

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"/>	DAkKS	Applied for: IEC 61724-1: 2017 and IEC 62446-1: 2016
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 checked="" type="checkbox"/> Solar PV Energy	<input 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 Inspection Body

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

Legal Entity Name	TÜV NORD CERT GmbH
Address	Langemarckstraße 20 D- 45141 Essen Germany
Contact Person	Matthias Böttcher
Email	mboettcher@tuev-nord.de
Tel	+49 201 825-2054
Mobile	+49 160 888-2054
Fax	+49 201 825-696715
Website	www.tuev-nord-cert.de

1.5 Members of the Assessment Team

	Name	Organisation
Lead Assessor	Dr. Martin Deter, QMR	TÜV NORD CERT
Assessor		
Assessor		

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

Main location(s)	Essen (Germany), Langemarckstraße 20, 2017-06-13
If applicable, other location(s)	

1.7 Assessment Base

IECRE 01 Basic Rules
IECRE Rules of Procedure
IECRE ODs
IEC Standards as noted in Annex 1
ISO/IEC 17020

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

2 Organisation

2.1 Brief history of the Inspection Body

The TÜV NORD GROUP (hereinafter referred to as TN GROUP) has concentrated its range of services for the certification and validation of management systems, the certification of persons, the certification and testing of products as well as related inspections at TÜV NORD CERT GmbH (hereinafter referred to as TN CERT). The TÜV NORD GROUP was founded in 2004 by merging RW TÜV, TÜV Hannover-Sachsen-Anhalt and TÜV NORD. Roots of these individual companies as inspection bodies date back to the 1860ies initially for pressure and steam vessels.

The Group operates several Business Units. The here relevant services are delivered from BU Industrial Service.

TN GROUP is a leading service provider for conformity assessments mainly in industry, energy, infrastructure and mobility.

TN CERT is a full service provider in the TIC market and active within BU Industrial Service.

The inspection body of TN CERT has global access to personal and expertise of other TN companies. ISO 17020 accreditations of several TN companies exist.

TN CERT operates test laboratories located in Essen, Hamburg, Hamburg-Harburg and Hanover. It also advises further test laboratories in subsidiary and affiliated companies of the TN GROUP.

TN CERT is active in IECEE and IECEx schemes for many years and therefore familiar with IEC schemes and regulations.

TN CERT is accredited and accepted certification body (NCB) for PV components (IEC 61215, IEC 61215-1, IEC 61215-1-1, IEC 61646, IEC 61730-1, IEC 61730-2, IEC 62108).

TN CERT holds some 130 accreditations, notifications etc. for certification of management systems, products, persons and sustainability as well as product testing.

TN CERT: approx. 420 FTE
TN GROUP: > 10.000 FTE

2.2 National Inspection Marks, Certificates & Programmes

DAkKS accreditation for ISO 17020 (standards in scope see item 1.1) applied for.

2.3 Financial support

The inspection body does not receive any financial support.
All expenses are covered by inspection fees.
TN CERT has met all financial targets in 2016. The annual report has been approved by external accountants BDO (no risks identified, no comments by the accountants).

2.4 Organisation of the Inspection Body

TÜV NORD CERT GmbH is located in the Business Unit Industrial Services within the TÜV NORD AG (see Chart Annex B.1).

In TÜV NORD CERT GmbH there is a division Certification Body (see Chart Annex B.2+3).

RE Inspection is a part of this CB, headed by an Inspection Manager (see Chart Annex B.4).
In the field of RE Inspection there are 3 subsections of disciplines (See Chart Annex B.4).

3 Personnel Structure

NOTE FROM THE SECRETARIAT: For Item 3.3, the inspection 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 Inspection Body	420
Number of people involved with the Inspection activity within the scope of this assessment	16

3.2 Responsible Managers for Inspection

Name	Position (title) and field of expertise	Years of relevant experience	Experience checked & appropriate		To whom do they report?
			Yes	No	
Mrs. Sandra Gerhartz (no Expert Decisions for PV)	Managing Director		<input type="checkbox"/>	<input type="checkbox"/>	Board of BU directors
Mr. Wolfgang Wielpütz (no Expert Decisions for PV)	Managing Director		<input type="checkbox"/>	<input type="checkbox"/>	Board of BU directors
Dr. Klaus Oberste-Lehn (no Expert Decisions for PV)	Head of Certification Division	30	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Managing Director Wolfgang Wielpütz

Name	Position (title) and field of expertise	Years of relevant experience	Experience checked & appropriate		To whom do they report?
			Yes	No	
Mr. Matthias Böttcher	Inspection Scheme Manager Products	23	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Head of Certification Division
Mrs. Mandy Sauer (no Expert Decisions for PV)	Accreditation Manager	6	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Head of Certification Division
Mr. Ryan Xiao	Inspection Manager PV	6	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Inspection Scheme Manager Products
Mr. Stavros Toggias	Deputy Inspection Manager PV	>20	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Inspection Scheme Manager Products

3.3 Principal staff involved in Inspection

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

3.4 Staff involved in the Quality Management System of the Inspection Body

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	
Dr. Martin Deter	Quality Manager	15	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Managing Director Wolfgang Wielpütz

3.5 Assessment of staff competence

Procedure I01-VA-001e describes the designation of staff competency and the qualification of staff. I01-MU-001 for inspection mgr and deputies as well as experts (specialist inspectors); list of qualifications as well as responsibilities in signing reports or making certification decision

Yearly personnel audits for maintenance of qualification done by e.g. inspection mgr who interviews the experts.

Further regular trainings and committee participation etc. – information shared in mgmt. and group meetings. Training plans are maintained for whole career in TÜV Nord.

4 Quality Management System

	Yes	No	N/A
Is the Inspection Body accredited by a reputable Accreditation Body?	<input checked="" type="checkbox"/> applied for IEC 62446, 61724-1	<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		
<p>The quality system of TÜV NORD CERT GmbH (TNC) is structured as following:</p> <ul style="list-style-type: none"> • Quality manual (Rev 17 dated 05.2017) with annexes, general procedures, CERT-VA/ CERT-AA/ CERT-MU • Certification and testing • I00 (General inspection- and standard related documents, I00-VA/AA/MU/F) • I01 (PV related documents, I01-VA/AA/MU/F) <p>The manual fulfils the requirement of DIN EN ISO 9001. Additional requirements from laws ordinances and EC Directives within the framework of the recognition procedure / accreditation procedure (such as, the ISO/IEC 17000 series) are described in the relevant documentation for the corresponding standards.</p>		
General requirements		
4.1.1	Inspection activities shall be undertaken impartially.	QMM, Par 1.1. Introduction TÜV NORD CERT, Par.3.2 Structure/Organisation TN CERT; Policy regarding Impartiality of TÜV NORD CERT GmbH in Internet on Homepage of TN CERT
4.1.2	The inspection body (IB) shall be responsible for the impartiality of its inspection activities and shall not allow commercial, financial or other pressures to compromise impartiality.	QMM, Par 1.1. Introduction TÜV NORD CERT, Par.3.2 Structure/Organisation TN CERT; Policy regarding Impartiality of TÜV NORD CERT GmbH in Internet on Homepage of TN CERT
4.1.3	The IB shall identify risks to its impartiality on an ongoing basis. This shall include those risks that arise from its activities, or from its relationships, or from the relationships of its personnel. However, such relationships do not necessarily present an IB with a risk to impartiality. [→Note]	CERT-210-VA-023 (Analysis of Conflicts of Interest, Impartiality and Confidentiality) CERT-340-F-001e (Declaration (17020, 17021, 17065))
4.1.4	If a risk to impartiality is identified, the IB shall be able to demonstrate how it eliminates or minimizes such risk.	CERT-211-VA-013 (Stakeholder Involvement) incl. Annexes A1, A2 und A3; CERT-210-VA-023 (Analysis of Conflicts of Interest, Impartiality and Confidentiality) here: Advisory Board
4.1.5	The IB shall have top management commitment to impartiality.	QMM, Par 1.1. Introduction TÜV NORD CERT, Par.3.2 Structure/Organisation TN CERT; Policy regarding Impartiality of TÜV NORD CERT GmbH in Internet on Homepage of TN CERT
4.1.6	The IB shall be independent to the extent that is required with regard to the conditions under which it performs its services. Depending on these	CERT-340-F-001e (Declaration (17020, 17021, 17065)) A.1a)

	<p>conditions, it shall meet the minimum requirements stipulated in Annex A, as outlined below.</p> <p>a) An IB providing third party inspections shall meet the type A requirements of Clause A.1 (third party IB).</p> <p>b) An IB providing first party inspections, second party inspections, or both, which forms a separate and identifiable part of an organization involved in the design, manufacture, supply, installation, use or maintenance of the items it inspects and which supplies inspection services only to its parent organization (in-house IB) shall meet the type B requirements of Clause A.2.</p> <p>c) An IB providing first party inspections, second party inspections, or both, which forms an identifiable but not necessarily a separate part of an organization involved in the design, manufacture, supply, installation, use or maintenance of the items it inspects and which supplies inspection services to its parent organization or to other parties, or to both, shall meet the type C requirements of Clause A.3.</p>	<p>A.1b) A.1c) A.1d)</p>
4.2.1	<p>The IB shall be responsible, through legally enforceable commitments, for the management of all information obtained or created during the performance of inspection activities. The IB shall inform the client, in advance, of the information it intends to place in the public domain. Except for information that the client makes publicly available, or when agreed between the IB and the client (e.g. for the purpose of responding to complaints), all other information is considered proprietary information and shall be regarded as confidential. [→Note]</p>	<p>QMM Par. 5.1 - Establishment of responsibilities and authorities, Par. 5.3.1 Communication with the customer declaration (CERT-340-F-001e) resp. contracts (Advisory Board, Evaluators, Reviewer, Inspectors, Management, Admin staff);</p>
4.2.2	<p>When the IB is required by law or authorized by contractual commitments to release confidential information, the client or individual concerned shall, unless prohibited by law, be notified of the information provided.</p>	<p>Testing, Inspection and Certification Regulations</p>
4.2.3	<p>Information about the client obtained from sources other than the client (e.g. complainant, regulators) shall be treated as confidential.</p>	<p>QMM Par. 5.1 - Establishment of responsibilities and authorities, P 03-MU-05e (Vertraulichkeitserklärung)</p>
<p>Structural requirements</p>		
5.1.1	<p>The IB shall be a legal entity, or a defined part of a legal entity, such that it can be held legally responsible for all its inspection activities. [→Note]</p>	<p>Commercial Register local court Essen (HRB 9976)</p>
5.1.2	<p>An IB that is part of a legal entity involved in activities other than inspection shall be identifiable within that entity.</p>	<p>Organisation Charts and IB charts</p>
5.1.3	<p>The IB shall have documentation which describes the activities for which it is competent.</p>	<p>I01-MU-010 Standards for Certification of PV power plant(20170519)</p>
5.1.4	<p>The IB shall have adequate provision (e.g. insurance or reserves) to cover liabilities arising from its operations. [→Note]</p>	<p>Business liability insurance</p>
5.1.5	<p>The IB shall have documentation describing the contractual conditions under which it provides the inspection, except when it provides inspection services to the legal entity of which it is a part.</p>	<p>service description I01-F-0029, I01-F-0030(20170519)</p>
5.2.1	<p>The IB shall be structured and managed so as to safeguard impartiality.</p>	<p>QMM, Par 1.1. Introduction TÜV NORD CERT GmbH, Par. 1.3 Management Declaration and Par. 3.2 Structure/ Organization TN CERT;</p>

		Policy regarding Impartiality of TÜV NORD CERT GmbH in Internet on Homepage of TN CERT;
5.2.2	The IB shall be organized and managed so as to enable it to maintain the capability to perform its inspection activities. [→Note]	I01 VA-001_e I01-MU-003
5.2.3	The IB shall define and document the responsibilities and reporting structure of the organization.	TN Cert-company and CB organization charts; I01 VA-001_e task description (I01-MU-004 Requirement for personnel, inspection manager Appointment letters; TN CERT procedures and work instructions
5.2.4	Where the IB forms a part of a legal entity performing other activities, the relationship between these other activities and inspection activities shall be defined.	Org Charts TN CERT and CB
5.2.5	The IB shall have available one or more person(s) as technical manager(s) who have overall responsibility to ensure that the inspection activities are carried out in accordance with this International Standard. [→Note] The person(s) fulfilling this function shall be technically competent and experienced in the operation of the IB. Where the IB has more than one technical manager, the specific responsibilities of each manager shall be defined and documented.	Appointment as IM
5.2.6	The IB shall have one or more named person(s) who will deputize in the absence of any technical manager responsible for ongoing inspection activities.	Appointment as IM deputy, Org Chart
5.2.7	The IB shall have a job description or other documentation for each position category within its organization involved in inspection activities.	CERT-I01-MU-004 Requirement for personnel for inspector, inspection manager

Resource requirements

6.1.1	The IB shall define and document the competence requirements for all personnel involved in inspection activities, including requirements for education, training, technical knowledge, skills and experience. [→Note]	see I01-MU-004 Requirement for personnel
6.1.2	The IB shall employ, or have contracts with, a sufficient number of persons with the required competencies, including, where needed, the ability to make professional judgements, to perform the type, range and volume of its inspection activities.	employment contracts between legal entities of TNG (forming the IB) and individual employees, service contracts between TNG companies and PersoDB, and see I01-F-0020 Form for competence evidence
6.1.3	The personnel responsible for inspection shall have appropriate qualifications, training, experience and a satisfactory knowledge of the requirements of the inspections to be carried out. They shall also have relevant knowledge of the following: <ul style="list-style-type: none"> – the technology used for the manufacture of the products inspected, the operation of processes and the delivery of services; – the way in which products are used, processes are operated and services are delivered; – any defects which may occur during the use of the product, any failures in the operation of the process and any deficiencies in the delivery of services. They shall understand the significance of deviations found with regard to the normal use of the products, the operation of the processes and the delivery of services.	I01-VA-001, I01-MU-001(Appointment and competences of personnel, Signature authority)

6.1.4	The IB shall make clear to each person their duties, responsibilities and authorities.	I01-MU-001(Appointment and competences of personnel, Signature authority)
6.1.5	The IB shall have documented procedures for selecting, training, formally authorizing, and monitoring inspectors and other personnel involved in inspection activities.	I01-VA-001
6.1.6	The documented procedures for training (see 6.1.5) shall address the following stages: a) an induction period; b) a mentored working period with experienced inspectors; c) continuing training to keep pace with developing technology and inspection methods.	I01-VA-001
6.1.7	The training required shall depend upon the ability, qualifications and experience of each inspector and other personnel involved in inspection activities, and upon the results of monitoring (see 6.1.8).	I01-VA-001
6.1.8	Personnel familiar with the inspection methods and procedures shall monitor all inspectors and other personnel involved in inspection activities for satisfactory performance. Results of monitoring shall be used as a means of identifying training needs (see 6.1.7). [→Note]	I01-VA-001
6.1.9	Each inspector shall be observed on-site, unless there is sufficient supporting evidence that the inspector is continuing to perform competently. [→Note]	I01-VA-001
6.1.10	The IB shall maintain records of monitoring, education, training, technical knowledge, skills, experience and authorization of each member of its personnel involved in inspection activities.	Archive PersoDB, I01-MU-001 Appointment and competences of personnel, Signature authority
6.1.11	The personnel involved in inspection activities shall not be remunerated in a way that influences the results of inspections.	CERT-340-F-001 (declaration (17020, 17021, 17065)); Employee's contract
6.1.12	All personnel of the IB, either internal or external, that could influence the inspection activities shall act impartially.	CERT-340-F-001
6.1.13.	All personnel of the IB, including sub-contractors, personnel of external bodies, and individuals acting on the IB's behalf, shall keep confidential all information obtained or created during the performance of the inspection activities, except as required by law.	Par. 5.3.1 Communication with the customer
6.2.1	The IB shall have available, suitable and adequate facilities and equipment to permit all activities associated with the inspection activities to be carried out in a competent and safe manner. [→Note]	I01-MU-008/CERT-I01-MU-009 HSE in a separate AA
6.2.2	The IB shall have rules for the access to, and the use of, specified facilities and equipment used to perform inspections.	I01-F-0105
6.2.3	The IB shall ensure the continued suitability of the facilities and the equipment mentioned in 6.2.1 for their intended use.	I01-MU-008 Equipment control
6.2.4	All equipment having a significant influence on the results of the inspection shall be defined and, where appropriate, uniquely identified	I01-F-0105 List of Equipment
6.2.5	All equipment (see 6.2.4) shall be maintained in accordance with documented procedures and instructions.	I01-MU-008 Equipment control
6.2.6	Where appropriate, measurement equipment having a significant influence on the results of the inspection shall be calibrated before being put into service, and thereafter calibrated according to an established programme.	I01-MU-008 Equipment control

6.2.7	The overall programme of calibration of equipment shall be designed and operated so as to ensure that, wherever applicable, measurements made by the IB are traceable to national or international standards of measurement, where available. Where traceability to national or international standards of measurement is not applicable, the IB shall maintain evidence of correlation or accuracy of inspection results.	I01-MU-008 Equipment control
6.2.8	Reference standards of measurement held by the IB shall be used for calibration only and for no other purpose. Reference standards of measurement shall be calibrated providing traceability to a national or international standard of measurement.	I01-MU-008 Equipment control
6.2.9	Where relevant, equipment shall be subjected to in-service checks between regular recalibrations.	I01-MU-008 Equipment control
6.2.10	Reference materials shall, where possible, be traceable to national or international reference materials, where they exist.	N/A
6.2.11	Where relevant for the outcome of inspection activities, the IB shall have procedures for the following: – selection and approval of suppliers; – verification of incoming goods and services; – ensuring appropriate storage facilities.	TN CERT Sharepoint qualified suppliers (http://tncertportal.tuev-nord.de/SiteDirectory/TNCERT-qualifizierte-Lieferanten/SitePages/Homepage.aspx)
6.2.12	Where applicable, the condition of stored items shall be assessed at appropriate intervals to detect deterioration.	see 6.2.11
6.2.13	If the IB uses computers or automated equipment in connection with inspections, it shall ensure that: a) computer software is adequate for use; [→Note] b) procedures are established and implemented for protecting the integrity and security of data; c) computer and automated equipment is maintained in order to ensure proper functioning.	I01-AA-0016 In-house calculation methods of measurement and its validation, I01-F-0028 Evaluation records for in-house methods of test and their validation
6.2.14	The IB shall have documented procedures for dealing with defective equipment. Defective equipment shall be removed from service by segregation, prominent labeling or marking. The IB shall examine the effect of defects on previous inspections and, when necessary, take appropriate corrective action.	CERT-121-VA016 (Corrective, Preventive and Improvement Action); I01-MU-008 Equipment control
6.2.15	Relevant information on the equipment, including software, shall be recorded. This shall include identification and, where appropriate, information on calibration and maintenance.	I01-F-0105 List of Equipment
6.3	Subcontracting	n.a.
Process requirements		
7.1.1	The IB shall use the methods and procedures for inspection which are defined in the requirements against which inspection is to be performed. Where these are not defined, the IB shall develop specific methods and procedures to be used (see 7.1.3). The IB shall inform the client if the inspection method proposed by the client is considered to be inappropriate. [→Note]	I01-VA-001 ~ I01-VA-003 All the Procedure
7.1.2	The IB shall have and shall use adequate documented instructions on inspection planning and on sampling and inspection techniques, where the absence of such instructions could jeopardize the effectiveness of the inspection process. Where applicable, the IB shall have	I01-AA-001 ~ I01-AA-019 All the work instruction

	sufficient knowledge of statistical techniques to ensure statistically sound sampling procedures and the correct processing and interpretation of results.	
7.1.3	When the IB has to use inspection methods or procedures which are non-standard, such methods and procedures shall be appropriate and fully documented. [→Note]	I01-AA-001 ~ I01-AA-019 All the work instruction
7.1.4	All instructions, standards or written procedures, worksheets, check lists and reference data relevant to the work of the IB shall be maintained up-to-date and be readily available to the personnel.	I01-MU-000
7.1.5	The IB shall have a contract or work order control system which ensures that: a) work to be undertaken is within its expertise and that the organization has adequate resources to meet the requirements; [→Note] b) the requirements of those seeking the IB's services are adequately defined and that special conditions are understood, so that unambiguous instructions can be issued to personnel performing the duties to be required; c) work being undertaken is controlled by regular review and corrective action; d) the requirements of the contract or work order have been met.	I01-F-0029 , I01-F-0029, I01-MU-005, I01-F-0016, I01-F-0017
7.1.6	When the IB uses information supplied by any other party as part of the inspection process, it shall verify the integrity of such information.	I01-VA-001
7.1.7	Observations or data obtained in the course of inspections shall be recorded in a timely manner so as to prevent loss of relevant information.	QMM Par. 5.2.3 Record Control; CERT-410-VA-009 (Record Control);
7.1.8	Calculations and data transfers shall be subject to appropriate checks. [→Note]	I01-VA-001, I01-AA-0016, I01-MU-005
7.1.9	The IB shall have documented instructions for carrying out inspection in a safe manner.	I01-MU-009
7.2.1	The IB shall ensure items and samples to be inspected are uniquely identified in order to avoid confusion regarding the identity of such items and samples.	I01-VA-001
7.2.2	The IB shall establish whether the item to be inspected has been prepared.	I01-VA-001
7.2.3	Any apparent abnormalities notified to, or noticed by, the inspector shall be recorded. Where there is any doubt as to the item's suitability for the inspection to be carried out, or where the item does not conform to the description provided, the IB shall contact the client before proceeding.	I01-F-0022 Nonconforming Work Report
7.2.4	The IB shall have documented procedures and appropriate facilities to avoid deterioration or damage to inspection items while under its responsibility.	I01-MU-008
7.3.1	The IB shall maintain a record system (see 8.4) to demonstrate the effective fulfilment of the inspection procedures and to enable an evaluation of the inspection.	CERT-410-VA-009 (Record Control)
7.3.2	The inspection report or certificate shall be internally traceable to the inspector(s) who performed the inspection.	CERT-410-VA-009 (Record Control)
7.4.1	The work carried out by the IB shall be covered by a retrievable inspection report or inspection certificate.	QMM Par. 5.3.2 Order handling; CERT-410-VA-009 (Record Control); I01-VA-002~I01-VA-003
7.4.2	Any inspection report/certificate shall include all of the following: a) identification of the issuing body;	I01-F-0023~I01-F-0026(Template)

	<ul style="list-style-type: none"> b) unique identification and date of issue; c) date(s) of inspection; d) identification of the item(s) inspected; e) signature or other indication of approval, by authorized personnel; f) a statement of conformity where applicable; g) the inspection results, except where detailed in accordance with 7.4.3. <p>[→Note]</p>	
7.4.3	An IB shall issue an inspection certificate that does not include the inspection results [see 7.4.2 g)] only when the IB can also produce an inspection report containing the inspection results, and when both the inspection certificate and inspection report are traceable to each other.	I01-F-0023~I01-F-0026(Template)
7.4.4	All information listed in 7.4.2 shall be reported correctly, accurately, and clearly. Where the inspection report or inspection certificate contains results supplied by subcontractors, these results shall be clearly identified.	I01-F-0023~I01-F-0026(Template)
7.4.5	Corrections or additions to an inspection report or inspection certificate after issue shall be recorded in accordance with the relevant requirements of this subclause (7.4). An amended report or certificate shall identify the report or certificate replaced.	I01-MU-005, I01-F-0022
7.5.1	The IB shall have a documented process to receive, evaluate and make decisions on complaints and appeals.	QMM Par. 5.3.8: Nonconformities, Complaints and Appeals; CERT-120-VA-012 (Complaints and appeal management); IT-Tool/ Sharepoint complaint management,
7.5.2	A description of the handling process for complaints and appeals shall be available to any interested party upon request.	CERT-120-VA-012 (Complaints and appeal management);
7.5.3	Upon receipt of a complaint, the IB shall confirm whether the complaint relates to inspection activities for which it is responsible and, if so, shall deal with it.	CERT-120-VA-012 (Complaints and appeal management);
7.5.4	The IB shall be responsible for all decisions at all levels of the handling process for complaints and appeals.	CERT-120-VA-012 (Complaints and appeal management);
7.5.5	Investigation and decision on appeals shall not result in any discriminatory actions.	CERT-120-VA-012 (Complaints and appeal management);
7.6.1	The handling process for complaints and appeals shall include at least the following elements and methods: <ul style="list-style-type: none"> a) a description of the process for receiving, validating, investigating the complaint or appeal, and deciding what actions are to be taken in response to it; b) tracking and recording complaints and appeals, including actions undertaken to resolve them; c) ensuring that any appropriate action is taken. 	CERT-120-VA-012 (Complaints and appeal management);
7.6.2	The IB receiving the complaint or appeal shall be responsible for gathering and verifying all necessary information to validate the complaint or appeal.	CERT-120-VA-012 (Complaints and appeal management);
7.6.3	Whenever possible, the IB shall acknowledge receipt of the complaint or appeal, and shall provide the complainant or appellant with progress reports and the outcome.	CERT-120-VA-012 (Complaints and appeal management);
7.6.4	The decision to be communicated to the complainant or appellant shall be made by, or reviewed and approved by, individual(s) not involved in the original inspection activities in question.	CERT-120-VA-012 (Complaints and appeal management);
7.6.5	Whenever possible, the IB shall give formal notice of	CERT-120-VA-012 (Complaints and appeal

	the end of the complaint and appeals handling process to the complainant or appellant.	management);
Management system requirements		
8 Management system requirements		
<input type="checkbox"/>	Option A	General management system requirements (according to 8.2 up to 8.8)
<input checked="" type="checkbox"/>	Option B	Management system requirements in accordance with ISO 9001 (according 8.2 up to 8.8)

IECRE Rules of Procedure
I01-VA-004
IECRE Operational Documents
I01-VA-004
Clarification Sheets
I01-VA-004
Use of appropriate IEC standards
I01-VA-004
Current IECRE decisions
I01-VA-004

5 Training

Training: "Introduction in Design, Construction & Certification (EN 62446:2009) of Grid Connected P.V. Systems."

I01-F-0018, I01-VA-001,
Training records of Ryan Xiao checked.

6 Inspection files reviewed during the assessment

1. Apollo Solar Development Pakistan Limited
2. Best Green Energy Pakistan Limited
3. Crest Energy Pakistan Limited.

7 Number of Non-Conformity Reports issued

Number of NCRs appended	0
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8 Recommendations of the Assessment Team

This assessment has been a sampling exercise and thus every aspect of the Inspection Body'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"/>

8.1 Additional Information

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9 Signatures of the Assessment Team

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

Date: 2017-06-13

	Printed name	Signature
Lead Assessor	Dr. Martin Deter	

10 Acknowledgement by the assessed organization

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.

- 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: 2017-06-13

	Printed name	Signature
Inspection Body Representative	Matthias Böttcher	

Annex 1 Assessment Scope

Type of assessment (IAR, EAR, FAR, RAR)	Standard	Number of Test Certificates issued during the last three years / test certificates reviewed during the assessment	Sufficient expertise demonstrated	
			Yes	No
IAR	IEC 61724-1:2017	0/0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IAR	IEC 62446-1:2016	3/3	<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: This Annex applies only to REIBs which have not already been assessed against it. If this Annex has been completed at least once and the organization is accredited according to ISO/IEC 17020, this Annex does not have to be completed again, except for clause 0.

0. Compliance with ISO/IEC 17020	Yes	No
The IB has a valid accreditation to ISO/IEC 17020.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1. General Operating Procedure	Yes	No
Does the Inspection 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 checked="" type="checkbox"/>	<input type="checkbox"/>
Document title: TN CERT QMM, CERT-340-F001		

2. Reference Document	Yes	No
Does the Body have access to ISO/IEC 17020:2012	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Does the Body have access to ISO/IEC 17025:2005	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3. Knowledge, training and decision making	Yes	No
Does the Body's staff have knowledge of the basic concepts of independence and impartiality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were the training records of the Body's staff checked?	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>
Names of person(s):		
Were examples of training programs of the Body's staff reviewed and found to be sufficient?	<input checked="" 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 checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>
Are the Body's decisions influenced by other interests or parties?	<input type="checkbox"/>	<input checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" type="checkbox"/>	
Is the Body linked to an organization that provides “commercial” consultancy services?	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the Body’s Inspection staff participate in “commercial consultancy”?	<input type="checkbox"/>	<input checked="" 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 checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>