Background Information

The Standard Authorization Request (SAR) of the Project 2016-02 Modifications to CIP Standards Standard Drafting Team (Project 2016-02 SDT) contains multiple issue areas that impact Control Centers. These areas include clarifying applicability for Transmission Owners performing the functional obligations of Transmission Operators, and protecting communication links and sensitive Bulk Electric System (BES) data communicated between BES Control Centers. In the course of its research of these issues, the SDT has identified potential improvements to the Control Center definition.

In the development of the current Control Center definition, the Project 2008-06 Cyber Security Order 706 Version 5 CIP Standards Standard Drafting Team (Project 2008-06 SDT) received comments stating that the scope of the Control Center definition did not adequately identify control centers. The comment noted that the defined term Control Center could inaccurately apply to some generator plant control rooms. In response, the Project 2008-06 SDT created criteria in CIP-002 that would categorize BES Cyber Systems associated with these facilities as low impact. Since there were no low impact requirements specific to Control Centers, this temporarily mitigated the issue. The Project 2016-02 SDT is now proposing the development of new requirements that apply to low impact Control Centers in its draft CIP-012 standard. The 2016-02 SDT is seeking feedback on whether modifications to the Control Center definition are also necessary.

The SDT is seeking comments on potential modifications to the Control Center definition to provide further clarification of the term “operating personnel.” The proposed Control Center definition identifies facilities that have two characteristics. The first characteristic is that the facility hosts operating personnel that perform Real-time reliability-related tasks to operate the Bulk Electric System. The second characteristic is that the facility contains BES Cyber Systems that are used by operating personnel...

1 See Consideration of Comments Cyber Security Order 706 Version 5 CIP Standards Comment Form D Definitions and Implementation Plans, Page 21, available at: http://www.nerc.com/pa/Stand/Project20086CyberSecurityOrder706Version5CIPStanda/Consideration_of_Comments_D_2008-06_091012.pdf. “One commenter suggested that Control Center as it applies to the function of a Generation Operator has a threshold of generation located at two or more locations, and that this single qualifier could unintentionally sweep in the control centers for multi-location generation of very small capacity. The commenter suggested that a capacity qualifier be added to this definition. The SDT does not think that the threshold should be in the definition, but has amended the criterion for generation Control Centers in the Medium Impact category that addresses this comment.”
monitor and control the BES. The SDT asserts that operating personnel in this definition should align with personnel already identified in Reliability Standard PER-005-2. The purpose of Reliability Standard PER-005-2 is, “to ensure that personnel performing or supporting Real-time operations on the Bulk Electric System are trained using a systematic approach.” The proposed revisions to the Control Center definition clarify that operating personnel perform Real-time reliability-related tasks and lists functional entities that perform those tasks as identified in the applicability section of PER-005-2.
Proposed Definition of “Control Center”

**Revised Definition:**
One or more facilities, including their associated data centers, that monitor and control the Bulk Electric System (BES) and host operating personnel who perform Real-time reliability-related tasks 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.

For Reliability Coordinators, Balancing Authorities, and Transmission Operators, the operating personnel above are System Operators.

For Transmission Owners performing the Real-time reliability-related tasks of a Transmission Operator, the operating personnel above consist of personnel, excluding field switching personnel, who can act independently to operate or direct the operation of the Transmission Owner’s Bulk Electric System Transmission Facilities in Real-time.

For Generator Operators, the operating personnel above consist of dispatch personnel at a centrally located dispatch center who receive direction from the Generator Operator’s Reliability Coordinator, Balancing Authority, Transmission Operator, or Transmission Owner, and have the capability to develop specific dispatch instructions for plant operators under their control. These personnel do not include plant operators located at a generator plant site or personnel at a centrally located dispatch center who relay dispatch instructions without making any modifications.

**Redline Definition:**
One or more facilities, including their associated data centers, that monitor and control the Bulk Electric System (BES) and host operating personnel that monitor and control the Bulk Electric System (BES) in real-time to who perform the Real-time reliability-related 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.

For Reliability Coordinators, Balancing Authorities, and Transmission Operators, the operating personnel above are System Operators.

For Transmission Owners performing the Real-time reliability-related tasks of a Transmission Operator, the operating personnel above consist of personnel, excluding field switching personnel, who can act independently to operate or direct the operation of the Transmission Owner’s Bulk Electric System Transmission Facilities in Real-time.

For Generator Operators, the operating personnel above consist of dispatch personnel at a centrally located dispatch center who receive direction from the Generator Operator’s Reliability Coordinator, Balancing Authority, Transmission Operator, or Transmission Owner, and have the capability to develop specific dispatch instructions for plant operators under their control. These personnel do not include plant...
operators located at a generator plant site or personnel at a centrally located dispatch center who relay dispatch instructions without making any modifications.

Currently Approved Definition:
One or more facilities hosting operating personnel that monitor and control the Bulk Electric System (BES) 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.
Questions
The SDT seeks comment on the potential modifications to the definition of Control Center to clarify the scope of included facilities by identifying the operating personnel at Control Centers performing various registered functions.

1. Control Center definition: The SDT seeks comment on potential modifications to the definition of Control Center to clarify the scope of included facilities by identifying the operating personnel at Control Centers under various functional registrations based on the applicability language in PER-005-2. Do you agree with the alignment to PER-005-2? If not, please provide rationale or propose an alternative definition.

☐ Yes
☐ No

Comments:
Agree with the alignment but not the specific wording

This definition of uses the NERC defined term “System Operator”. In the NERC Glossary, the “System Operator” definition uses the term “Control Center.” Request this dependency be addressed.

Request clarification of the Transmission Owner’s “field switching personnel,” for this definition. This term was not explained well in PER-005.

Request clarification of “who can act independently to operate or direct the operation.” Is this addressing capability or authority?

Request clarification of the Generation Operator – “have the capability to develop specific dispatch instructions.” Should this be the capability to issue instead of capability to develop?

2. Control Center definition: Do the potential modifications to the Control Center definition change the scope or intent of any current or pending Reliability Standard(s) (examples include Reliability Standards: COM-001-3; TOP-001-4; and IRO-002-5)? If yes, provide details of the affected Reliability Standard(s), requirements, and any anticipated impact.

☐ Yes
☐ No

Comments:

3. Control Center definition: The SDT contends that there will be no change in BES Cyber System categorization by clarifying the definition of Control Center. This assertion is based on SDT review
of the CIP-002-5.1a criteria and its understanding of BES Cyber System categorization through experience implementing CIP-002-5.1a. Do you agree with this assertion? If not, please provide rationale and practical examples of where a change in categorization will occur as a result of this modification.

☐ Yes
☒ No

Comments:
This new definition may bring in new assets or change the impact level of existing assets which would change the list of BES Cyber Systems and impact levels.
4. Control Center definition: Do you agree with the potential definition of Control Center? If not, please provide rationale or propose an alternative definition.

☐ Yes  ✗ No

Comments:
Need clarification(s) – see Q1.

5. Implementation Plan: The SDT proposes to make the new Control Center definition effective upon applicable governmental authority’s order approving the definition, or as otherwise provided for by the applicable governmental authority. Do you agree with this proposal not to provide additional implementation time following approval? If you agree with the potential implementation time period, please note the actions you will take that require this amount of time to complete. If you think an alternate implementation time period is needed, please propose an alternate implementation period and provide a detailed explanation of actions and time needed to meet your proposed implementation deadline.

✗ Yes  ☐ No

Comments:
Yes, because the Implementation Plan in the CIP Standards will cover newly identified assets.

6. If you have additional comments on the proposed definition of Control Center that you have not provided in response to the questions above, please provide them here.

Comments: