

1 Object and field of assessment

1.1 Object

Assessment covering	IECRE Assessment	Unified Assessment	Accreditation Body	Scope of Accreditation
Initial Assessment (IAR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	UKAS	IEC 61400-12-1: 2005
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

<input type="checkbox"/> Marine Energy	<input type="checkbox"/> Solar PV Energy	<input checked="" type="checkbox"/> Wind Energy
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1.3 Previous Assessment Report (if applicable)

Previous Assessment Report Number	N/A
Previous Assessment Date	N/A

1.4 Complete legal entity name and address of the Testing Laboratory

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

Legal Entity Name	SgurrEnergy Ltd
Address	225 Bath Street, G2 4GZ, Glasgow, United Kingdom
Contact Person	Florin Pintilie
Email	Florin.pintilie@sgurrenergy.com
Tel	+44 (0) 141 227 1700
Website	www.sgurrenergy.com

1.5 Members of the Assessment Team

	Name	Organisation
Lead Assessor	Alistair Mackinnon	Energy Technology Centre, Glasgow, UK
Assessor	Flemming Langhans	COWI A/S, Denmark

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

Main location(s)	SgurrEnergy Office, 225 Bath Street, Glasgow, G2 4GZ, 2016-10-04 & 05
If applicable, other location(s)	Andershaw Wind Farm, Central Scotland

1.7 Assessment Base

IECRE 01 Basic Rules
IECRE Rules of Procedure
IECRE ODs
IEC Standards as noted in Annex 1
ISO/IEC 17025

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

2 Organisation

2.1 Brief history of the Testing Laboratory

SgurrEnergy was established in Glasgow in 2002 and became a part of the Wood Group in 2010.

With over 300 staff in 15 offices globally, SgurrEnergy are a leading engineering consultancy Company with a separate ISO/IEC 17025: 2005 UKAS accredited Power Performance Measurement Testing Team which is the subject of this Assessment Report. The initial UKAS accreditation was first granted in January 2011.

The business is active across a range of renewable energy technologies of which the wind sector is the most significant. SgurrEnergy has a number of products available to their clients including the Galion Lidar, SgurrMetMast and SgurrControlCentre.

2.2 Organisation of the Testing Laboratory

The main SgurrEnergy Glasgow Office hosts a number of different business activities of which the Power Performance Testing Team (PPT) is the UKAS (accredited for IEC 61400-12-1: 2005) entity. PPT has its own comprehensive local QMS procedures in addition to the Corporate QMS System.

NOTE FROM THE SECRETARIAT: The Organization Chart was supplied to, and reviewed by, the assessment team, and it is retained in the IEC Central Office by the Executive Secretary.

3 Personnel Structure

NOTE FROM THE SECRETARIAT: For Items 3.1, 3.2, 3.3, and 3.5, the number of staff and their experience/competence were supplied to, and reviewed by, the assessment team. It was determined that there was objective evidence to determine that it was appropriate. The staff list is retained in the IEC Central Office by the Executive Secretary.

3.1 Employees

Number of overall people employed by the legal entity of the Testing Laboratory	See Note above
Number of people involved with the testing activity within the scope of this assessment	See Note above

3.2 Responsible Managers for Testing

Name	Position (title) and field of expertise	Years of relevant experience	Experience checked & appropriate		To whom do they report?
			Yes	No	
See above			<input type="checkbox"/>	<input type="checkbox"/>	

3.3 Principal staff involved in Testing

Name	Position (title) and field of expertise	Years of relevant experience	Experience checked & appropriate		To whom do they report?
			Yes	No	
See Note above			<input type="checkbox"/>	<input type="checkbox"/>	

3.4 Staff involved in the Quality Management System of the Testing Laboratory

Name	Position (title) and field of expertise	Years of relevant experience	Experience checked & appropriate		To whom does the quality management system staff report?
			Yes	No	
Florin Pintilie	Technical Manager ISO 17025 QMS	8	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Robbie Gibson
Alan Smith	Director of Operations	7	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Steve McDonald
Robert Lockhart	Operational Manager	4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Alan Smith

3.5 Assessment of staff competence

See Note above

4 Quality Management System

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

Structure of the Quality System
The Integrated Management System Manual is the top level document and is sub divided down to the various working levels. The Power Performance Team has its own area on the online system which was fully demonstrated to the satisfaction of the assessment team. The QMS is complete and appears to function very efficiently. The assessment team recognised that the local PPT procedures are a good example of best practice.
Document control
There is a robust process for document control and only Robert Lockhart and Alan Smith have editorial control of the overall QMS.
Florin Pintilie has control over the PPT specific procedures in the local QMS.
SgurrEnergy employ an external consultant – QCS International to assist with internal audits and to provide an additional level of independence and impartiality.
Review of requests, tenders and contracts
The QMS has a specific review form to address this business critical area which was found to be comprehensive, complete and fit for purpose.
Sub-contracting of tests
There is no subcontracting of test work. However, some measurement critical activities can be subcontracted. For example the meteorological mast manufacture and installation and the installation of the sensors, but SgurrEnergy Staff policy is to always supervise or carry out these activities using qualified in-house staff. There has been one occasion recently where met mast compliance was checked only through installation reports and post installation site visit from ground level.
Purchasing services and supplies
SgurrEnergy operate an approved suppliers list at the Corporate level. This is a very robust system with specific requirements at the PPT level – eg that the Anemometer's used are from a UKAS (or equivalent) accredited approved supplier.
Service to the client
The service to the client was reviewed during the assessment. SgurrEnergy enjoy a good reputation with clients.
Complaints
Complaints are dealt with via the 'Corrective Preventative Action Register'.
Since 2011 there has only been one complaint. The SgurrEnergy policy is to resolve any issues before they become a complaint.
One way of achieving this is through the Questionnaire issued to clients after the site calibration.
Control of non-conforming work
The Corrective Preventative Action Register applies.

Corrective action
Corrective action is managed through the 'Improvement Register'
Preventive action
Preventative action is usually achieved through the implementation of Controlled Templates on the basis of any lessons learned.
Control of records
The Register is updated monthly which follows a meeting between Florin Pintilie and Robbie Gibson.
Internal audits
Internal audits are undertaken every six months by QCS (an external and independent supplier). There is a particular focus on the ISO/IEC 17025: 2005 accredited PPT area and the IEC 61400-12-1: 2005 requirements.
Management reviews
The management review is undertaken on an annual basis in November. Last year's report was reviewed and found to be a very comprehensive including a specific review of the PPT business.
IECRE Rules of Procedure
This is currently work in progress – SgurrEnergy are aware of and are working to the RoP but implementation in the new online system is partial.
IECRE Operational Documents
This is currently work in progress – SgurrEnergy are aware of and are working to the ODs.
Clarification Sheets
SgurrEnergy has access to the IECRE website and the clarification sheets – more direct access to these will be included in the QMS.
Use of appropriate IEC standards
SgurrEnergy has a Company-wide licence for IEC Standards which was made available to the assessment team.
Current IECRE decisions
SgurrEnergy have access to the IECRE website and the IECRE Decisions – more direct access to these will be included in the QMS.

5 Critical Technical Procedures

Environmental conditions
Please see the attached completed OD checklist for Power Performance Measurements NOTE FROM THE SECRETARIAT: The completed OD Checklist for Power Performance Measurement is retained in the IEC Central Office by the Executive Secretary.

Test methods and method validation
<p>Please see the attached completed OD checklist for Power Performance Measurements</p> <p><i>NOTE FROM THE SECRETARIAT: The completed OD Checklist for Power Performance Measurement is retained in the IEC Central Office by the Executive Secretary.</i></p>
Equipment
<p>Please see the attached completed OD checklist for Power Performance Measurements</p> <p><i>NOTE FROM THE SECRETARIAT: The completed OD Checklist for Power Performance Measurement is retained in the IEC Central Office by the Executive Secretary.</i></p>
Measurement traceability
<p>Please see the attached completed OD checklist for Power Performance Measurements</p> <p><i>NOTE FROM THE SECRETARIAT: The completed OD Checklist for Power Performance Measurement is retained in the IEC Central Office by the Executive Secretary.</i></p>
Sampling
Not Applicable
Handling of test items
<p>Please see the attached completed OD checklist for Power Performance Measurements</p> <p><i>NOTE FROM THE SECRETARIAT: The completed OD Checklist for Power Performance Measurement is retained in the IEC Central Office by the Executive Secretary.</i></p>
Assuring the quality of test results
<p>Please see the attached completed OD checklist for Power Performance Measurements</p> <p><i>NOTE FROM THE SECRETARIAT: The completed OD Checklist for Power Performance Measurement is retained in the IEC Central Office by the Executive Secretary.</i></p>
Reporting the results
<p>Please see the attached completed OD checklist for Power Performance Measurements</p> <p><i>NOTE FROM THE SECRETARIAT: The completed OD Checklist for Power Performance Measurement is retained in the IEC Central Office by the Executive Secretary.</i></p>

6 Proficiency Testing Programmes

SgurrEnergy has recently become members of the MEASNET group having met all of the entrance criteria. The Proficiency Test used for SgurrEnergy's application was reviewed in detail. Whilst there were some outliers in the first version submitted to MEASNET, when discussed during the assessment then this was due to some critical information not being provided to SgurrEnergy and there was a lack of clarity on what was expected of applicants.

Once these issues were addressed then SgurrEnergy were able to satisfy the MEASNET membership criteria.

SgurrEnergy are participating in the current IECRE Proficiency Test being organised by Deutsche WindGuard (as Controller) on behalf of MEASNET.

7 Testing witnessed during the assessment

A site visit was arranged for the Andershaw Wind Farm in the Scottish Borders.

NOTE FROM THE SECRETARIAT: A site-visit and requisite documentation was completed by the assessment team. This documentation is retained in the IEC Central Office by the Executive Secretary.

8 Test reports reviewed during the assessment

Three test reports were reviewed by the Peer prior to the assessment and various technical discussions took place during the visit. The assessment team were satisfied that current IECRE requirements are being met.

NOTE FROM THE SECRETARIAT: The completed OD Checklist for Power Performance Measurement, and the identified Test Reports reviewed, is retained in the IEC Central Office by the Executive Secretary.

9 Number of Non-Conformity Reports issued

Number of NCRs appended	NOTE FROM THE SECRETARIAT: Any NCRs, and their resolution, is retained in the IEC Central Office by the Executive Secretary.
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10 Recommendations of the Assessment Team

This assessment has been a sampling exercise and thus every aspect of the Testing Laboratory'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 organisation for the scope(s) as reported in Annex 1 of this Assessment Report as appropriate.	<input checked="" type="checkbox"/>
2. The Assessment Team recommends acceptance of the assessed organisation 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 organisation 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

The assessment team would like to thank SgurrEnergy staff for their openness and willingness to discuss all aspects of the Scheme's requirements during the assessment. Similarly thanks are due to SgurrEnergy's customers who allowed access to their Reports, the windfarm and also the construction company for permitting access during this installation phase. The attention to site safety was considered to be very comprehensive and an example of very good practice.

The assessment team were also impressed by the local PPT QMS that has been created to deal with the ISO/IEC 17025: 2005 accredited entity within the Company and would suggest that this is probably a good example of current best practice.

11 Signatures of the Assessment Team

Executive Secretary comments: Concurrence with this report by the Assessors noted below has been confirmed and signatures retained in the IEC Central Office, therefore no signatures are needed below.

Date: 2016-12-08

	Printed name	Signature
Lead Assessor	Alistair Mackinnon	
Assessor	Flemming Langhans	

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:

Executive Secretary comments: Concurrence with this report by the representative noted below has been confirmed and his signature is retained in the IEC Central Office, therefore no signature is needed below.

Date: 2016-12-08

	Printed name	Signature
Testing Laboratory Representative	Florin Pintilie	

Annex 1 Assessment Scope

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
IAR	IEC 61400-12-1: 2005	15/3 complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Annex 2 Organisation chart

NOTE FROM THE EXECUTIVE SECRETARY: The Organization Chart was supplied to, and reviewed by, the assessment team, and it is retained in the IEC Central Office by the Executive Secretary.

Annex 3 Accreditation Certificate relevant to the IECRE operations

NOTE FROM THE EXECUTIVE SECRETARY: The Accreditation Certificate was supplied to, and reviewed by, the assessment team, and it is retained in the IEC Central Office by the Executive Secretary.

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

NOTE FROM THE EXECUTIVE SECRETARY: The Independence and Impartiality was assessed by the assessment team and there was objective evidence of compliance. This Annex was completed and it is retained in the IEC Central Office by the Executive Secretary.