

# Technical Rationale for Exclusion of CIP Criteria Modifications by Project 2015-09

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## Introduction

The Project 2015-09 Standard Drafting Team (SDT) is proposing the retirement of the NERC FAC-010-3 - System Operating Limits Methodology for the Planning Horizon Reliability Standard. The SDT further proposes a new construct regarding the coordination of the Planning Assessment (TPL-001-4 - Transmission System Planning Performance Requirements) with the establishment of System Operating Limits (SOLs) used in operations. Along with the retirement of FAC-010-3, this new construct consists of substantial modifications to FAC-011-3 - System Operating Limits Methodology for the Operation Horizon and FAC-014-2 - Establish and Communicate System Operating Limits. These proposals together represent an improvement for planning and operations to better coordinate analysis input assumptions and System performance criteria to prevent instability, Cascading or uncontrolled separation that adversely impact the reliability of the BES up to and including Real-time operations.

The proposed construct does not make use of an SOL methodology applicable to the planning horizon as required by the currently-effective FAC-010-3 due to its overall redundancy with TPL-001-4, and potential conflicts with the Reliability Coordinator's (RC) SOL methodology. During their discussion of FAC-010-3's retirement, the SDT concluded (with industry concurrence) that SOLs, and Interconnection Reliability Operating Limit (IROLs), only appropriate in the operations time horizon, and should not be determined in the planning horizon.

With these proposed changes to the FAC standards, and this conclusion regarding SOLs, the SDT was tasked with ensuring supplemental modifications were made, where necessary, to other Reliability Standards that made use of or referred to planning horizon SOLs. However, CIP-002-5.1a - Cyber Security — BES Cyber System Categorization and CIP-014-2 - Physical Security are not among the modification proposals despite the references, in attachments/applicability sections, to Planning Coordinator (PC)/Transmission Planner (TP) derived IROLs for use in the planning horizon. The remainder of this document provides a rationale for the SDT's exclusion of these two standards from the overall proposed modifications that result from the proposed retirement of FAC-010-3.

## CIP Requirements for PC/TP Input

### CIP-002.5.1a

Reliability Standard CIP-002.5.1a includes an attachment providing criteria that characterize the level of impact of CIP assets. The attachment includes 13 criteria (2.1 through 2.13) for the medium level. The first eight (8) criteria (2.1 through 2.8) focus on sets of transmission and generation facilities.

Criterion 2.6 in Attachment 1 of the standard states:

*Generation at a single plant location or 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.*

Upon the retirement of FAC-010, this information would still be available from the RC via that information provided due to FAC-014 R5.6, but there would be no direct tie to PC/TP derived IROLs. The SDT does not view the retirement of FAC-010 as a potential reliability gap as it related to this criterion for the following reasons.

- The RC is currently solely responsible for determining IROLs needed for operating the BES reliably. Those IROLs exist for use by the RC and are shared with their Transmission Operators (TOPs). This does not change with the new SOL construct the SDT is proposing. In the new construct, the RC will continue to provide its IROLs to its TOPs and impacted planning entities. Additionally, the RC will provide information to the transmission and generation asset owners for their Facilities that are critical to the derivation of an IROL or its critical contingencies, at least annually. This ensures that all *“Generation at a single plant location or Transmission Facilities at a single station or substation location that are identified ... as critical to the derivation of Interconnection Reliability Operating Limits (IROLs) and their associated contingencies”* are addressed with no gaps.
- Also in this new construct, PCs and TPs will continue to conduct their respective planning assessments in accordance with TPL-001 to identify system deficiencies and the respective Corrective Action Plans (CAPs) to address them. PCs and TPs will share with impacted RCs any information on CAPs they determine are needed to correct instances of instability found in their Planning Assessment of the Near-Term Transmission Planning Horizon (proposed FAC-014-3, Requirement R7). This provides the RC additional relevant information it needs from planning entities in its determination of SOLs, including IROLs. This ensures that all *“Generation at a single plant location or Transmission Facilities at a single station or substation location that are identified ... as critical to the derivation of Interconnection Reliability Operating Limits (IROLs) and their associated contingencies”* include relevant input from the PC/TPs.
- Criterion 2.3 references generation Facilities identified by the PC/TP as necessary to avoid an Adverse Reliability Impact. This has significant overlap, as it relates to generation Facilities, to the Facilities that would also be identified by the RC as critical to the derivation of an IROL. It is important to note that the actual operating limit (referenced in criterion 2.6) is not the focus. Rather, the identification of the relevant generation plant is the focus; this plant, if lost or

somehow compromised, could adversely impact the BES. This would also produce significant overlap to the Facilities identified by the RC in Criterion 2.6.

- Criterion 2.4 automatically qualifies Transmission Facilities operated at 500 kV or greater voltages to be in the medium impact category. This is regardless the reliability impact of a specific Facility that could be identified by planning studies. Since these types of Facilities enable bulk power flow of the System, the impact identified by planning studies of the loss of one or more of these Facilities would generally produce more severe impacts than lower voltage Facilities. This would also produce significant overlap to the Facilities identified by the RC in Criterion 2.6.
- Criterion 2.5 automatically qualifies Facilities operating between 200 kV and 499 kV based on the number of connections to other Transmission stations or substations. The basic premise in this criterion is to include “well-connected” BES substations as medium impact Facilities. Since these types of Facilities enable bulk power flow of the System, the impact identified by planning studies of the loss of one or more of these Facilities would generally produce more severe impacts than Facilities not as well connected to the System. This would also produce significant overlap to the Facilities identified by the RC in Criterion 2.6.
- TPL-001-4 Requirement R3 Parts 3.4 and 3.5 and Requirement R4 Parts 4.4 and 4.5 require the PC/TP to, in the annual Planning Assessment, identify and create a list of the planning and extreme events that are expected to produce “more severe System impacts.” These events may overlap those events that are critical to the derivation of an IROL. The transmission/generation owners can receive the annual Planning Assessment by request as a “functional entity with a reliability related need” per Requirement R8 of the standard.
- Proposed FAC-014-3 requires the PC/TP to annually communicate to impacted Transmission Owners and Generation Owners “their Facilities that comprise the planning event Contingency(ies) that would cause instability, Cascading or uncontrolled separation that adversely impacts the reliability of the BES as identified in its Planning Assessment of the Near-Term Transmission Planning Horizon.” This list of Facilities (for specific owners), covers all facilities the PC/TP would identify as critical to the derivation of an IROL under FAC-014-2 as it utilizes the components of the IROL definition (instability, Cascading, and uncontrolled separation that adversely impact the reliability of the Bulk Electric System) to describe the relevant Facilities as opposed to using the term itself.

In addition, the information provided by the RCs per FAC-014 R5.6 will be made available annually to the facility owners. Today there is no requirement that the information described in attachment 1 of CIP-002.5.1a be provided by any entity. FAC-014 R5.6 identifies an entity (the RC) and requires the information be submitted on regular basis (at least once annually). The annual submission requirement should address the concern noted by FERC in order 777 regarding the timeliness of CIP information provision. With an annual submission, the parties submitting the data should be able to provide the required information whether the data is created in an annual process (such as seasonal studies), or some other effort with a higher periodicity. The information recipients, the CIP asset owners, should be able to budget, plan and execute necessary projects accordingly knowing that they will receive the required

information annually. If the RC deems an increased periodicity is needed, they can so act, but annual requirement set the minimum standard that all entities can use.

### **CIP-014-2**

Reliability Standard CIP-014-2 enumerates the criteria (4.1.1.1 – 4.1.1.4) for Transmission Facilities to require physical security hardening. These criteria overlap those referenced above in CIP-002-5.1a.

Criterion 4.1.1.3 in the Applicability section of the standard 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.*

This criterion is very similar to criterion 2.6 in CIP-002-5.1a as it relates to transmission facilities. Due to the similarities in the criteria, the same rationale stated for CIP-002-5.1a applies to CIP-014-2.