
Project QC-2017-01

Standard CIP-014-2 – Physical Security

1. ASSESSMENT OF RELEVANCE

In the wake of an April 2013 attack on a substation in San Jose, California, the FERC (Federal Energy Regulatory Commission) issued an order directing NERC (North American Electric Reliability Corporation) to develop a standard that addresses threats and vulnerabilities to the physical security of critical facilities of the power system. The proposed standard identifies and protects Transmission stations and their associated primary control centers that if damaged or rendered inoperable as a result of a physical attack, could result in instability, uncontrolled separation, or cascading within an Interconnection.

The CIP-014-2 standard reduces the susceptibility of the power system to physical attacks by providing a framework whereby critical Transmission Facilities such as stations, substations, control centers and transmission lines are identified according to specific criteria. An evaluation of potential threats and associated vulnerabilities of the identified assets is performed, and the evaluation is then verified by an independent third party. The standard also requires the development and implementation of a physical security plan to protect the identified assets from physical threats and requires that this plan is verified by an independent third party. Furthermore, this standard requires the identification and implementation of security measures designed to deter, detect, delay, assess, communicate and respond to potential physical threats and vulnerabilities.

2. PREREQUISITE FOR ADOPTION

None.

3. MODIFICATIONS TO OTHER STANDARDS OR TO GLOSSARY DEFINITIONS

3.1. Standards or requirements to be retired upon enforcement:

None.

3.2. New definitions to be added to the glossary:

None.

3.3. Definitions to be modified in the glossary:

None.

3.4. Definitions to be retired from the glossary:

None.

4. NOTE REGARDING THE USE OF THE TERM "POSTE" IN THE FRENCH VERSION

The English version of the standards uses the term "stations" and "substations" to designate a set of transmission elements in the same location. The term "substation" is often used in the industry to specify a station that contains at least one autotransformer, while the term "station" is used to refer to stations that are operated at a single voltage level. This distinction does not exist in French, and the term "poste" is used to refer to both types of facilities. Therefore, the French version of the

standards only uses the term "poste" to translate the terms "station" and "substation" and the use of these terms could not be translated literally.

5. APPLICABILITY

This standard is applicable to:

- Transmission Owners that own a Transmission station that meets the criteria in sections 4.1.1.1 through 4.1.1.4 of the standard,
- Transmission Operators.

6. PROVISIONS SPECIFIC TO QUÉBEC

This standard only applies to the facilities of the Main Transmission System (RTP) that meet the criteria established in the "Applicability" section. In application of this standard, any reference to the term "BES" shall be replaced by the term "RTP".

7. PROPOSED EFFECTIVE DATES

Standard	Enforcement date in the USA	Proposed Enforcement date in Québec
CIP-014-2	October 2, 2015	The first day of the first calendar quarter six months after the adoption of the standard by the Régie de l'énergie.

In Québec, the standard CIP-014-2 is the first proposed version of a standard that addresses physical security.

In the United States, the standard CIP-014-2 shall be implemented according to the following timeline:

Requirement	Sub requirement	Enforcement date in the USA	Proposed enforcement date in Québec
R1		On or before the enforcement date of October 2, 2015	On or before the proposed enforcement date in Québec.
R2	2.1 2.2 2.4	Within 90 calendar days of the enforcement date of October 2, 2015.	Within 90 calendar days of the proposed enforcement date in Québec.
	2.3	Within 60 calendar days of the completion of Requirement R2 part 2.2.	Within 60 calendar days of the completion of Requirement R2 part 2.2.
R3		Within 7 calendar days of the completion of Requirement2	Within 7 calendar days of the completion of Requirement2
R4 and R5		Within 120 calendar days of completion of Requirement R2	Within 120 calendar days of completion of Requirement R2

Requirement	Sub requirement	Enforcement date in the USA	Proposed enforcement date in Québec
R6	6.1	Within 90 calendar days of completion of Requirement R5	Within 90 calendar days of completion of Requirement R5
	6.2		
	6.4		
	6.3	Within 60 calendar days of completion of Requirement R6, part 6.2	Within 60 calendar days of completion of Requirement R6, part 6.2

8. PRELIMINARY ASSESSMENT OF THE IMPACT

	Low	Moderate	Important
Implementation of the standard			X
Maintenance of the standard			X
Compliance Monitoring			X

Legend:

Low: Normal industry practice or standard involving minor adjustments to processes or practices in place.

Moderate: Changes that require an allocation of certain material, human or financial resources to implement, maintain and monitor compliance of the proposed standard.

Important: Changes that require significant provision and allocation of material, human or financial resources to implement, maintain and monitor compliance of the proposed standard.