

## Physical Security Reliability Standard Implementation

### Action

Information

### Background

On March 7, 2014, the Commission issued an order directing NERC to submit for approval, within 90 days, one or more Reliability Standards addressing physical security risks and vulnerabilities of critical facilities on the Bulk-Power System. On May 23, 2014, NERC filed a petition for approval of proposed Reliability Standard CIP-014-1. As proposed, CIP-014-1 requires Transmission Owners and Transmission Operators to protect those critical Transmission stations and Transmission substations, and their associated primary control centers “that if rendered inoperable or damaged as a result of a physical attack could result in widespread instability, uncontrolled separation, or Cascading within an Interconnection.”

On July 17, 2014, the Commission issued a NOPR proposing to: (1) approve the CIP-014-1 Reliability Standard, and (2) direct NERC to modify the standard in two respects and submit certain informational filings. On September 8, 2014, NERC filed comments in response to the NOPR.

On November 20, 2014, FERC issued Order No. 802 approving Reliability Standard CIP-014-1 – Physical Security. In approving the standard, the Commission also adopted its proposal to direct NERC to develop and submit modifications to the Reliability Standard, within six months of the effective date of the order, concerning the use of the term “widespread” in Requirement R1. In contrast, the Commission did not adopt the proposal to direct NERC to include a procedure that would allow applicable governmental authorities to add or subtract facilities from an applicable entity’s list of critical facilities under Requirement R1. With respect to the proposed informational filing, the Commission adopted the proposal to direct NERC to make an informational filing addressing whether it is necessary to develop a Reliability Standard that provides physical security for all “High Impact” control centers. The Commission directed NERC to submit this filing within two years of the effective date of the standard. The Commission, however, did not adopt the NOPR proposal to direct NERC to make an informational filing addressing resiliency.

In response to the Order No. 802 directive related to the term “widespread,” on December 9, 2014, NERC submitted a revised Standards Authorization Request (SAR) to the Standards Committee (SC) for authorization to post for informal comment. The SC authorized posting the SAR for a 30-day informal comment period. The revised SAR was posted for comment on December 15, 2014. Comments are due on January 13, 2015. The original standard drafting team will review the comments received on the SAR and address the directive at their January 27, 2015 meeting in Atlanta.

### Overview of Key Elements of CIP-014-1 and Relevant Dates

Under CIP-014-1, applicable entities are required to identify their critical facilities, evaluate the security risks and vulnerabilities to those identified facilities, and implement measures to mitigate the risk of physical attack. More specifically, the proposed Reliability Standard contains the following six requirements designed to protect against and mitigate the impact of physical attacks on certain Transmission stations and Transmission substations, and their associated primary control centers:

- *Requirement R1* requires applicable Transmission Owners to perform risk assessments on a periodic basis to identify their Transmission stations and Transmission substations that if rendered inoperable or damaged could result in instability, uncontrolled separation, or Cascading within an Interconnection. The Transmission Owner must then identify the primary control center that operationally controls each of the identified Transmission stations or Transmission substations.
- *Requirement R2* provides that each applicable Transmission Owner shall have an unaffiliated third party verify the risk assessment performed under Requirement R1. The unaffiliated third party verifier may recommend additions or removals from the list of transmission stations or transmission substations under Part 2.3. The resolution of this activity could take up to 60 days.
- *Requirement R3* requires the Transmission Owner to notify a Transmission Operator that operationally controls a primary control center identified under Requirement R1 of such identification.
- *Requirement R4* requires each applicable Transmission Owner and Transmission Operator to conduct an evaluation of the potential threats and vulnerabilities of a physical attack to each of its critical facilities identified in Requirement R1, as verified under Requirement R2.
- *Requirement R5* requires each Transmission Owner and Transmission Operator to develop and implement documented physical security plan that covers each of its respective critical facilities identified in Requirement R1, as verified under Requirement R2.
- *Requirement R6* provides that each Transmission Owner and Transmission Operator subject to Requirements R4 and R5 have an unaffiliated third party review its Requirement R4 evaluation and Requirement R5 security plan. The unaffiliated third party reviewer may recommend changes to the evaluation performed under Requirement R4 or security plan(s) developed under Requirement R5. The resolution of this activity could take up to 60 days.

The manner in which entities implement these requirements is necessarily dependent upon the facts and circumstances of each facility. The standard's approach provides entities the necessary flexibility to identify and protect their critical facilities in a manner that best suits their needs.

The following are relevant dates related to CIP-014-1.<sup>1</sup>

- November 20, 2014 – FERC issued Order No. 802 approving CIP-014-1.
- November 25, 2014 – Order No. 802 published in the Federal Register.
- January 26, 2015 – Effective date of Order No. 802.

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<sup>1</sup> Note that as described in the implementation plan associated with CIP-014-1, the timing to complete performance of certain requirements (or part thereof) in CIP-014-1 is dependent upon completion of certain prior requirements (or parts thereof). Registered entities should review their own implementation activities to ensure that they meet the timing obligations under CIP-014-1, as certain requirements may need to be completed earlier than a "latest date" indicated here depending upon the time in which the entity completed a preceding requirement.

- July 27, 2015 – Due date for petition for approval of revisions to CIP-014-1 to address “widespread” directive.
- October 1, 2015 – Effective Date of CIP-014-1 (in the U.S.) – U.S. entities must comply with Requirement R1 by this date.
- December 30, 2015 – U.S. entities must have completed Parts 2.1, 2.2, and 2.4 of Requirement R2.
- February 28, 2016 – Latest date by which U.S. entities must have completed Part 2.3 of Requirement R2.
- March 6, 2016 – Latest date by which U.S. entities must have completed Requirement R3.
- June 27, 2016 – Latest date by which U.S. entities must have completed Requirements R4 and R5.
- September 25, 2016 – Latest date by which U.S. entities must have completed Parts 6.1, 6.2 and 6.4 of Requirement R6.
- November 24, 2016 – Latest date by which U.S. entities must have completed Part 6.3 of Requirement R6.
- October 1, 2017 – Due date for informational filing addressing control center issue.

### **Efforts to Support Understanding and Implementation of CIP-014-1**

Based on its prior experiences, NERC understands that issues, questions, or requests for additional guidance can arise as entities implement new or revised versions of Reliability Standards. Although CIP-014-1 represents one standard with six requirements, the implementation of the standard presents a number of considerations related to risk management and compliance expectations due to the flexibility provided in the standard. To that end, NERC is conducting several activities to support increased understanding of the various requirements in CIP-014-1 and to promote transparency and confidence in industry’s implementation of the standard.

During the implementation period for CIP-014-1, with the support and engagement of industry stakeholders and the Regional Entities, NERC is planning to issue guidance documents, provide training to industry and ERO compliance and enforcement staff, and conduct other outreach efforts to improve industry’s understanding of the requirements of CIP-014-1 and help ensure that industry is technically ready to implement the various requirements in the standard according to the time frame provided in the implementation plan. These activities are also designed to ensure the ERO Enterprise enforces CIP-014-1 consistently, reasonably, and transparently.

The following outlines NERC’s key activities for supporting effective and efficient implementation of CIP-014-1.

- **Guidance.** While CIP-014-1 contains a Guidelines and Technical Basis section to assist registered entities in implementing the requirements, NERC understands that the industry would benefit from additional guidance, especially related to the performance of the risk assessment to identify critical facilities. Accordingly, NERC is collaborating with industry participants and Regional Entities to develop additional guidance on CIP-014-1. More specifically, NERC is

developing a package of guidance documents for the Regional Entities, which will be publicly available, outlining the ERO’s compliance and enforcement expectations for CIP-014-1. Additionally, NERC is collaborating with certain reliability-focused industry groups in developing guidance for successful implementation of specific requirements in CIP-014-1, some of whom are already developing guidance for their members. NERC may reference guidance of this type in its forthcoming guidance to Regional Entities. For example, the North American Transmission Forum (NATF) is in the process of developing guidance for certain requirements in the standard (Requirements R1, R4 and R5). In addition, NERC will interface with Reliability Coordinators for their expertise in performing reliability studies as a consideration for Requirements R1 and R2. NERC staff also expects to coordinate with representatives of the NERC Planning Committee and Critical Infrastructure Protection Committee as it develops additional guidance documents. These groups will be of particular value to help address how NERC may view the threat evaluation and security plan in Requirements R4 and R5, along with the unaffiliated third party reviews as contemplated in Requirement R6. Importantly, NERC recognizes that there may be more than one approach to achieving compliance with CIP-014-1’s requirements, so it is not planning to “adopt” or “endorse” a specific approach as the only way to comply with the standard. The timeline below summarizes the schedule for additional guidance:

<i>Requirement</i>	<i>Guidance</i>	<i>Posting</i>
<i>R1 &amp; R2</i>	Risk assessment approach and third party assessment considerations	January 2015
<i>R4 &amp; R5</i>	Examples of threat & vulnerability assessment and security plans	April 2015
<i>R6</i>	NERC third-party assessment program	July 2015

- **Monitor and Assess Implementation.** NERC management, per the Board’s instruction, will monitor and assess implementation of CIP-014-1. Specifically, NERC management intends to monitor the general number and characteristics of assets identified as critical and the scope of security plans developed to meet the requirements in CIP-014-1, including the timelines provided for implementation of the various security and resiliency measures included in the plan. Following the effective date of CIP-014-1, NERC intends to report quarterly to the Board in response to the Board’s request.
- **Outreach and Communications.** As FERC has issued a final order approving CIP-014-1 and Registered Entities have begun steps toward implementation, NERC will continue providing regular communications and outreach on key information to support industry’s implementation of the standard. NERC presented a webinar to industry on December 18, 2014, where it provided information related to implementation support as discussed in these materials. NERC will conduct additional webinars, workshops, or technical conferences going forward based on feedback from industry and in conjunction with Regional Entity outreach activities.
- **Training.** Throughout 2015, NERC will provide training to Regional Entity staff to support consistency of approach in compliance monitoring and enforcement expectations around CIP-014-1. Initial coordination to ensure auditor training and consistent application of CIP-014-1 began in Atlanta, Georgia, during the week of September 15, 2014. Additional training and coordination continues as part of NERC’s regular CIP compliance monitoring and enforcement

staff training to help ensure a consistent, reasonable, and transparent approach to monitoring CIP-014-1 under the risk-based Compliance Monitoring and Enforcement Program.

Collectively, these elements will help ensure a more common understanding of implementation expectations for CIP-014-1 throughout 2015.