1 Scope

The scope of this document is to address and provide guidance on the countermeasures used to reduce the likelihood of a security breach of the SIS that degrades its ability to perform its function(s). This relates to cybersecurity from both inside and outside the plant boundary.

The scope does not address physical plant protection (for example, fences, cameras, and grounding), but does address physical issues related to cybersecurity of the SIS (section 8.2 of this technical report).

2 References

The following referenced documents are important for understanding this technical report. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

In addition, readers should be aware of the ongoing development of additional standards in the ISA/IEC 62443 series, *Security for Industrial Automation and Control Systems*, beyond those listed below. For an update on the status of these standards, visit www.isa99.org.

- ANSI/ISA-84.00.01-2004 Part 1 (IEC 61511-1 Mod), *Functional Safety: Safety Instrumented Systems for the Process Industry Sector – Part 1: Framework, Definitions, System, Hardware and Software Requirements*
- IEC 61511-1, *Functional Safety: Safety Instrumented Systems for the Process Industry Sector – Part 1: Framework, Definitions, System, Hardware and Software Requirements*
- ANSI/ISA-62443-3-3 (99.03.03)-2013, *Security for Industrial Automation and Control Systems Part 3-3: System Security Requirements and Security Levels*
- ANSI/ISA-62443-2-1 (99.02.01)-2009, *Security for Industrial Automation and Control Systems Part 2-1: Establishing an Industrial Automation and Control Systems Security Program*
- ANSI/ISA-62443-1-1 (99.01.01)-2007, *Security for Industrial Automation and Control Systems Part 1: Terminology, Concepts, and Models*

3 Terms, definitions, abbreviated terms, acronyms, and conventions

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 61511, ANSI/ISA-84.00.01-2004, and ANSI/ISA-62443-1-1 apply (see references above).

3.2 Abbreviated terms and acronyms

The abbreviated terms and acronyms used in this document are defined as follows:

ANSI	American National Standards Institute
BPCS	Basic Process Control System
EMC	Electromagnetic Compatibility
FAT	Factory Acceptance Testing
H&RA	Hazard and Risk Assessment
HMI	Human Machine Interface