

Coordonnateur de la fiabilité

Demande R-4152-2021

Norme de fiabilité et son annexe Québec (version anglaise)



Coordonnateur de la fiabilité

Demande R-4152-2021

A. Introduction

- **1. Title:** Cyber Security Communications between Control Centers
- **2.** Number: CIP-012-1
- **3. Purpose:** To protect the confidentiality and integrity of Real-time Assessment and Real-time monitoring data transmitted between Control Centers.
- 4. Applicability:
 - **4.1. Functional Entities:** The requirements in this standard apply to the following functional entities, referred to as "Responsible Entities," that own or operate a Control Center.
 - 4.1.1. Balancing Authority
 - 4.1.2. Generator Operator
 - 4.1.3. Generator Owner
 - 4.1.4. Reliability Coordinator
 - 4.1.5. Transmission Operator
 - 4.1.6. Transmission Owner
 - 4.2. Exemptions: The following are exempt from Reliability Standard CIP-012-1:
 - **4.2.1.** Cyber Assets at Facilities regulated by the Canadian Nuclear Safety Commission.
 - **4.2.2.** 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.** A Control Center that transmits to another Control Center Real-time Assessment or Real-time monitoring data pertaining only to the generation resource or Transmission station or substation co-located with the transmitting Control Center.
- 5. Effective Date: See Implementation Plan for CIP-012-1.

B. Requirements and Measures

R1. The Responsible Entity shall implement, except under CIP Exceptional Circumstances, one or more documented plan(s) to mitigate the risks posed by unauthorized disclosure and unauthorized modification of Real-time Assessment and Real-time monitoring data while being transmitted between any applicable Control Centers. The Responsible Entity is not required to include oral communications in its plan. The plan shall include: [*Violation Risk Factor: Medium*] [*Time Horizon: Operations Planning*]

- **1.1.** Identification of security protection used to mitigate the risks posed by unauthorized disclosure and unauthorized modification of Real-time Assessment and Real-time monitoring data while being transmitted between Control Centers;
- **1.2.** Identification of where the Responsible Entity applied security protection for transmitting Real-time Assessment and Real-time monitoring data between Control Centers; and
- **1.3.** If the Control Centers are owned or operated by different Responsible Entities, identification of the responsibilities of each Responsible Entity for applying security protection to the transmission of Real-time Assessment and Real-time monitoring data between those Control Centers.
- **M1.** Evidence may include, but is not limited to, documented plan(s) that meet the security objective of Requirement R1 and documentation demonstrating the implementation of the plan(s).

C. Compliance

1. Compliance Monitoring Process

- **1.1. Compliance Enforcement Authority:** "Compliance Enforcement Authority" (CEA) means NERC, 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.

- The Responsible Entities shall keep data or evidence of each Requirement in this Reliability 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.	N/A	The Responsible Entity documented its plan(s) but failed to include one of the applicable Parts of the plan as specified in Requirement R1.	The Responsible Entity documented its plan(s) but failed to include two of the applicable Parts of the plan as specified in Requirement R1.	The Responsible Entity failed to document plan(s) for Requirement R1; Or The Responsible Entity failed to implement any Part of its plan(s) for Requirement R1, except under CIP Exceptional Circumstances.	

D. Regional Variances

None.

E. Associated Documents

Implementation Plan.

Technical Rationale for CIP-012-1.

Implementation Guidance.

Version History

Version	Date	Action	Change Tracking
1		Respond to FERC Order No. 822	New
1	August 16, 2018	Adopted by NERC Board of Trustees	
1	January 23, 2020 FERC Order issued approving CIP-012-1. Docket No. RM18-20-000;		

Appendix CIP-012-1-QC-1 Specific provisions applicable in Québec for standard CIP-012-1 – Cyber Security – Communications between Control Centers

This appendix establishes specific provisions for the application of the standard in Québec. Provisions of the standard and of this appendix must be read jointly for comprehension and interpretation purposes. Where the standard and appendix differ, the appendix shall prevail.

A. Introduction

- **1. Title:** No specific provisions.
- **2. Number:** No specific provisions.
- **3. Purpose:** No specific provisions.

4. Applicability:

4.1. Functional Entities

No specific provisions.

Facilities

When applying the CIP-012-1 standard, the definition of Control Center reads as follows: One or more facilities operating personnel that monitor and control the Main Transmission System (RTP) in real-time to perform the reliability tasks, including their associated data centers, of: 1) a Reliability Coordinator, 2) a Balancing Authority, 3) a Transmission Operator for transmission Facilities at two or more locations, or 4) a Generator Operator for generation Facilities at two or more locations.

4.2. Exemptions

No specific provisions.

5. Effective date:

5.1. 5.2.	Adoption of the standard by the Régie de l'énergie: Adoption of this appendix by the Régie de l'énergie:	April 8 th , 2022 April 8 th , 2022	
3.2.		April 8 , 2022	
5.3.	Effective date of the standard and of its		
	appendix in Québec:	July 1 st , 2024	

B. Requirements and Measures

No specific provisions.

C. Compliance

1. Compliance Monitoring Process

1.1. Compliance Enforcement Authority

In Québec, "Compliance Enforcement Authority" means the Régie de l'énergie in its roles of monitoring and enforcing compliance with respect to the Reliability Standard and to this appendix.

1.2. Evidence Retention

No specific provisions.

Appendix CIP-012-1-QC-1 Specific provisions applicable in Québec for standard CIP-012-1 – Cyber Security – Communications between Control Centers

1.3. Compliance Monitoring and Enforcement Program

The Régie de l'énergie establishes the monitoring processes used to evaluate data or information for the purpose of determining compliance or non-compliance with the Reliability Standard and with this appendix.

Violation Severity Levels

No specific provisions

D. Regional Variances

No specific provisions.

E. Associated Documents

No specific provisions.

Version History

Version	Date	Action	Change tracking
1	April 8, 2022	New appendix as per decision D-2022- 048	New