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IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE System)

Industrial Cyber Security Program

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CONTENTS

FOREWORD

Document Owner

CMC TF “Cyber Security”

History of changes

Revision Date	Brief summary of changes
2016-11-28	N/A, new document
2018-02-07	Clause 2 has been updated to reference the latest edition of IECEE 02. Inclusion of additional standards under subclause 3.2

Effective date	Next maintenance due date
2018-06-05	2021-06-05

IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE)

1. Scope

This publication contains the Rules of Procedure for the IECEE Industrial Cyber Security Program. The service is intended to provide a framework for assessments in accordance with the IEC 62443 Security for industrial automation and control systems series of standards to result in an IECEE Certificate of Conformity - Industrial Cyber Security Capability.

The IEC 62443 series of standards generally specify requirements for security capabilities. These capabilities may be technical capabilities (security mechanisms) or process capabilities (human procedures).

IEC 62443 conformance assessment consists of the evaluation of an Applicant's security capabilities that it uses to develop, integrate and/or maintain specific products or solutions. Two evaluations can be conducted:

1) To evaluate an applicant's ability to provide IEC 62443 compliant security capabilities. This assessment focuses on evidence that supports the Applicant's submittal. This submittal contains the specific requirements and the processes used to implement the security capabilities for which they are requesting to be assessed.
2) To evaluate that these capabilities have been applied to either:
   a) a specific product or
   b) a specific solution.

2. Normative References

The following publication contain provisions which, through reference in this text, constitute modification of these Rules of Procedure.

IECEE 02: Edition 17.0 2017-05 *IECEE Rules of Procedure - CB Scheme*

IEC 62443 (series) *Security for industrial automation and control systems*

3. Rules

The IECEE Industrial Cyber Security Program is operated following the same basic rules of the CB Scheme as specified in *IECEE 02 Part I* and its related Operational Documents (ODs) and Administrative Documents (ADs) with the following additional considerations.

Note: In this case, Test Results relate to the assessment of supporting evidence for security capabilities required by IEC 62443 and the application of those capabilities.

In addition, the following apply:

3.1 Participation

Participation in the IECEE Industrial Cyber Security Program does not require NCBs to be Recognizing NCBs before they can become Issuing NCBs. However, NCBs are encouraged to participate as Recognizing NCBs even if they are not Issuing NCBs.

Members and other interested stakeholders may determine the suitability and potential further use of this program. As a result, specification of National differences is not applicable.

3.2 Certificate of Conformity - Industrial Cyber Security Capability

The deliverable to be issued as a result of the IECEE Industrial Cyber Security Program is a Certificate of Conformity – Industrial Cyber Security Capability. A Certificate is associated with a supporting IECEE Test Report. The report is not valid as an IECEE Test Report unless signed by an approved CB Testing Laboratory and appended to a Certificate issued by an NCB in accordance with this operational document.

This certificate can be issued by an NCB under two scenarios:

1) Scenario 1 – Capability Assessment: An assessment of a set of technical capabilities (IEC 62443-3-3, IEC 62443-4-2) or process-oriented capabilities (IEC 62443-2-4, IEC 62443-4-1)
2) Scenario 2 – Application of Capabilities Assessment: Use of a Scenario 1 process-oriented capability for a specific product or solution

Within this program, the Scenarios apply as follows for the IEC 62443 series of standards (greyed-out cells mean not applicable):

	IEC 62443-2-4	IEC 62443-3-3	IEC 62443-4-1	IEC 62443-4-2 (Future Consideration)
Process	✓ Scenario 1		✓ Scenario 1	
Product	✓ Scenario 1*	✓ Scenario 1* Optionally in conjunction with an IEC 62443-4-1 Scenario 2 certificate***	✓ Scenario 2 possibly in conjunction with an IEC 62443-3-3 or IEC 62443-4-2 Scenario 1 certificate**	✓ Scenario 1* in conjunction with an IEC 62443-4-1 Scenario 2 certificate****
Solution	✓ Scenario 2			

* Note – Product in this instance refers to a product/component as it contributes to a solution.

**Note – An IEC 62443-4-1 Application of Capability certificate of conformity for a product may be issued in conjunction with an IEC 62443-3-3 or IEC 62443-4-2 Scenario 1 certificate of conformity for that product, or for a product that meets non-IEC 62443 technical security requirements.

***Note – A product certificate of conformity for a control system may optionally be issued in conjunction with an IEC 62443-4-1 Scenario 2 certificate of conformity for that control system.

**** Note - A product certificate of conformity for a control system component must be issued in conjunction with an IEC 62443-4-1 Scenario 2 certificate of conformity for that component.

In summary, the following types of certificates of conformity are defined:

- Product Capability Assessment (IEC 62443-2-4, IEC 62443-3-3, IEC 62443-4-2)
- Process Capability Assessment (IEC 62443-2-4, IEC 62443-4-1)
- Solution Capability Assessment (future consideration)
- Product Application of Capabilities Assessment (IEC 62443-4-1)
- Process Application of Capabilities Assessment (future consideration)
- Solution Application of Capabilities Assessment (IEC 62443-2-4)

3.3 IECEE Industrial Cyber Security Program Operation

3.3.1 Scoping of Submittal

The Applicant is responsible for both identifying the standards within the IEC 62443 series to be utilized in their assessment and for selecting the specific security requirements from the identified standards that are to be evaluated within the scope of the assessment. In addition, the Applicant may be required to identify the product(s) or solution to which the assessment applies.

Note: It is not required to select all security requirements from the identified standard. The Applicant selects the specific requirements for which they are requesting to be assessed.

3.3.2 Supporting Evidence

As part of the submittal, the Applicant completes the applicable portions of a Test Report Form (TRF) and additionally provides evidence in support of the capabilities that are intended to demonstrate compliance to the selected requirement(s).

3.3.3 Assessment

In performing the assessment, each selected IEC 62443 security requirement is evaluated against the supporting evidence supplied by the Applicant to determine compliance.

3.4 Expert Task Force (ETF)

Based on the needs for specific technical expertise for this service, a CTL ETF for the IEC 62443 series of cyber security standards shall be maintained.

A primary responsibility of the ETF is to ensure the consistent interpretation and application of IEC 62443 requirements by all NCBs/CBTLs.

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