



IECRE OPERATIONAL DOCUMENT

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

Testing Laboratory / Customer Test Facility Assessment Report

(Based on ISO/IEC 17025:2017)

Confidential to the applicant, assessment team & IEC Central Office

ME/PV/WE-OMCREMC/ / (assigned by the Secretariat on finalization)

Testing Laboratory / Customer Test Facility:

Fill in with complete Legal Entity name of the Testing Laboratory / Customer Test Facility and country of domicile.

Date of assessment: yyyy-mm-dd

The aim of this document is to provide guidance for Assessors undertaking Testing Laboratory assessments and





THIS PUBLICATION IS COPYRIGHT PROTECTED
Copyright © 2020 IEC, Geneva, Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester.

If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigenda or an amendment might have been published.

Useful links:

IEC publications search - www.iec.ch/searchpub

The advanced search enables you to find IEC publications by a variety of criteria (reference number, text, technical committee,...).

It also gives information on projects, replaced and withdrawn publications.

IEC Just Published - webstore.iec.ch/justpublished

Stay up to date on all new IEC publications. Just Published details all new publications released. Available on-line and also once a month by email.

Electropedia - www.electropedia.org

The world's leading online dictionary of electronic and electrical terms containing more than 30 000 terms and definitions in English and French, with equivalent terms in additional languages. Also known as the International Electrotechnical Vocabulary (IEV) on-line.

Customer Service Centre - webstore.iec.ch/csc

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: csc@iec.ch.



IECRE OPERATIONAL DOCUMENT

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

Testing Laboratory / Customer Test Facility Assessment Report

(Based on ISO/IEC 17025:2017)

Confidential to the applicant, assessment team & IEC Central Office

ME/PV/WE - OMC / — / (assigned by the Secretariat on finalization)

Testing Laboratory / Customer Test Facility:

Fill in with complete Legal Entity name of the Testing Laboratory / Customer Test Facility and country of domicile.

Date of assessment: yyyy-mm-dd

The aim of this document is to provide guidance for Assessors undertaking Testing Laboratory / Customer Test Facility assessments and completing form OD-XXX Testing Laboratory / R Facility Assessment Report.



Note: orange text is guidance text and should be removed before the report is finalized and submitted to the Secretariat.

1 Object and field of assessment

1.1 Object

Assessment covering	IECRE Assessment	Unified Assessment	Accreditation Body	Scope of Accreditation
Initial Assessment (IAR)	<input type="checkbox"/>	<input type="checkbox"/>		
Extension of Scope (EAR)	<input type="checkbox"/>	<input type="checkbox"/>		
Re-Assessment (RAR)	<input type="checkbox"/>	<input type="checkbox"/>		
Follow-up Assessment (FAR)	<input type="checkbox"/>	<input type="checkbox"/>		

1.2 Energy Sector

1.2.1 Energy Sector covered by the assessment

Please cross (X) as appropriate and refer to Annex 1 Assessment Scope **Error! Reference source not found.** for a complete list of the scope of the assessment containing details of the relevant IEC Standards and relevant experience including editions and amendments.

<input type="checkbox"/> Marine Energy	<input type="checkbox"/> Solar PV Energy	<input type="checkbox"/> Wind Energy
--	--	--------------------------------------

1.3 Previous Assessment Report (if applicable)

Previous Assessment Report Number	ME/PV/WE-OMC <u>or REMC</u> / /
Previous Assessment Date	yyyy-mm-dd

1.4 Complete legal entity name and address of the Testing Laboratory / Customer Test Facility

If the Testing Laboratory / Customer Test Facility is already an accepted IECRE RETL / RECTF and the assessment is a Scope extension the box "Accepted" should be checked.

Type	Candidate	Accepted
RETL	<input type="checkbox"/>	<input type="checkbox"/>
RECTF	<input type="checkbox"/>	<input type="checkbox"/>

Legal Entity Name	
Address	
Contact Person	
Email	
Tel	
Mobile	
Fax	
Website	



1.5 Members of the Assessment Team

	Name	Organization
Lead Assessor		
Assessor		
Assessor		
Assessor		

1.6 Place(s) and date(s) of Assessment

If multiple buildings, include all addresses, such as: ABC Testing Laboratory / Customer Test Facility in City A together with DEF Testing Laboratory / Customer Test Facility in City D.

Main location(s)	
If applicable, other location(s)	

1.7 Assessment Base

- IEC CA 01 & Suppl.
- IECRE Rules of Procedure
- IECRE ODs
- IEC Standards as noted in Annex 1
- ISO/IEC 17025:2017 – Option A

The above documents are to be based upon the latest published editions

2 Organization

2.1 Brief history of the Testing Laboratory / Customer Test Facility

Include information about the legal entity of the Testing Laboratory / Customer Test Facility and ownership.



2.2 Organization of the Testing Laboratory / Customer Test Facility

Include information relevant to the organization of the Testing Laboratory / Customer Test Facility pertaining to the operated Energy Sector(s).

If the quality management system is such that the Quality Manual and/or Quality Procedure include one or more organization charts then this could be attached as an appendix to the Assessment Report.

NOTE: The IECRE Executive Secretary will redact the organization chart(s) in Sub-Clause 2.2 for the Summary Assessment Report.

--

3 Personnel Structure

When the declared years of experience is low, the assessment team should make a professional judgment based upon interviews on the awareness and knowledge of the standards, witnessing of Test Report review, witnessing of testing and measuring as well as CV information e.g. previous employments and function, training programmes completed.

NOTE: The IECRE Executive Secretary will redact ALL names in Clause 3 for the Summary Assessment Report.

3.1 Employees

Number of overall people employed by the legal entity of the Testing Laboratory / Customer Test Facility	
Number of people involved with the testing activity within the scope of this assessment	

3.2 Responsible Managers for Testing

Name [REDACT NAMES IN SUMMARY ASSESSMENT REPORT]	Position (title) and field of expertise	Years of relevant experience	Experience checked & appropriate		To whom do they report? [REDACT NAMES IN SUMMARY ASSESSMENT REPORT]
			Yes	No	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	



3.3 Principal staff involved in Testing

Name [REDACT NAMES IN SUMMARY ASSESSMENT REPORT]	Position (title) and field of expertise	Years of relevant experience	Experience checked & appropriate		To whom do they report? [REDACT NAMES IN SUMMARY ASSESSMENT REPORT]
			Yes	No	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	

3.4 Staff involved in the Quality Management System of the Testing Laboratory / Customer Test Facility

Name [REDACT NAMES IN SUMMARY ASSESSMENT REPORT]	Position (title) and field of expertise	Years of relevant experience	Experience checked & appropriate		To whom does the quality management system staff report? [REDACT NAMES IN SUMMARY ASSESSMENT REPORT]
			Yes	No	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	

3.5 Assessment of staff competence

When the declared years of experience is low, the assessment team should make a professional judgment based upon interviews on the awareness and knowledge of the standards, witnessing of Test Report review, witnessing of testing and measuring as well as CV information e.g. previous employments and function, training programmes completed.



4 Quality Management System

If the Testing Laboratory / Customer Test Facility is accredited, check the most recent accreditation assessment report and the scope covered by the accreditation.

If the Testing Laboratory / Customer Test Facility is not accredited or if the Testing Laboratory / Customer Test Facility does not make the accreditation report available, the quality management system of the Testing Laboratory / Customer Test Facility shall be examined in detail.

~~Briefly describe the structure of the management system, its documentation and degree of implementation, and how it is checked for compliance with ISO/IEC 17025:2017.~~

~~State whether reports from external/internal audits, management reviews and corrective action processes have been reviewed and other relevant items from ISO/IEC 17025:2017. Briefly describe the structure of the quality system, its documentation and degree of implementation, and how it is checked for compliance with ISO/IEC 17025.~~

~~State whether reports from external/internal audits, management reviews and corrective action processes have been reviewed and other relevant items from ISO/IEC 17025.~~

In any case the ODs, clarification sheets, and the Rules of Procedure of the relevant Energy Sector should be assessed in order to verify that they are duly included in the quality management system and implemented in practise and effective.

	Yes	No	N/A
Is the Testing Laboratory / Customer Test Facility accredited by a reputable Accreditation Body?	<input type="checkbox"/>	<input type="checkbox"/>	
Does the accreditation include the standards covered by this assessment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Structure of the Quality System <u>(Cl. 8.1.2, 8.1.3)</u>
<u>Only Option A (compliance with ISO/IEC 17025:2017) may be used.</u> <input type="checkbox"/> <u>Option A only: (Cl. 8.2 to 8.9)</u> <u>Brief description</u>
Document control <u>(Cl. 8.3)</u>
Review of requests, tenders and contracts <u>(Cl.7.1)</u>
<u>Purchasing services and supplies – Externally provided products and services (Cl. 6.6)Sub-contracting of tests</u>
<u>Purchasing services and supplies</u>



Service to the client
Complaints (CI. 7.9)
Control of non-conforming work (CI. 7.10)
Corrective action (CI.8.7)
Actions to address risks and opportunities (CI. 8.5) The laboratory shall have a procedure to identify and address risks and opportunities. However, this does not need to be a formal risk management system through the application of other guidance or standards. Preventive action
Control of records (CI.8.4)
Internal audits (CI.8.8)



Management reviews <u>(CI.8.9)</u>
IECRE Rules of Procedure
IECRE Operational Documents
Clarification Sheets
Use of appropriate IEC standards
Current IECRE decisions

5 Critical Technical Procedures

Briefly describe if the presence and appropriateness of procedures for sample handling, component acceptance, performance of critical tests, calibration of equipment, measurement accuracy/uncertainty, training and other relevant items from ISO/IEC 17025 Clause 5.0 have been checked.

Equipment:

Verify that the calibration certificates include measurement uncertainty values.

Sampling:

In case of multiple factory location for the same product.



<u>Accommodation and environmental conditions (Cl. 6.3)</u> Environmental conditions
Test methods and method validation <u>(Cl. 7.2)</u>
Equipment <u>(Cl. 6.4)</u>
Measurement traceability <u>(Cl. 6.5)</u>
Sampling <u>(Cl. 7.3)</u> <u>Only applicable when required by product standard</u>
Handling of test items <u>(Cl. 7.4)</u>



Assuring the validity of results (Cl. 7.7.1) Assuring the quality of test results

Note: this does not apply to PTP as covered under clause 7.7.2. Compliance with 7.7.1 is shown through the review of an example of the laboratory's analysis and decision, to determine what monitoring activity is appropriate, and the results of this monitoring.

List the activities implemented by the laboratory related to monitoring of the validity of test results, relevant to the scope of the laboratory, other than Proficiency Testing.

Review the procedure related to 7.7.1 items a) to k) or other activities, describing what the laboratory applies for each general type of testing, and how the resulting plan is implemented.

Category/standard	Type of Monitoring Implemented	

Reporting the results (Cl. 7.8)

6 Proficiency Testing Programmes

Indicate the laboratory's participation in any comparative testing programs.



7 Testing witnessed during the assessment

Provide information about the equipment used, the testing methodology, general proficiency, knowledge and competence of the laboratory staff and the relevant standard and clause against which the test has been carried out.

8 Test reports reviewed during the assessment

E.g. To check the validity and completeness of the measurement reported in the Test Report, list of used Test Equipment reported, proper signatures and reviewers etc.

NOTE: The IECRE Executive Secretary will redact ALL names in Clause 8 for the Summary Assessment Report.

9 Number of Non-Conformity Reports issued

NOTE: The IECRE Executive Secretary will redact ALL of Clause 9 for the Summary Assessment Report.

Number of NCRs appended	
-------------------------	--



10 Recommendations of the Assessment Team

This assessment has been a sampling exercise and thus every aspect of the Testing Laboratory's / Customer Test Facility's activities has not been covered. It does not follow, therefore, that non-conformances do not exist in areas where none have been reported in this assessment report.

Standard recommendations:

1. The Assessment Team recommends acceptance of the assessed organization for the scope(s) as reported in Annex 1 of this Assessment Report as appropriate.	<input type="checkbox"/>
2. The Assessment Team recommends acceptance of the assessed organization for the scope(s) as reported in Annex 1 of this Assessment Report, subject to clearance of the outstanding Non-conformity Reports as appropriate.	<input type="checkbox"/>
3. The Assessment Team recommends that the acceptance of the assessed organization is postponed until a further follow-up assessment is carried out and is found satisfactory.	<input type="checkbox"/>
4. Other, please specify using similar terminology	<input type="checkbox"/>

10.1 Additional Information



11 Signatures of the Assessment Team

Date: yyyy-mm-dd

	Printed name	Signature
Lead Assessor		
Assessor		
Assessor		
Assessor		

12 Acknowledgement by the assessed organization

- We acknowledge and agree with the content of the Assessment Report.
- We acknowledge the content of the Assessment Report and we disagree for the following reasons:

Date: yyyy-mm-dd

	Printed name	Signature
Testing Laboratory / Customer Test Facility Representative		



Annex 1 Assessment Scope

Type of assessment (IAR, EAR, FAR, RAR)

Indicate for each standard the type of assessment being conducted as a part of this report.

Standard:

The assessment team completes this section with the standard(s) selected for this assessment.

List the standards in the Testing Laboratory / Customer Test Facility scope, including the editions and amendments.

Number of Test Reports issued during the last three years and the number of test reports reviewed during the assessment:

The Testing Laboratory / Customer Test Facility should provide this information during the assessment.

Test Reports completed can also include projects based on the equivalent National Standard.

Sufficient expertise demonstrated:

The assessment team completes this section based upon the on-site assessment.

Where insufficient experience is demonstrated the "No" box shall be checked.

Example:

Type of assessment (IAR, EAR, FAR, RAR)	Standard	Number Test Reports issued during the last three years / test reports reviewed during the assessment	Sufficient expertise demonstrated	
			Yes	No
RAR	IEC/TS 62600-10:2015	5 / 2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
EAR	IEC 61215:2005	9 / 4	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Testing/certification experience for national/regional standards that are reasonably harmonized with the equivalent IEC standard can be counted as experience if no experience can be demonstrated for the IEC standard. This shall be clearly indicated by adding an asterisk after the number for test reports issued, for example:

Type of assessment (IAR, FAR, EAR, RAR)	Standard	Number Test Reports issued during the last three years* / test reports reviewed during the assessment	Sufficient expertise demonstrated	
			Yes	No
IAR	IEC 61400-12-1:2005	3* / 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>

* experience also includes equivalent national/regional standards.

Type of assessment (IAR, EAR, FAR, RAR)	Standard	Number of Test Reports issued during the last three years / test reports reviewed during the assessment	Sufficient expertise demonstrated	
			Yes	No
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

Note: For the organization's full scope please see the IECRE Website



Annex 2 Organization chart

Include the relevant organization chart(s) here.

NOTE: The IECRE Executive Secretary will redact ALL of Annex 2 for the Summary Assessment Report.



Annex 3 Accreditation Certificate relevant to the IECRE operations

Include the relevant accreditation certificate(s) here.



Annex 4 “Independence and impartiality” including “Commercial consultancy”

This Annex applies to all Testing Laboratories for which they have not already been assessed.

1. General Operating Procedure	Yes	No
Does the Body have a documented procedure for independence and impartiality that as a minimum includes the following while carrying out conformity assessment activities: a) to be objective, b) to identify, avoid, mitigate and manage conflicts of interest, and c) to ensure independence, so as to increase the amount of trust, confidence and value that those activities have in the market place	<input type="checkbox"/>	<input type="checkbox"/>
Document title:	Document number:	

2. Reference Document	Yes	No
Does the Laboratory have access to ISO/IEC 17025:2017 and in particular Sub-clause 4.1 ? Does the Body have access to ISO/IEC 17025:2005 and in particular Sub-clause 4.1.4 (including Note 2, 4.1.5 B) and 4.1.5 d)?	<input type="checkbox"/>	<input type="checkbox"/>

NOTE: The IECRE Executive Secretary will redact ALL names in Clause 3, Annex 4, for the Summary Assessment Report.

3. Knowledge, training and decision making	Yes	No
Does the Body’s staff have knowledge of the basic concepts of independence and impartiality?	<input type="checkbox"/>	<input type="checkbox"/>
Were the training records of the Body’s staff checked?	<input type="checkbox"/>	<input type="checkbox"/>
Does the Body’s selected staff have sufficient knowledge in the principles of independence and impartiality to provide initial training and retraining to other staff?	<input type="checkbox"/>	<input type="checkbox"/>
Names of person(s): [REDACT NAMES IN SUMMARY ASSESSMENT REPORT]		
Were examples of training programs of the Body’s staff reviewed and found to be sufficient?	<input type="checkbox"/>	<input type="checkbox"/>
Does the Body’s staff select and make pass/fail decisions taking the principles of independence and impartiality into account?	<input type="checkbox"/>	<input type="checkbox"/>
Are the Body’s decisions based on objective evidence of conformity (or nonconformity) obtained by the Body’s staff?	<input type="checkbox"/>	<input type="checkbox"/>
Are the Body’s decisions influenced by other interests or parties?	<input type="checkbox"/>	<input type="checkbox"/>

4. Documentation and Implementation	Yes	No
Does the Body have documented and implemented (on an on-going basis) sufficient procedures to ensure the independence and impartiality of all staff?	<input type="checkbox"/>	<input type="checkbox"/>
Does the Body have documented and implemented (on an on-going basis) sufficient procedures to ensure that the remuneration of staff is free from pressures and inducements and is not dependent on the number, outcome of the result of their activities? Note: It is recognized that the source of revenue of the Body is its customers paying for its services and that this is a potential threat to independence and impartiality.	<input type="checkbox"/>	<input type="checkbox"/>



Does the Body have documented sufficient procedures for the identification, review, resolution and prevention of conflict of interest (including “commercial consultancy”) where conflicts of interest are suspected or proven (including subcontracted personnel) and does the Body keep records of such reviews and decisions?	<input type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------

5. Marketing and advertising materials	Yes	No	N/A
Do the Body’s marketing materials give the impression that “commercial consultancy” activities are offered?	<input type="checkbox"/>	<input type="checkbox"/>	
Is the Body linked to an organization that provides “commercial” consultancy services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there a documented policy/procedure to ensure that there is an effective separation between all conformity assessment activities and consultancy services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Staff declarations	Yes	No
Does the Body require all staff acting on its behalf to declare any potential conflict of interest?	<input type="checkbox"/>	<input type="checkbox"/>

7. Compliance	Yes	No
Does the Body comply with all the above independence and impartiality principles on an ongoing basis? Note: If the answer is NO a Non-Conformity Report must be issued	<input type="checkbox"/>	<input type="checkbox"/>



Non-Conformity Reports (NCRs)

General

Copy this template for each non-conformity found.

Non-conformity Report No.

Assign a consecutive number to each NCR issued and include the total number of NCRs issued. Example: 1/5.

Standard Clause / Sub-clause of Non-Conformity and/or IECRE Rule/OD

NCR related to ISO/IEC 17025, IEC CA 01 & Suppl., IECRE Rules of Procedure, ODs, Clarification Sheets.

NOTE: The IECRE Executive Secretary will redact ALL Non-Conformity Reports (NCRs) for the Summary Assessment Report.

Non-conformity Report No	/	Date	YYYY-MM-DD
Standard Clause / Sub-clause of Non-Conformity and/or IECRE Rule/OD.			
Non-conformity description			
Lead Assessor	Testing laboratory / Customer Test Facility representative acknowledgement of the issuance of the NCR		
Signature and printed name	Signature, printed name and title		
Root cause of non-conformity			
Proposed Corrective action(s)			



Implementation date	Testing laboratory / Customer Test Facility representative confirms implementation of corrective actions
YYYY-MM-DD	Signature, printed name, title and date
Proposed Corrective Action(s) acceptance by the Lead Assessor	
Acceptance, no further verification required	<input type="checkbox"/>
Acceptance, further verification of implementation is required, <u>without</u> on-site follow-up assessment	<input type="checkbox"/>
Acceptance, further verification of implementation is required, <u>with</u> on-site follow-up assessment	<input type="checkbox"/>
Lead Assessor (Signature, printed name and date)	
Implementation verified and final clearance provided by Lead Assessor (only if further verification of implementation is required)	
Lead Assessor signature, printed name and date	

**INTERNATIONAL
ELECTROTECHNICAL
COMMISSION**

3, rue de Varembé
PO Box 131
CH-1211 Geneva 20
Switzerland

Tel: + 41 22 919 02 11
info@iec.ch
www.iec.ch

**IEC SYSTEM FOR CERTIFICATION TO STANDARDS
RELATING TO EQUIPMENT FOR USE IN RENEWABLE
ENERGY APPLICATIONS (IECRE SYSTEM)**

IECRE Secretariat c/o IEC
3, rue de Varembé
PO Box 131
CH-1211 Geneva 20
Switzerland

Tel: + 41 22 919 02 11
secretariat@iecre.org
www.iecre.org