



# IECRE PUBLICATION

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

**Marine Energy Operational Management Committee (ME-OMC) - Rules of Procedure**



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

**Marine Energy Operational Management Committee (ME-OMC) - Rules of Procedure**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

PRICE CODE

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**IEC System for Certification to Standards Relating to Equipment  
for Use in Renewable Energy Applications (IECRE System) –****Rules of Procedure for the Certification of Marine Energy Converters  
according to the IECRE-ME Schemes**

## FOREWORD

The Marine Renewable Energy industry includes wave, tidal and other water current converters, among others. There is a need for a single, internationally-recognized 3rd party Conformity Assessment (CA) system for the verification of compliance to consensus-based International Standards and Technical Specifications to reduce risk and improve stakeholder confidence. The implementation of the Marine Energy Operational Management Committee (ME-OMC) and a Marine Energy Certification Scheme will help to accelerate commercialization of the industry, thus reducing risk and increasing confidence in the market.

This publication has been prepared by the ME-OMC for approval by the REMC.

The annexes to this publication are normative.

The text of this publication is based on the following document(s):

Document	Report on Voting
REMC/274/DV	REMC/ <del>XXX</del> 277/RV

## INTRODUCTION

This publication contains the Rules of Procedure (RoP) of the Marine Energy (ME) Sector under the IECRE Conformity Assessment System. The term “Marine Energy Converter” is used to describe Renewable Energy Equipment in the ME Sector. These RoP comply with IECRE 01, Basic Rules and IECRE 02, Rules of Procedure. IECRE rules and documents, and a list of standards approved for use in the ME Certification Scheme, can be found at [www.iecre.org](http://www.iecre.org).

The RoP defines the structure and governance of the ME-OMC, the principles of the ME CA Schemes and procedures for acceptance of Renewable Energy Certification Bodies (RECB) and Renewable Energy Testing Laboratories (RETL) applying to work within the ME Certification Scheme. Additional operational documents (ODs) specify ME Certification Scheme deliverables, such as certificates, conformity statements and test reports, in order to operate the system. This RoP, and the associated ODs, establishes a framework for the mutual recognition of ME Certification Scheme deliverables among and between testing laboratories and certification bodies.

# **IEC System for Certification to Standards Relating to Equipment for Use in Renewable Energy Applications (IECRE System) –**

## **Rules of Procedure**

### **1 Scope**

The scope of the ME-OMC is to operate an international ME Certification Scheme for marine energy conversion systems. Participation in the ME-OMC shall include certification bodies, test laboratories and other stakeholders that are members in good standing of a Member Body.

### **2 Normative References**

Detailed lists of relevant normative references can be found in the following documents:

IEC CA 01, IEC Conformity Assessment Systems - Basic Rules

IECRE 01, IEC System for Certification to Standards Relating to Equipment for Use in Renewable Energy Applications - Basic Rules

IECRE 02, IEC System for Certification to Standards Relating to Equipment for Use in Renewable Energy Applications - Rules of Procedure

IECRE Definitions, IEC System for Certification to Standards Relating to Equipment for Use in Renewable Energy Applications (IECRE System) - Acronyms, Terms and Definitions

International Association of Classification Societies (IACS), Quality Management System Certification Scheme (QSCS)

### **3 Definitions and Abbreviations**

The applicable acronyms, terms and definitions can be found in ISO/IEC 17000 and in IECRE Definitions. In case of a conflict between definitions in ISO/IEC 17000 and in IECRE Definitions, the latter shall take precedence.

### **4 Organizational Structure**

The organizational structure of the ME-OMC is identical to all other IECRE Sectors and therefore, is defined in Clause 4 of IECRE 02, Rules of Procedure and Annex A, OMC Terms of Reference. This document covers Membership, Leadership, Meetings, Voting, Numbering Definitions, Working Groups, Stakeholder Groups and Task Forces.

### **5 Requirements for Participation in the IECRE System**

The requirements for participation in the IECRE System is covered in Clause 5 of IECRE 02, Rules of Procedure.

### **6 Deliverables of the IECRE System**

The Conformity Assessment scheme developed and operated by the ME OMC is a Certification Scheme.

#### **6.1 ME Certification Scheme**

The ME Certification Scheme provides a means for obtaining deliverables that are intended to be accepted globally as the internationally accepted means of demonstrating conformity with international standards and technical specifications.

The ME Certification Scheme deliverables follow.

##### **6.1.1 Test Reports (RETRs)**

RETRs with an approved Scope in Marine Energy are authorized to issue Test Reports (RETRs) against the standards for which they have been assessed.

Test Report deliverables shall follow the requirements of IECRE 02 – Clause 6.

The requirements for the issuance of a Test Report against the technical standards covered by this scheme are detailed in OD 300 (under development).

### **6.1.2 Product Certificates**

The Product Certification processes include Component, Prototype, Type and Project, the deliverables of which are Product Certificates.

RECBs with an approved Scope in Marine Energy are authorized to issue Product Certificates for the Product Certification processes to which they have been assessed.

Product Certification deliverables shall follow the requirements of IECRE 02 – Clause 6.

The requirements for the issuance of a Product Certificate against the technical standards covered by this scheme are detailed as below:

- a) Component Certificates (OD 330 – under development)
- b) Prototype Certificates (OD 320 – under development)
- c) Type Certificates (OD 340 – to be developed)
- d) Project Certificates (OD 350 – to be developed)

Conformity Statements (OD 310 – under development) will be issued upon successful completion of evaluation of a Certification Module as part of the Product Certification process.

### **6.2 Exchange of ME Certification Scheme Deliverables**

The Product Certification processes may depend upon other ME Certification Scheme deliverables issued by the RETLs or RECBs approved to operate within the ME Sector.

NOTE: a Project Certificate can include a Type Certificate

Consequently, RECBs and/or RETLs participating in the ME Certification Scheme shall accept ME Certification Scheme deliverables issued by other RECBs and/or RETLs participating in the ME Sector.

This is enabled by ensuring that ME Certification Scheme deliverables are issued according to detailed descriptions and requirements given in the associated Operating Documents. The ME Certification Scheme deliverables shall be supplemented by a final evaluation report that will enable the receiver of the deliverable to understand the extent of the certification.

Where an RECB or RETL identifies a problem or question related to a deliverable issued by another RECB or RETL, the RECB or RETL shall raise the matter first with the Applicant, then the RECB or RETL shall raise the matter with the organization that initially issued the deliverable. If the RECBs or RETLs involved arrive at different conclusions, the case shall be referred to the IECRE Executive Secretary.

## **7 Applicants seeking ME Certification Scheme Deliverables**

Applicants may apply to any RECB or RETL approved to participate in the ME Certification Scheme against the standards for which they have been assessed.

The Applicant is the holder of the deliverable and shall be responsible for complying with the requirements and obligations of the deliverable.

## **8 Acceptance of RECBs and RETLs with a Scope in Marine Energy**

To participate in the ME Sector, RECBs and RETLs shall be current in their ME Sector dues and have undergone a peer assessment process as defined by the ME-OMC.

RECB or RETL applications shall be made with reference to specific ME CA scheme deliverable(s), as defined by associated ODs and Standards. The peer review process shall address the specified ODs and Standards and report any non-conformities to the REMC Executive Secretary.



NOTE: those ODs are e.g. Type Certification, Component Certification...

## 8.1 Acceptance of RETLs

Acceptance of RETLs shall follow the requirements of IECRE 02 – Clauses 5.1 and 8.1 with the exception of the following.

### 8.1.1 Overall acceptance process

The assessment of candidate RETLs, to be conducted upon completion of the transition period defined in 8.1.2 shall be based on the following five elements:

-A review of a random sample of historic reports issues for the competence area (to assess compliance with the referenced standard).

OR

A prepared representative report for the competence area which may contain fictitious data as a substitute.

- The results of a proficiency test for the competence area. The proficiency test shall follow ISO/IEC 17043 although the OMCs may deviate from the requirements in this standard as long as these deviations are described in an approved Operational Document. For some tests it is too expensive/difficult to test multiple samples, in which case the proficiency test may cover a more limited part of the standard if it is defined in an approved OD.

-A review of the candidate RETL's own processes and procedures related to the specific competence area.

-An inspection of an ongoing test (or the installation of a new test) and the related documentation.

-An assessment of the candidate RETL against ISO/IEC 17025 in case the test laboratory does not already hold an accreditation for ISO/IEC 17025 for the specific competence area.

Authority for the acceptance of RETLs lies with the REMC.

This shall also apply to new entrants.

### 8.1.2 Transition period acceptance process

For RETL acceptance for power performance assessment of electricity producing tidal, wave and river energy converters, over a period of 3 years from the approval of this document, a self-assessment scheme will be in place which will negate the need for on-site peer assessment. An initial RETL Assessment Checklist that will be used for peer assessment is provided in OD 300-200. This self-assessment scheme is outlined below.

#### 8.1.2.1 Review of reports issued

A review of a random sample of historic reports issues for the competence area (to assess compliance with the referenced standard) will be required.

The Applicant shall submit an overview of reports submitted the last three years issued that state compliance with the standard.

The Lead Assessor, together with the Technical Assessors and/or experts, shall select from the list. These selected reports shall be submitted to the IECRE Secretariat by the Applicant.

OR

A prepared representative report for the competence area which may contain fictitious data as a substitute.

When applying via this route, the first commercial test report will be reviewed by Peer assessors; this may require document review or site visit. While the period allowing self-assessment remains in place, this will require document review only.

The reports shall be reviewed for compliance with the standard, as per the form in Annex A of this OD. A completed version of the Test Report Form, Annex A, shall be included in the final self-assessment report.

#### **8.1.2.2 Proficiency Testing**

A system of proficiency testing is not yet available within the marine sector applicable to power performance testing and so is not required.

NOTE: As a system is developed, it will be included here.

#### **8.1.2.3 Internal Procedures**

A review of the candidate RETL's own processes and procedures related to the specific competence area is required.

While the period allowing self-assessment remains in place, this will be through document review only.

#### **8.1.2.4 Inspection of Field Test**

There will be a requirement for an inspection of an ongoing test (or the installation of a new test) and the related documentation by peer assessment.

While the self-assessment transition period is in place there will be no requirement for on-site inspection, instead RETLs will submit a report against the Application Form in OD 300-200, Annex C.

#### **Proficiency Testing**

~~A system of proficiency testing is not yet available within the marine sector applicable to power performance testing and so is not required.~~

~~NOTE: As a system is developed, it will be included here.~~

#### ~~**Review of Reports Issued**~~

~~A review of a random sample of historic reports issues for the competence area (to assess compliance with the referenced standard) will be required.~~

~~The Applicant shall submit an overview of reports submitted the last three years issued that state compliance with the standard.~~

~~The Lead Assessor, together with the Technical Assessors and/or experts, shall select from the list. These selected reports shall be submitted to the IECRE Secretariat by the Applicant.~~

#### **OR**

~~A prepared representative report for the competence area which may contain fictitious data as a substitute.~~

~~When applying via this route, the first commercial test report will be reviewed by Peer assessors; this may require document review or site visit. While the period allowing self-assessment remains in place, this will require document review only.~~

~~The reports shall be reviewed for compliance with the standard, as per the form in Annex A of this OD. A completed version of the Test Report Form, Annex A, shall be included in the final self-assessment report.~~

#### **Internal Procedures**

~~A review of the candidate RETL's own processes and procedures related to the specific competence area is required.~~

~~While the period allowing self-assessment remains in place, this will be through document review only.~~

#### **8.1.2.5 Inspection against ISO 17025 or Equivalent**

RETL should be accredited against ISO 17025 for IEC/TS 62600-200. In the case where the test laboratory does not already hold an accreditation for ISO/IEC 17025 for the specific

competence area, an assessment of the candidate RETL against ISO/IEC 17025 will be carried out by the peer assessors; this combined assessment will not be a route of entry during the self-assessment period.

#### **8.1.2.6 Reassessment Period**

The reassessment period will be every 3 years.

#### **8.1.2.7 Peer Assessment Team**

During the period allowing self-assessment, the peer assessment team will include the ME OMC officers and the REMC Executive Secretary. Subsequently, a peer assessment team will be established including a ME lead assessor and REMC Executive Secretary.

### **8.2 Acceptance of RECBs**

Acceptance of RECBs shall follow the requirements of IECRE 02 – Clauses 5.1 and 8.2. In addition, a certification body shall be accepted as an RECB under the two following conditions:

- 1) The competence of the RECB shall be demonstrated by peer assessment in conformity with ISO/IEC 17040 and detailed in the ME specific ODs covering the specific CA;
  
- 2) The RECB shall be a recognized Classification Society with current membership in the International Association of Classification Societies (IACS), including mandatory compliance with the IACS Quality System Certification Scheme (QSCS). Audits and assessment of compliance with the QSCS are carried out by independent external Accredited Certification Bodies. If the RECB loses its IACS membership they must notify the IECRE Secretary.

The Peer assessment of the applicant RECB utilizing this option will include assessment against a selection of clauses to meet equivalence with ISO/IEC 17065. These clauses are contained in an OD to be developed.

OR

The RECB shall be accredited to ISO/IEC 17065 for the specific ME competence area by a recognized national accreditation body. If the RECB loses its accreditation it must promptly notify the IECRE Executive Secretary.

Authority for the acceptance of RECBs lies with the REMC.

This shall also apply to new entrants.

### **9 Complaints**

If there are complaints concerning the actions of an RECB or RETL that cannot be resolved, the RECB, RETL or the complainant shall have the right to request the matter be raised with the ME-OMC and the IECRE Executive Secretary.

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