



OD-2051-Ed.1.0
IECEE PV Program

OPERATIONAL & RULING DOCUMENTS

IECEE PV PROGRAM

PROCEDURE FOR CERTIFICATION OF PHOTOVOLTAIC (PV) PRODUCTS AND THE USE OF THE IECEE PV QUALITY MARK AND PV QUALITY SEAL

OD-2051-Ed.1.0

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IEC System for Conformity Testing and Certification of Electrotechnical Equipment and Components

1.0 FOREWORD

The Global Approval Program for Photovoltaics (PV GAP) was established in 1998 under the auspices of an independent organization, PV GAP, to promote the use of international standards, quality management processes and organizational training in the manufacture, installation and sale of PV systems.

PV GAP established two certification marks for PV products, a PV Quality Mark for PV components and a PV Quality Seal for systems. The Mark and Seal are licensed to those companies and products which achieve approval under the PV GAP Program.

In 2007, PV GAP and the IECEE signed the first agreement that permitted the IECEE member NCBS to authorize the use of the PV GAP marks by manufacturers on their PV products. The agreement also provided a plan for the transfer of ownership of the PV GAP program and its marks to the IECEE.

The transfer of the ownership of the PV GAP Marks has been approved by the CMC in 2009, and has now been completed. The new owner (on behalf of the IECEE – which is not a legal entity), is Electrosuisse in Switzerland (which is a legal entity), which has registered the Marks with trademark authorities in Switzerland.

Each of the IECEE NCBS wishing to participate in the IECEE PV Program will be required to sign a 'Mark Licence Agreement' that will authorize the NCB to operate in this program and to grant PV product manufacturers the right to apply the PV Quality Mark or the PV Quality Seal, as appropriate, to their compliant products.

2.0 INTRODUCTION

- 2.1 This procedure defines the requirements for the Photovoltaic Mark and Seal Certification Program (PV Program) operated by the IECEE.
- 2.2 The primary objective of the PV Program is to facilitate direct market acceptance for PV products at the local level by local authorities, specifiers, retailers, distributors and users.
- 2.3 ISO 9000 Quality System Registration of the manufacturing location is a pre-requisite for the authorization to apply the PV Quality Mark and PV Quality Seal.

3.0 SCOPE

- 3.1 This procedure covers all IECEE PV Program activities that involve the authorization and ongoing use of the IECEE PV Quality Mark or PV Quality Seal.
- 3.2 The PV Program utilizes the following IEC standards PV specifications:
60891, 60904, 61194, 61215, 61345, 61646, 61702, 61721, 61727, 61730, 61829, 62093, 62109, 62124, 62257, 62446, PVRS11A, PVRS11, PVRS6A, PVRS6



4.0 DEFINITIONS

PV Authorization Documentation

A document package issued to confirm compliance with the PV Program requirements and to convey the right to use the PV Quality Mark or PV Quality Seal on conforming products. The document package consists of:

- PV Certificate – **CB-PV 101**
- PV Compliance Report - **CB-PV 102**
- PV Test Report
- Additional comments and observations
- Initial or surveillance factory audit report
- Documentation of the arrangements for ongoing factory inspection/surveillance

PV Certificate - document issued by the NCB as part of the Authorization Documentation.

PV Quality Mark – a unique trademark (illustrated in Annex A1) for use with PV system components, registered on behalf of the IECEE by Electrosuisse (Switzerland), and licensed to IECEE NCBs by means of a PV Quality Mark and PV Quality Seal Licensing Agreement. The PV Quality Mark may be affixed only to Photovoltaic Components used in photovoltaic systems such as, for example, modules, regulators, inverters, batteries, switches, connectors, and materials.

PV Quality Seal – a unique trademark (illustrated in Annex A2) for use with PV systems, registered on behalf of the IECEE by Electrosuisse (Switzerland), and licensed to IECEE NCBs by means of a PV Quality Mark and PV Quality Seal Licensing Agreement. The PV Quality Seal should be affixed only to Photovoltaic “Systems”, such as, for example, photovoltaic home systems, street lights, or other systems powered by a PV module.

Unique identification number – Each participant is assigned its own unique identification number for use with the PV Quality Mark and PV Quality Seal. The full list of participants and their assigned ID numbers is available on the IECEE website. A NCB may also use its own name, trademark or brand name adjacent to the PV Quality Mark or PV Quality Seal.

PV Quality Mark and PV Quality Seal Licensing Agreement – A standardized legal agreement signed between Electrosuisse (Mark Owner) and each NCB participating in the PV Program, licensing the use of the PV Quality Mark and PV Quality Seal to the NCB.

PV Customer Service Agreement – A typical legal agreement (providing the minimum required content) signed between the NCB and the customer, authorizing the customer to apply the PV Quality Mark and PV Quality Seal on products and in locations that comply with the requirements of the IECEE PV Program.



5.0 RESPONSIBILITIES

5.1 Responsibilities of the NCB

The NCB is responsible for:

- a) Signing the **Mark Licensing Agreement** with Electrosuisse, the registered “owner” of the PV Quality Mark and Seal;
- b) Authorizing the use of the PV Quality Mark and/or Seal by the customer only where there is full compliance with the requirements of this program;
- c) Executing a **PV Customer Service Agreement** with the customer to authorize the use of the PV Quality Mark and/or Seal under the specified conditions;
- d) Providing an ongoing product inspection/surveillance program at the factory, in accordance with the requirements of this procedure, at each factory where the PV Quality Mark and/or Seal are applied;
- e) Ensuring that its CBTLs participating in the PV Program have the IECEE recognition for the relevant standards, and are following the requirements of the Program;
- f) Ensuring that all personnel involved in the PV Program at the NCB and the CBTL(s) are trained on an ongoing basis in:
 - applicable IEC standards,
 - IECEE operational procedures for the PV Program.
- g) Reporting all issued Conformity Assessment Certificates to the IECEE Secretariat;

5.2 Responsibilities of the CBTL

The CBTL is responsible for:

- a) Following the requirements of the PV Program in relation to testing and documenting product compliance with the PV requirements;
- b) Ensuring, in accordance with the NCB direction, that all personnel involved in the PV Program at the CBTL are trained on an ongoing basis in:
 - applicable PV standards and specifications, and relevant testing practices,
 - IECEE operational procedures for the PV GAP Mark program.



5.3 Responsibilities of the Customer (Manufacturer)

The Customer is responsible for:

- a) Maintaining a current ISO 9000 quality management system registration for each PV Program factory.
- b) Signing a PV Customer Service Agreement with the NCB, pertaining to the application of the PV Quality Mark or PV Quality Seal.
- c) Following the conditions specified in the PV Customer Service Agreement, including compliance with the relevant product standards and specifications, and the PV Program requirements.

6.0 NORMATIVE REFERENCES

Document Number	Title
ISO/IEC Guide 65:1996	General Requirements for Bodies Operating Certification Systems
ISO/ICE Guide 27:1983	Guidelines for corrective action to be taken by a certification body in the event of misuse of its mark of conformity
ISO/IEC 17025:2005	General Requirements for the Competence of Testing and Calibration Laboratories
ISO/IEC 17020:1998	General Criteria for the Operation of Various Types of Bodies Performing Inspections
IECEE 02	IECEE Rules of Procedure
Relevant IECEE Operating Documents	

7.0 GENERAL PROVISIONS

- 7.1 The above references, define the general program requirements for NCBs and CBTLs operating under the PV Program.
- 7.2 PV products evaluated under the PV Program shall comply in full with the requirements of the applicable IEC standards and other documents accepted for use in the IECEE PV product category, as listed in Clause 3.2.
- 7.3 Each manufacturing location of PV products authorized to bear the PV Quality Mark or PV Quality Seal shall be covered by a valid ISO 9000 quality system registration.



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8.0 ACCEPTANCE OF THE NCB

- 8.1 The NCB wishing to qualify for the PV Program shall be required to sign the PV Quality Mark and PV Quality Seal Licensing Agreement with Electrosuisse.
- 8.2 Additionally, in countries that are not members of the WIPO “Madrid Agreement” on protection of trademarks, Electrosuisse may make the application for registration, and the cost of such an application would be borne in full by Electrosuisse.

Alternatively, a NCB in that country may be permitted to apply to the local trademark registration authorities for registration of the PV Quality Mark and PV Quality Seal.

A list of member countries of the Madrid Agreement is available on the IECEE Website in the PV area.

9.0 OPERATION

- 9.1 The application, evaluation and certification process that results in the issuance of PV Authorization Documentation, is illustrated on the flowchart provided in Annex B.
- 9.2 The application for the PV Quality Mark or the PV Quality Seal begins with a manufacturer contacting the NCB and providing as a minimum the following information:
- a) Letter formally requesting the PV GAP Mark License
 - b) Details of the products
 - c) Proposed usage of the PV Quality Mark or PV Quality Seal, e.g. on products, in documentation, packaging and promotional material, as well as usage in catalogues and on a website;
 - d) Demonstration that the manufacturer’s quality management system includes appropriate measures to protect the marks, such as:
 - i) A strict requirement that the Mark or Seal is only to be used on and associated with “authorized” PV products;
 - ii) Clear procedures for the development and release of promotional material, including websites, to ensure the above requirement is followed;
 - iii) Identification of the management personnel that has that this responsibility and authority within the organization.
- 9.3 The NCB with its CBTL(s) will carry out a full evaluation of the product to the relevant requirements, in accordance with the IECEE procedures.
- 9.4 Additionally, the NCB will carry out an initial assessment of the applicant’s factory(ies) as well as an assessment of the applicant’s procedures for compliance with the PV Program requirements.
- 9.5 On successful completion of the certification process, the NCB will issue the PV Authorization Documentation including the certificate authorizing the customer to use of the PV Quality Mark or the PV Quality Seal on compliant products in specified factory locations that meet the requirements of the PV Program.



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9.6 Use of the PV Quality Mark and PV Quality Seal

- 9.6.1 All reproductions of the PV Quality Mark and PV Quality Seal shall comply with the dimensional proportions as specified by the NCB authorizing the use of the PV Quality Mark or PV Quality Seal. The marks shall have a minimum size of 10 mm in height. The NCB identification number shall be placed as indicated in Annexes A1 and A2, with a minimum character size of 1mm in height.
- 9.6.2 The marks shall only be placed on products, or their documentation, packaging and promotional material, which are covered by a valid PV Certificate and PV Compliance Report.
- 9.6.3 The Mark shall remain traceable at all times; the NCB identification number shall appear with the Mark or Seal, wherever it is used.

10.0 FACTORY INSPECTION/SURVEILLANCE

- 10.1 The NCB shall operate a documented factory inspection/surveillance program in conformance with ISO/IEC 17020, to verify on an ongoing basis that the product and the factory comply with the requirements of the PV Program.
- 10.2 The minimum frequency of the factory inspections shall be once per year.
- 10.3 The factory inspection program shall include a procedure for corrective actions resulting from factory inspection/surveillance.

11.0 CORRECTIVE ACTIONS, SUSPENSIONS AND WITHDRAWAL OF CERTIFICATION

- 11.1 The NCB shall have procedures, in accordance with ISO/IEC Guide 27, to deal with misuses of the Mark, non-compliance with program requirements, non-compliance with product standards, defective products, etc., and to take appropriate corrective actions, including product re-work, removal of PV marks, as well as suspensions and cancellation of the PV Certificate and withdrawal of the authorization to use the PV marks.



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12.0 DOCUMENTS AND RECORDS

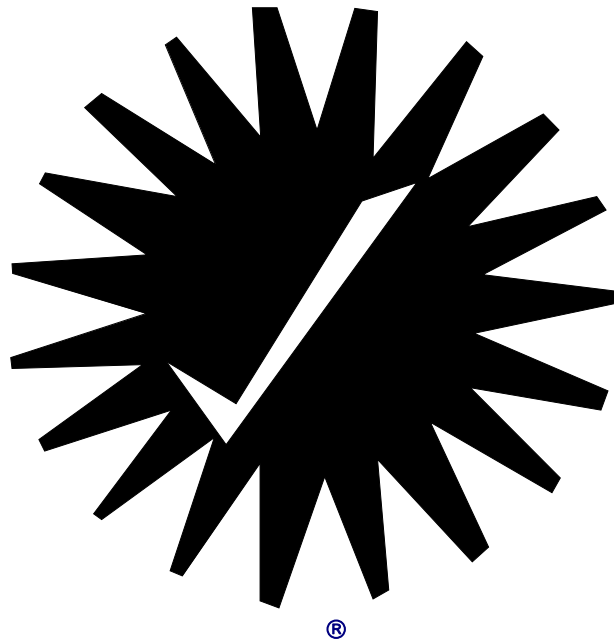
- 12.1 All relevant records related to the testing, evaluation, certification and factory inspection processes shall be maintained to ensure the integrity of the process and confidentiality of the information.
- 12.2 The records on each product shall be kept for as long as the product is certified and bears the PV Quality Mark or PV Quality Seal, and for 5 years after the withdrawal or cancellation of the certification.

13.0 DIRECTORY OF CERTIFIED PRODUCTS

A Directory of Certified Products is provided on the IECEE Website. The NCBs participating in the PV Program are required to provide appropriate information to the IECEE Secretariat.

ANNEX A1

THE PV QUALITY MARK



56

(Example of NCB Identification Number)

MC-001-07

(Example of User Identification)

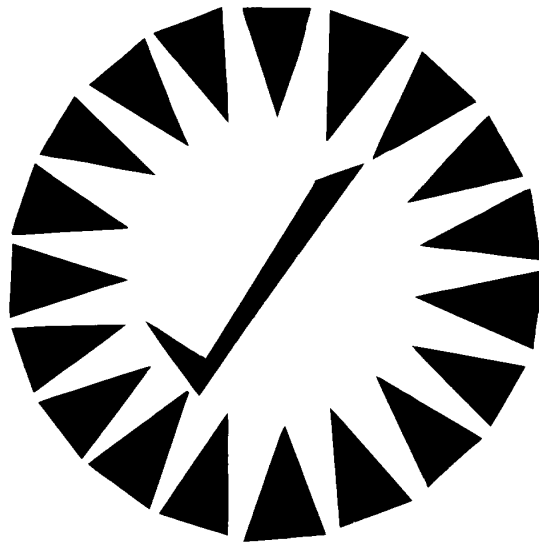
PV Quality Mark – a unique trademark (illustrated in Annex A1) for use with PV system components, registered on behalf of the IECEE by Electrosuisse (Switzerland), and licensed to IECEE NCBs by means of a PV Quality Mark and PV Quality Seal Licensing Agreement. The PV Quality Mark may be affixed only to Photovoltaic Components used in photovoltaic systems such as, for example, modules, regulators, inverters, batteries, switches, connectors, and materials.

Unique identification number - Each participant is assigned its own unique identification number for use with the PV Quality Mark. The full list of participants and their assigned ID numbers is available on the IECEE website.

A NCB may also use its own name, trademark or brand name adjacent to the PV Quality Mark.

ANNEX A2

THE PV QUALITY SEAL



®

56

(Example of NCB Identification Number)

MC-001-07

(Example of User Identification)

PV Quality Seal – a unique trademark (illustrated in Annex A2) for use with PV “Systems”, registered on behalf of the IECEE by Electrosuisse (Switzerland), and licensed to IECEE NCBs by means of a PV Quality Mark and PV Quality Seal Licensing Agreement. The PV Quality Seal may be affixed only to Photovoltaic “Systems”, such as, for example, photovoltaic home systems, street lights, or other systems powered by a PV module.

Unique identification number - Each participant is assigned its own unique identification number for use with the PV Quality Seal. The full list of participants and their assigned ID numbers is available on the IECEE website.

A NCB may also use its own name, trademark or brand name adjacent to the PV Quality Seal.

ANNEX B

Certification Process Flowchart

