or its authorized agencies while implementing the order.
- (iii) The sample of Goods of the registered user shall be drawn from his manufacturing unit or from the market by the Appropriate Authority or person authorized by him for ascertaining whether they conform to the Specified Standard:

Provided that if required, samples may also be drawn by the Bureau or its authorized representatives.

- (iv) The samples shall be drawn at least once in two years for a product or Series of Product covered under the scope of registration granted.
- (v) The location and the product to be picked up shall be selected randomly.
- (vi) At least one sample from the range of products covered in the scope of registration granted shall be picked up for testing.

- (vii) The sample so drawn shall be properly sealed to protect it from any damage and labeled indicating the registration number, the date of the drawl of sample, the source of the market sample or manufacturing unit sample, a three-latter code of the person drawing the sample and the identification number, if any, given on Goods:

Provided that where the sample drawn from the manufacturing unit, in addition to the sample to be sent for testing, another sample from the same batch or lot shall also be drawn, sealed and labeled, and left with the registered user as a counter sample, for use in case of any subsequent dispute.

- (viii) The sample so drawn, sealed and labeled, shall be sent by the Appropriate Authority or person authorized by him for testing to a laboratory recognized by the Bureau along with a request indicating that the sample shall be tested with respect to all the requirements of the specified standard and the test report shall be sent to the Appropriate Authority.
- (ix) All the test report shall be scrutinized for conformity of the sample with respect to the requirements of the Specified Standard.
- (x) The test report of the conforming sample shall be retained by the Appropriate Authority and the test report of the non-conforming sample shall be sent to the Bureau by Appropriate Authority within the specified time limit for further action.
- (xi) The Appropriate Authority shall also make available information regarding the above on its website.

6. Power to issue direction to manufacturers:- The Appropriate Authority may issue such directions to manufactures, consistent with the provisions of the Act, rules or this Order, as may be necessary, for carrying out the purpose of this Order.

7. Compliance of directions:- Every manufacturer to whom any direction is issued under this Order shall comply with such direction.

8. Obligation to furnish information:- No manufacturer shall refuse to give any information lawfully demanded from him under clause 4 or conceal, destroy, mutilate or deface any book or document relating thereto in his possession or control.

ANNEX 2 SCHEDULE

S No. (1)	Product (2)	Indian Standard Number (3)	Title of Indian Standard (4)
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1.	Crystalline Silicon Terrestrial Photovoltaic (PV) modules (Si wafer based)	IS 14286	Crystalline Silicon Terrestrial Photovoltaic (PV) modules - Design Qualification And Type Approval
2.	Thin-Film Terrestrial Photovoltaic (PV) Modules (a-Si, CiGs and CdTe)	IS 16077	Thin-Film Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval
3.	PV Module (Si wafer and Thin film)	IS/IEC 61730 (Part 1) IS/IEC 61730 (Part 2)	Photovoltaic (PV) Module Safety Qualification Part 1 Requirements for Construction Photovoltaic (PV) Module Safety Qualification Part 2 Requirements for Testing
4.	Power converters for use in photovoltaic power system	IS 16221 (Part 1) IS 16221 (Part 2)	Safety of Power Converters for use in Photovoltaic Power Systems Part 1- General Requirements Safety of Power Converters for Use in Photovoltaic Power Systems Part 2-Particular Requirements for Inverters
5.	Utility – Interconnected Photovoltaic inverters	IS 16169	Test Procedure of Islanding Prevention Measures for Utility-Interconnected Photovoltaic Inverters
6.	Storage battery	IS 16270	Secondary Cells and Batteries for Solar Photovoltaic Application General-Requirements and Methods of Test