

PJM Compliance Bulletin

CB020 NERC Standard CIP-014

General

CIP-014 requires entities to identify and protect 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.

As the Reliability Coordinator (RC), Planning Coordinator (PC), and Transmission Planner (TP), PJM will fulfill several roles as it relates to CIP-014 including providing input into the assessment to identify Transmission facilities by way of analysis to support Applicability 4.1.1.3. PJM may also serve as the third-party reviewer as required in Requirement R2. This Compliance Bulletin describes the process PJM implemented to identify assets that will serve as input to the analysis required in Requirement R1 in addition to discussing the process for coordinating and communicating to the Transmission Owners (TOs) the results of this analysis and for assisting as the third-party reviewer (R2).

Background

CIP-014

Applicability 4.1.1.3 states: “Transmission Facilities at a single station or substation location that are identified by its Reliability Coordinator, Planning Coordinator, or Transmission Planner as critical to the derivation of Interconnection Reliability Operating Limits (IROLs) and their associated contingencies.”

PJM is the Reliability Coordinator, Planning Coordinator, and Transmission Planner for its footprint. The requirement in the applicability of CIP-014 establishes that PJM may identify Transmission Facilities that the owning entity should use as input to the assessment required by CIP-014 Requirement R1. To that end, PJM Operations and Planning conducted a study to identify contingencies critical to the derivation of the PJM IROLs (PJM IROLs are published in Manual 03 Section 3.8), that is, that are providing data critical to the derivation of the IROL. That study yielded a sub-set of contingencies that were decomposed to their component Transmission facilities. PJM expects that these facilities along with the IROL facilities

themselves will comprise the list of Transmission Facilities that the owning entity shall use to perform an initial risk assessment and subsequent risk assessments of in accordance with Requirement R1 of CIP-014.

IROL Facilities + Transmission Contingency Facilities = CIP-014 Applicability
4.1.1.3 List

Next Steps for TO's: Apply analysis in R1 to the 4.1.1.3 List

The analysis that PJM's Operations and Planning groups conducted will be replicated at least every 15 calendar months to support CIP-014.

PJM IROLs and Associated Contingencies

PJM establishes a list of reactive and voltage transfer limit facilities that define the PJM transfer interfaces. PJM publishes these lists in PJM Manual 03, section 3.8. These transfer limits are listed by Transfer Interface, and consist of an Interface Definition that lists a number of 138, 345, 500, and/or 756 kV lines. The interface definitions list the substations at each endpoint of the Transmission Facilities as well as the voltage level.

In order to determine which facilities, in addition to the IROL facilities themselves, are considered "critical to the derivation of Interconnection Reliability Operating Limits (IROLs) and their associated contingencies", PJM conducted an analysis using historical Day-ahead Transfer Limit Calculator and posted real-time congestion results. PJM collected historical day-ahead limiting contingencies associated with IROLs and applied a method that included comparison to real-time operations. The results yielded a sub-set of contingencies that were decomposed to their component Transmission facilities. PJM considers these Transmission Facilities (at a single station or substation) are providing data critical to the derivation of the IROL and should be subject to additional analysis by the owning entity as required in CIP-014 Requirement R1.

The equipment meeting the PJM designation under the Applicability Section 4.1.1.3 in CIP-014 includes the Transmission Facilities, and terminal equipment at the associated substation locations.

Discussion

To assist the Transmission Owners in identification of their list of assets that will serve as an input to Requirement R1, a Transmission Owner should include:

1. The substations that make up the end points for each line listed in the Interface Definitions in Manual 03, Section 3.8.
2. The specific Transmission Facilities that have been determined as "critical to the derivation of Interconnection Reliability Operating Limits (IROLs) and their



associated contingencies” by PJM Operations Support and Planning by way of the analysis described above.

Coordination and Communication Process

Applicability 4.1.1.3 – Input to Requirement R1

PJM will coordinate with its member Transmission Owners should they own facilities identified under CIP-014 Applicability Section 4.1.1.3 analysis described above. PJM will issue the member Transmission Owner a formal letter containing the specific facilities identified by PJM under 4.1.1.3. This letter will be issued by the Compliance Division and will be issued every 15 calendar months to support compliance with CIP-014. PJM will issue this letter to the point of contact identified by the Transmission Owner. To confirm we have the correct contact please reach out to:

regional_compliance@pjm.com.

Requirement R2 – Third Party Validation

PJM will also support requests to perform the third party validation as required by CIP-014 Requirement R2. To request a third party review please contact NERC.Planning.Coordinator@PJM.com

Conclusion

PJM issued this Compliance Bulletin to coordinate and communicate the processes in place to support compliance with CIP-014. Should member companies have questions regarding this bulletin or the specifics of the analysis, please contact:

regional_compliance@pjm.com.

Document Retention

Entities shall retain all evidence of compliance in accordance with the document retention requirement as stated in the applicable NERC or Regional Reliability Standard. If there is no specific data retention requirement, Entities will retain the data for four years.

Development History

Revision: 0	
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