



IECRE OPERATIONAL DOCUMENT

IEC System for Certification to Standards relating to Equipment for use in Renewable Energy applications (IECRE System)

Acceptance of REIB for PV sector related inspections





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1 Objectives

This Operational Document details the procedure for accepting new entrant REIBs into the IECRE system, and reassessment of REIBs previously approved as part of the PV Sector.

The basic acceptance procedure is given in IECRE 02 and this operational document gives the detailed procedure. The assessment is based on peer assessment guided by and referring to ISO/IEC 17040 and ISO/IEC 17020.

The IECRE PV scheme intends to promote high standards, transparency and fair competition in the industry and as such, the focus of the assessment will therefore be on the quality of work performed.

2 Definitions and acronyms

Refer to the document IECRE Definitions “Acronyms, Terms and Definitions”.

3 Certification scheme

3.1 Roles and Requirements for REIB

The REIB is responsible for carrying out initial inspections of PV plants and factories manufacturing PV components as well as routine surveillance inspections (both pre-certification and post-certification) in accordance with the appropriate international standards, documented requirements, rules, guidelines, and procedures

The overall responsibility for qualification and certification resides with the RECB.

3.2 Acceptance criteria for REIBs

This document covers acceptance of REIBs for the following schemes:

- PV inspection deliverables supporting certification according to the applicable OD-4XX series (“X” being an integer from 0 – 9), for example
 - PV plant inspection supporting certification see OD-401-series, OD-402, in future to be replaced by the 44X-series (under development)
 - PV quality inspection supporting certification, see OD-405-series, OD-410-1, in future to be replaced by the 45X-series (under development)

These schemes are defined in the supplement to IECRE 02 applicable for the PV sector and the related operational documents as outlined above.

4 Requirements

IECRE 02 gives the basic requirements and procedure for acceptance of an REIB. The basic requirements are listed and further detailed in this chapter.

4.1 Basic requirements

Any (1) new entrant REIB candidates or (2) REIB to be reassessed need to be peer-assessed by providing proof of proficiency referencing to the requirements outlined in ISO/IEC 17020 or 17021..

An equivalent scheme shall be understood as a certification and/or inspection scheme for the PV sector having the following features:

- a) Covers project certification and/or inspection
- b) Has performance measurements, and surveillance activities (manufacturing, installation, commissioning, and/or operational status)
- c) Has equivalent level of detail for the assessment activities as the applicable IECRE scheme

4.2 Participation requirements

Active participation in the PV SWG, which apart from sharing the workload assigned to any of the WG or TF associated with the PV SWG also implies participation and presence in more than half of its face-to-face or online meetings. The presence may be through web-based participation but physical presence is required for minimum one meeting per year if possible under government imposed or government recommended travel restrictions.

4.3 IECRE System Knowledge Requirements

The REIB or REIB candidate shall have

- Knowledge and understanding of IECRE system rules and the PV sector procedures and related technical codes and standards relevant for the scheme and
- Implemented its own procedures and instructions to ensure compliance.

4.4 Proficiency requirements

The REIB or REIB candidate shall be proficient in PV technology proving state of the art knowledge of the PV sector (active participation in IEC TC82, PVQAT, the PV SWG, local or regional technical industry associations, or local mirror groups for standardization or conformity assessment).

4.5 Human Resources:

- a) The REIB or REIB candidate shall have a minimum of
- One expert available in each technical area covered by an inspection activity and
 - One qualified individual that was not involved in the inspection activity and that is sufficiently knowledgeable to review an inspection report of that expert.
 - The following documentation shall be provided for REIB acceptance.
 1. Educational background: Indication of degree, Diploma or Certificate(s).
 2. General Work Experience: Listing of relevant work experience
 3. Solar PV specific work experience: Listing of relevant solar work experience
 4. Auditor training: Listing of training classes attended as per Table 1
 5. Auditing experience: Listing of audit experience with customer signatures as per Table 1

Table 1 - PV Quality system auditor Qualifications Table

Item	Description
Educational Background	Either a University degree / College diploma in the relevant discipline (e.g. Electrotechnical, mechanical, chemical, etc.) or Certified / Licensed master craftsman, technician or engineer in the relevant technical working field
General Work Experience	4 Years, or equivalent
Solar PV specific work experience*	2 Years, or equivalent
Auditor Training	Attended a lead assessor/auditor training on ISO 9001 approved by a accreditation board from IAF Or, Attended auditor training or a training on IEC 62941 requirements interpretation
Auditing experience	4 Full Management Systems audit, all elements of audit cycle, 20 days of which 15 on site

- b) The REIB or REIB candidate shall have implemented a system for qualification of its technical inspection staff. The system shall include training programs (theoretical and practical) relevant to the type of inspection work covered by the qualification. The training shall cover the following contents,
1. ISO/IEC 17024 and 17021 (relevant clauses) e.g.: – Technical Requirements – Quality System – Personnel

2. Inspection Methods and Procedures e.g.: – Product review according to product certification documents –
 3. Handling Inspection Samples – Records – Inspection Reports and Inspection Certificates.
 4. Requirements for surveillance sample testing and test results evaluation as needed during the performance of PV Factory Auditor in the applicable product categories.
 5. Familiarity with the IEC 61215 series, the IEC 61730 series, and all other standards listed in normative references of IEC 62941.
- c) The system shall also address the maintenance and updating of qualifications.
- d) The REIB or REIB candidate shall limit subcontracting such that it is able to manage any subcontractors in a way that complies with the rules of procedure as well as with the scope outlined in the operational documents pertaining to PV (OD-4XX).
- e) Any subcontractors must
- (1) be qualified to fulfil their tasks,
 - (2) generally abide by the main principles of independency and impartiality.
 - (3) have a minimum of 1 expert available in each technical area covered by an inspection activity.

4.6 Experience requirements:

4.6.1 PV plant inspection:

- (1) Candidate REIB applying to become a REIB for the first time shall demonstrate that they have sufficient experience or that they have maintained the experience by issuing 3 PV plant inspection reports according to standards comparable to the IECRE scheme, in any case referencing relevant IEC standards.
- (2) REIB subject to reassessment, shall demonstrate that they have sufficient experience or that they have maintained the experience by issuing 3 PV plant inspection reports according to either the (a) IECRE, (b) an equivalent international scheme or (c) a national certification and/or inspection scheme during the last five years or since the last peer assessment.

If this requirement is not fulfilled, additional peer assessment will be required as outlined in chapter 5.5.

4.6.2 PV quality system inspection:

- (1) Candidate REIB applying to become a REIB for the first time shall demonstrate that they have sufficient experience or that they have maintained the experience by issuing 3 quality system inspection reports according to standards comparable to the IECRE scheme, in any case referencing relevant IEC standards.
- (2) REIB subject to reassessment, shall demonstrate that they have sufficient experience or that they have maintained the experience by issuing 3 quality system inspection reports according to either the (a) IECRE, (b) an equivalent international scheme or (c) a national certification and/or inspection scheme during the last five years or since the last peer assessment.

If this requirement is not fulfilled, additional peer assessment will be required as outlined in chapter 5.5.

5 REIB Acceptance process

5.1 REIB Application Form

Each candidate REIB subject to assessment shall submit the completed form AD-004 to the IECRE Secretary. New entrant candidate REIBs shall submit AD-004 through the national Member Body for their endorsement.

The IECRE Secretariat will review the received AD-004 for completeness before proceeding with the assessment planning.

5.2 Applicant

During the assessment, each applicant shall provide relevant documents together with the application form according to the requirements listed above in chapter 4. Some documentation will not need to be provided at the point of application, such as:

- a) Accreditation documents, if any
- b) Process/Work instructions
- c) Quality Management (QM) manual

With the application form, the applicant confirms that the above documents under a) – c) will be readily available during the assessment.

5.3 Peer assessors

Each peer assessor shall be approved according to the supplement to IECRE 02, IECRE 02 PV SUP, and OD-481, and shall be officially appointed according the procedures outlined in these documents.

Each REIB shall at least provide one, ideally two peer assessors to the pool of approved peer assessors. The application process follows OD-481. The peer assessment planning should be such that all peer assessors are utilised at least once every three years.

The IECRE Secretariat shall maintain the list of peer assessors meeting the qualification requirements and approved according to IECRE 02 applicable for the PV sector. This list shall be made available to the PV SWG.

All qualified peer assessors shall receive training on the IECRE peer assessment rules and best practices once every three years. Details and further requirements related to training are given in a separate document (to be developed).

5.4 Assessment team

The IECRE Secretary shall select the peer assessors from the above list of qualified peer assessors. The assessment team shall consist of at least two assessors, one from a different REIB and one lead assessor. An appointed lead assessor will either be the Executive Secretary, his deputy, an appointed lead assessor according to OD-481, or a lead assessor from a different IECRE sector.

In lieu of assessors from REIBs the IECRE Secretary can select Interim Peer Assessors as long as less than 10 REIBs are accepted participants in the IECRE scheme. The assessment team shall therefore consist of at least one Interim Peer Assessor that takes the role of the lead Assessor by default – sufficient qualification assumed – and in addition, another Peer Assessor. The IECRE secretary may consult with the PV SWG Convener on the composition of the peer assessment team.

The IECRE Secretary or an appointed qualified assessor or an Interim Peer Assessor will participate as lead assessor.

The IECRE Secretary shall inform the applicant REIB of the names of the assessors at least two months before the planned date of the peer assessment.

5.5 Assessment preparation

The preparation for the assessment consists of:

- For the lead assessor:
 - to define, in agreement with the applicant REIB and the peer assessor(s), the dates for the peer assessment
 - to prepare, in coordination with the selected peer assessor(s), the assessment plan (describing the content of the assessment and the sharing of works between the assessors); and to send it to the applicant REIB, at least two weeks before the beginning of the assessment

- For the applicant REIB: to prepare the assessment report OD-408-4 to the extent possible, and submit this to the lead assessor, at least two weeks in advance or as agreed with the lead assessor.

5.6 Assessment

5.6.1 Duration and process

The duration of the assessment shall be determined by the peer assessment team based on the experience of the entrant REIB and may be shortened or extended beyond the durations stated below based on the observations and findings made during the assessment.

For an experienced IB or REIB, a duration of minimum 2 full consecutive working days will initially be planned to allow for around 8 hours of interviews and document review per assessor and provided the requested information is readily available in English language.

In case the requirement in chapter 4 related to experience is not fulfilled (new entrant candidate REIB or REIB with limited experience since the last peer assessment), the assessment will be extended by one additional working day, allowing for additional assessment.

The scope of the REIB will be determined by the established assessment report, and can contain the following categories:

- PV plant inspection (conditional, final, annual, operational status)
- Quality management system inspection (e. g. module manufacturer, PCE manufacturer, other subcomponent manufacturers, EPC company, O&M service provider, recycling company)

5.6.2 Scope extension

To extend the scope for a qualified REIB to also include additional scopes listed in section 5.6.1. relative to its current scope, the following applies:

An additional assessment is required, and the assessment will initially be planned to last for two full consecutive working days allowing for around 8 hours of interviews and document review provided the requested information is readily available in English language. The lead assessor will attend corresponding to one working day as the review of the management system is already done for the REIB assessment for its current scope.

In case the requirements above related to experience are not fulfilled, the assessment will be extended by at least one additional working day, allowing for additional assessment.

5.6.3 Assessment scope

The assessment shall take place at the IB / REIB site where its most important activities are carried out or – in case of travel or other pertinent government imposed restrictions – online with access to a file server.

The assessment starts with an initial meeting:

- gathering all assessors and the IB representatives
- where the assessment objectives, organisation, timing, and participants are confirmed. The applicant REIB shall be evaluated against all requirements in section 4 of this document.

The assessment activities consist of:

- Organisation documents (Organogram, Quality Manual) review with focus on impartiality.
- Accreditation documents (accreditation certificate, accreditation audit report) review, if any
- Inspection process documentation (procedures, templates) review with focus on the specifics for the IECRE system.
- Personnel qualification files (internal resources and sub-contractors) review
- For the scope: PV plant related inspection reports:

- Project files review including below topics in order to confirm that relevant requirements in the applicable OD-4XX-series – or for candidate REIB, equivalent - are appropriately managed and evaluated in the project:
 - Records (contract review, evaluation review, certification decision, annual reporting ...)
 - Identification of the PV project
 - Standards considered (all relevant standards for project certification shall be mentioned)
 - Technical documents including standard inspection report meta-structure, workflows, evaluation metrics
 - Final evaluation (review by someone not taking part of the review/evaluation work)
 - Deliverables (conformity statement, inspection reports), and suitability of the deliverables for inclusion in the certification process
 - Outstanding issues, conditions, limitations
 - Operation and maintenance surveillance (demonstrate that this is implemented), only if applicable to the scope of the IB or REIB
- If applied for and required, it shall be assessed that the REIB has experience to evaluate all possible elements of the applicable scopes (see OD-4XX).
- For the scope: Quality system inspection:
 - Project files review including below topics in order to confirm that relevant requirements in OD-4XX-series are appropriately managed and evaluated in the project
 - Records (contract review, evaluation review, annual reporting ...)
 - Identification of the inspected Quality Management System
 - Standards considered (all relevant standards for quality management certification shall be mentioned)
 - Process inspection documents (relevant reports)
 - Final evaluation (review by someone not taking part of the review/evaluation work)
 - Deliverables (conformity statement, inspection reports), and suitability of the deliverables for inclusion in the certification process
 - Outstanding issues, conditions, limitations

The applicant REIB shall ensure all necessary information and/or documentation is made available to the peer assessors. This will also include all documents referred in the inspection reports.

5.6.4 Assessment report

The reporting template OD-408-4 shall be used for the reporting from the peer assessment. Any non-resolved deviations shall be highlighted in the conclusion of this report. For further requirements to reporting and handling of non-conformities, see the Rules of Procedures applicable for the PV sector, IECRE 02 and IECRE 02 PV SUP.

For new REIB assessment non-conformities shall be closed within 3 months. If non-conformities cannot be closed within the 3 months period, an exceptional extension for 1 month can only be granted at the discretion of the IECRE Secretariat based on evidence on progress to resolve the outstanding non-conformities. If the deadline cannot be met a new application (incl. fees) will be required.

For REIB re-assessment non-conformities shall be closed within 3 months. If non-conformities cannot be closed within the 3 months period, an exceptional extension for 1 month can only be granted at the discretion of the IECRE Secretariat based on evidence on progress to resolve

the outstanding non-conformities. If the deadline cannot be met, the acceptance will be suspended for 12 months, after which it will be withdrawn and then a new application (incl. fees) will be required.

The conclusions of the assessment report shall be agreed upon by the assessment team (lead assessors, and the peer assessor(s)), and by the IB representative.

The summary assessment report is established by the IECRE Secretary within 10 days from the assessment, and excludes all confidential information, such as the name of the staff interviewed and the sensitive identifying information (name of customer, project names or designation...). The summary report will be sent to REMC for final approval per the IECRE system rules.

6 Re-assessment

The acceptance of the REIB is valid for a period defined in the Rules of Procedures applicable for the PV sector, namely IECRE 02 and IECRE 02 PV SUP (the “RoP”).

The IECRE Secretariat will notify REIBs early in the year as to when their reassessment is required for that year according to the RoP. Within one month of the notification the REIB shall formally request the IECRE Secretariat for being re-assessed within the time limit required by the RoP. In case of unsuccessful re-assessment or refusal, the REIB will be suspended.

7 Confidentiality

Confidentiality in the REIB acceptance process is considered as essential, as peer assessors are originating from competitor REIBs, and certification information and documentation should be confidential within the REIBs. The protection of confidential information is managed as follows:

- Each person, when submitting their request to become a peer assessor to the IECRE Secretary, commits (to the IECRE and to the concerned applicant REIB) to keep confidential all information they will review and assess from the applicant REIB (and from its customers) during the complete acceptance process, for a duration not shorter than 5 years.

Each (applicant and accepted) REIB will add in its contracts with its own customer a clause allowing the participation of third party observers, namely the peer assessors (in line with §4.1.2.2.c.3 of ISO/IEC 17065 or an equivalent reference thereto).

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