

Standard Development Timeline

This section is maintained by the drafting team during the development of the standard and will be removed when the standard is adopted by the NERC Board of Trustees (Board).

Description of Current Draft

This is the initial draft of proposed standard.

Completed Actions	Date
Standards Committee (SC) approved Standard Authorization Request (SAR) for posting	March 9, 2016
SAR posted for comment	March 23–April 21, 2016
SAR posted for comment	June 1–June 30, 2016
SC Accepted the SAR	July 20, 2016
45-day formal comment period with ballot	January 21–February 8, 2021

Anticipated Actions	Date
45-day formal comment period with ballot	May 11–June 24, 2021
45-day formal comment period with ballot	August 3–September 16, 2021
Final Ballot	October 19–28, 2021
Board adoption	November 4, 2021

A. Introduction

1. **Title:** Cyber Security - Supply Chain Risk Management
2. **Number:** CIP-013-~~32~~
3. **Purpose:** To mitigate cyber security risks to the reliable operation of the Bulk Electric System (BES) by implementing security controls for supply chain risk management of BES Cyber Systems and their associated cyber systems.
4. **Applicability:**
 - 4.1. **Functional Entities:** For the purpose of the requirements contained herein, the following list of functional entities will be collectively referred to as “Responsible Entities.” For requirements in this standard where a specific functional entity or subset of functional entities are the applicable entity or entities, the functional entity or entities are specified explicitly.
 - 4.1.1. **Balancing Authority**
 - 4.1.2. **Distribution Provider** that owns one or more of the following Facilities, systems, and equipment for the protection or restoration of the BES:
 - 4.1.2.1. Each underfrequency Load shedding (UFLS) or undervoltage Load shedding (UVLS) system that:
 - 4.1.2.1.1. Is part of a Load shedding program that is subject to one or more requirements in a NERC or Regional Reliability Standard; and
 - 4.1.2.1.2. Performs automatic Load shedding under a common control system owned by the Responsible Entity, without human operator initiation, of 300 MW or more.
 - 4.1.2.2. Each Remedial Action Scheme (RAS) where the RAS is subject to one or more requirements in a NERC or Regional Reliability Standard.
 - 4.1.2.3. Each Protection System (excluding UFLS and UVLS) that applies to Transmission where the Protection System is subject to one or more requirements in a NERC or Regional Reliability Standard.
 - 4.1.3. **Generator Operator**
 - 4.1.4. **Generator Owner**
 - 4.1.5. **Reliability Coordinator**
 - 4.1.6. **Transmission Operator**
 - 4.1.7. **Transmission Owner**

4.2. Facilities: For the purpose of the requirements contained herein, the following Facilities, systems, and equipment owned by each Responsible Entity in 4.1 above are those to which these requirements are applicable. For requirements in this standard where a specific type of Facilities, system, or equipment or subset of Facilities, systems, and equipment are applicable, these are specified explicitly.

4.2.1. Distribution Provider: One or more of the following Facilities, systems and equipment owned by the Distribution Provider for the protection or restoration of the BES:

4.2.1.1. Each UFLS or UVLS System that:

4.2.1.1.1. Is part of a Load shedding program that is subject to one or more requirements in a NERC or Regional Reliability Standard; and

4.2.1.1.2. Performs automatic Load shedding under a common control system owned by the Responsible Entity, without human operator initiation, of 300 MW or more.

4.2.1.2. Each RAS where the RAS is subject to one or more requirements in a NERC or Regional Reliability Standard.

4.2.1.3. Each Protection System (excluding UFLS and UVLS) that applies to Transmission where the Protection System is subject to one or more requirements in a NERC or Regional Reliability Standard.

4.2.1.4. Each Cranking Path and group of Elements meeting the initial switching requirements from a Blackstart Resource up to and including the first interconnection point of the starting station service of the next generation unit(s) to be started.

4.2.2. Responsible Entities listed in 4.1 other than Distribution Providers: All BES Facilities.

4.2.3. Exemptions: The following are exempt from Standard CIP-013-~~32~~:

4.2.3.1. Cyber ~~Assets-systems~~ at Facilities regulated by the Canadian Nuclear Safety Commission.

4.2.3.2. Cyber ~~Assets-systems~~ associated with communication ~~networks and data communication-links between discrete Electronic Security Perimeters (ESPs)~~ logically isolated from, but not providing logical isolation for, BES Cyber Systems (BCS) or Shared Cyber Infrastructure (SCI).

4.2.3.3. Cyber systems associated with communication links between Cyber Assets, Virtual Cyber Assets, or SCI performing logical isolation that extends to one or more geographic locations.

~~4.2.3.3.~~4.2.3.4. The systems, structures, and components that are regulated by the Nuclear Regulatory Commission under a cyber security plan pursuant to 10 C.F.R. Section 73.54.

~~4.2.3.4.~~4.2.3.5. For Distribution Providers, the systems and equipment that are not included in section 4.2.1 above.

~~4.2.3.5.~~4.2.3.6. Responsible Entities that identify that they have no BES Cyber Systems categorized as high impact or medium impact according to the identification and categorization process required by CIP-002 or any subsequent version of that Reliability Standard.

5. **Effective Date:** See “Project 2016-02 Virtualization Implementation Plan.” ~~for Project 2019-03.~~

B. Requirements and Measures

- R1.** Each Responsible Entity shall develop one or more documented supply chain cyber security risk management plan(s) for high and medium impact ~~BES Cyber Systems~~, ~~and~~ their associated Electronic Access Control or Monitoring Systems (EACMS), ~~and~~ Physical Access Control Systems (PACS), and the SCI hosting high or medium impact BCS or their associated Electronic Access Controlling or Monitoring System (EACMS) or Physical Access Control System (PACS). The plan(s) shall include: *[Violation Risk Factor: Medium] [Time Horizon: Operations Planning]*
- 1.1.** One or more process(es) used in planning for the procurement of ~~SCI, BES Cyber Systems~~BCS, and their associated EACMS and PACS to identify and assess cyber security risk(s) to the Bulk Electric System (BES) from vendor products or services resulting from: (i) procuring and installing vendor equipment and software; and (ii) transitions from one vendor(s) to another vendor(s).
 - 1.2.** One or more process(es) used in procuring ~~SCI, BES Cyber Systems~~BCS, and their associated EACMS and PACS, that address the following, as applicable:
 - 1.2.1.** Notification by the vendor of vendor-identified incidents related to the products or services provided to the Responsible Entity that pose cyber security risk to the Responsible Entity;
 - 1.2.2.** Coordination of responses to vendor-identified incidents related to the products or services provided to the Responsible Entity that pose cyber security risk to the Responsible Entity;
 - 1.2.3.** Notification by vendors when remote or onsite access should no longer be granted to vendor representatives;
 - 1.2.4.** Disclosure by vendors of known vulnerabilities related to the products or services provided to the Responsible Entity;
 - 1.2.5.** Verification of software integrity and authenticity of all software and patches provided by the vendor for use in the ~~SCI, BES Cyber System~~BCS and their associated EACMS and PACS; and
 - 1.2.6.** Coordination of controls for vendor-initiated remote access.
- M1.** Evidence shall include one or more documented supply chain cyber security risk management plan(s) as specified in the Requirement.
- R2.** Each Responsible Entity shall implement its supply chain cyber security risk management plan(s) specified in Requirement R1. *[Violation Risk Factor: Medium] [Time Horizon: Operations Planning]*

Note: Implementation of the plan does not require the Responsible Entity to renegotiate or abrogate existing contracts (including amendments to master agreements and purchase orders). Additionally, the following issues are beyond the

scope of Requirement R2: (1) the actual terms and conditions of a procurement contract; and (2) vendor performance and adherence to a contract.

- M2.** Evidence shall include documentation to demonstrate implementation of the supply chain cyber security risk management plan(s), which could include, but is not limited to, correspondence, policy documents, or working documents that demonstrate use of the supply chain cyber security risk management plan.
- R3.** Each Responsible Entity shall review and obtain CIP Senior Manager or delegate approval of its supply chain cyber security risk management plan(s) specified in Requirement R1 at least once every 15 calendar months. *[Violation Risk Factor: Medium] [Time Horizon: Operations Planning]*
- M3.** Evidence shall include the dated supply chain cyber security risk management plan(s) approved by the CIP Senior Manager or delegate(s) and additional evidence to demonstrate review of the supply chain cyber security risk management plan(s). Evidence may include, but is not limited to, policy documents, revision history, records of review, or workflow evidence from a document management system that indicate review of supply chain risk management plan(s) at least once every 15 calendar months; and documented approval by the CIP Senior Manager or delegate.

C. Compliance

1. Compliance Monitoring Process

1.1. Compliance Enforcement Authority:

“Compliance Enforcement Authority” (CEA) means NERC or the Regional Entity, or any entity as otherwise designated by an Applicable Governmental Authority, in their respective roles of monitoring and/or enforcing compliance with mandatory and enforceable Reliability Standards in their respective jurisdictions.

1.2. Evidence Retention:

The following evidence retention period(s) identify the period of time an entity is required to retain specific evidence to demonstrate compliance. For instances where the evidence retention period specified below is shorter than the time since the last audit, the CEA may ask an entity to provide other evidence to show that it was compliant for the full time period since the last audit.

The Responsible Entity shall keep data or evidence to show compliance as identified below unless directed by its CEA to retain specific evidence for a longer period of time as part of an investigation.

- Each Responsible Entity shall retain evidence of each requirement in this standard for three calendar years.
- If a Responsible Entity is found non-compliant, it shall keep information related to the non-compliance until mitigation is complete and approved or for the time specified above, whichever is longer.
- The CEA shall keep the last audit records and all requested and submitted subsequent audit records.

1.3. Compliance Monitoring and Enforcement Program

As defined in the NERC Rules of Procedure, “Compliance Monitoring and Enforcement Program” refers to the identification of the processes that will be used to evaluate data or information for the purpose of assessing performance or outcomes with the associated Reliability Standard.

Violation Severity Levels

R #	Violation Severity Levels			
	Lower VSL	Moderate VSL	High VSL	Severe VSL
R1.	<p>The Responsible Entity developed one or more documented supply chain cyber security risk management plan(s) which include the use of process(es) in planning for procurement of BES Cyber Systems, and their associated EACMS and PACS<u>BES Cyber Systems, and their associated EACMS, PACS, and SCI</u>, to identify and assess cyber security risk(s) to the BES as specified in Part 1.1, and include the use of process(es) for procuring BES Cyber Systems and their associated EACMS and PACS<u>BES Cyber Systems, and their associated EACMS, PACS, and SCI</u>, as specified in Part 1.2, but the plans do not include one of the parts</p>	<p>The Responsible Entity developed one or more documented supply chain cyber security risk management plan(s) which include the use of process(es) in planning for procurement of BES Cyber Systems, and their associated EACMS and PACS<u>BES Cyber Systems, and their associated EACMS, PACS, and SCI</u>, to identify and assess cyber security risk(s) to the BES as specified in Part 1.1, and include the use of process(es) for procuring BES Cyber Systems and their associated EACMS and PACS<u>BES Cyber Systems, and their associated EACMS, PACS, and SCI</u>, as specified in Part 1.2, but the plans do not include two or more of the parts in <u>Requirement R1</u></p>	<p>The Responsible Entity developed one or more documented supply chain cyber security risk management plan(s), but the plan(s) did not include the use of process(es) in planning for procurement of BES Cyber Systems, and their associated EACMS and PACS<u>BES Cyber Systems, and their associated EACMS, PACS, and SCI</u>, to identify and assess cyber security risk(s) to the BES as specified in Part 1.1, or the plan(s) did not include the use of process(es) for procuring BES Cyber Systems and their associated EACMS and PACS<u>BES Cyber Systems, and their associated EACMS, PACS, and SCI</u>, as specified in <u>Requirement R1</u> Part 1.2.</p>	<p>The Responsible Entity developed one or more documented supply chain cyber security risk management plan(s), but the plan(s) did not include the use of process(es) in planning for procurement of BES Cyber Systems, and their associated EACMS and PACS<u>BES Cyber Systems, and their associated EACMS, PACS, and SCI</u>, to identify and assess cyber security risk(s) to the BES as specified in Part 1.1, and the plan(s) did not include the use of process(es) for procuring BES Cyber Systems and their associated EACMS and PACS<u>BES Cyber Systems, and their associated EACMS, PACS, and SCI</u>, as specified in <u>Requirement R1</u> Part 1.2.</p>

R #	Violation Severity Levels			
	Lower VSL	Moderate VSL	High VSL	Severe VSL
	in <u>Requirement R1</u> Part 1.2.1 through Part 1.2.6.	Part 1.2.1 through Part 1.2.6.		OR The Responsible Entity did not develop one or more documented supply chain cyber security risk management plan(s) as specified in the Requirement.
R2.	The Responsible Entity implemented its supply chain cyber security risk management plan(s) including the use of process(es) in planning for procurement of BES Cyber Systems, and their associated EACMS and PACSBES Cyber Systems, and their associated EACMS, PACS, and SCI , to identify and assess cyber security risk(s) to the BES as specified in Requirement R1 Part 1.1, and including the use of process(es) for procuring BES Cyber	The Responsible Entity implemented its supply chain cyber security risk management plan(s) including the use of process(es) in planning for procurement of BES Cyber Systems, and their associated EACMS and PACSBES Cyber Systems, and their associated EACMS, PACS, and SCI , to identify and assess cyber security risk(s) to the BES as specified in Requirement R1 Part 1.1, and including the use of process(es) for procuring BES Cyber	The Responsible Entity implemented its supply chain cyber security risk management plan(s), but did not implement the use of process(es) in planning for procurement of BES Cyber Systems, and their associated EACMS and PACSBES Cyber Systems, and their associated EACMS, PACS, and SCI , to identify and assess cyber security risk(s) to the BES as specified in Requirement R1 Part 1.1, or did not implement the use of process(es) for procuring	The Responsible Entity implemented its supply chain cyber security risk management plan(s), but did not implement the use of process(es) in planning for procurement of BES Cyber Systems, and their associated EACMS and PACSBES Cyber Systems, and their associated EACMS, PACS, and SCI , to identify and assess cyber security risk(s) to the BES as specified in Requirement R1 Part 1.1, and did not implement the use of process(es) for procuring

R #	Violation Severity Levels			
	Lower VSL	Moderate VSL	High VSL	Severe VSL
	<p>Systems and their associated EACMS and PACSBES Cyber Systems, and their associated EACMS, PACS, and SCI, as specified in Requirement R1 Part 1.2, but did not implement one of the parts in Requirement R1 Part 1.2.1 through Part 1.2.6.</p>	<p>Systems and their associated EACMS and PACSBES Cyber Systems, and their associated EACMS, PACS, and SCI, as specified in Requirement R1 Part 1.2, but did not implement two or more of the parts in Requirement R1 Part 1.2.1 through Part 1.2.6.</p>	<p>BES Cyber Systems and their associated EACMS and PACSBES Cyber Systems, and their associated EACMS, PACS, and SCI, as specified in Requirement R1 Part 1.2.</p>	<p>BES Cyber Systems and their associated EACMS and PACSBES Cyber Systems, and their associated EACMS, PACS, and SCI, as specified in Requirement R1 Part 1.2;</p> <p>OR</p> <p>The Responsible Entity did not implement its supply chain cyber security risk management plan(s) specified in the requirement.</p>
R3.	<p>The Responsible Entity reviewed and obtained CIP Senior Manager or delegate approval of its supply chain cyber security risk management plan(s) but did so more than 15 calendar months but less than or equal to 16 calendar months since the previous review as specified in the Requirement.</p>	<p>The Responsible Entity reviewed and obtained CIP Senior Manager or delegate approval of its supply chain cyber security risk management plan(s) but did so more than 16 calendar months but less than or equal to 17 calendar months since the previous review as specified in the Requirement.</p>	<p>The Responsible Entity reviewed and obtained CIP Senior Manager or delegate approval of its supply chain cyber security risk management plan(s) but did so more than 17 calendar months but less than or equal to 18 calendar months since the previous review as specified in the Requirement.</p>	<p>The Responsible Entity did not review and obtain CIP Senior Manager or delegate approval of its supply chain cyber security risk management plan(s) within 18 calendar months of the previous review as specified in the Requirement.</p>

D. Regional Variances

None.

E. Associated Documents

- See “Project 2016-02 Virtualization Implementation Plan” for Project 2019-03
- ~~CIP-013-2 Technical Rationale~~

Version History

Version	Date	Action	Change Tracking
1	07/20/17	Respond to FERC Order No. 829.	
1	08/10/17	Approved by the NERC Board of Trustees.	
1	10/18/18	FERC Order approving CIP-013-1. Docket No. RM17-13-000.	
2	TBD	Modified to address directive in FERC Order No. 850.	
<u>3</u>	<u>TBD</u>	<u>Virtualization conforming changes.</u>	