

NERC Project 2009-18 *****

Synopsis: A ballot pool and pre-ballot window has opened for the NERC Project 2009-18 (“Withdraw Three Midwest ISO Waivers”). The applicable entity is a **Balancing Authority**.

The Midwest ISO is now a Balancing Authority so three NERC waivers are being withdrawn for the standards:

- Inadvertent Accounting Waiver from BAL-006 — Inadvertent Accounting
- Scheduling Agent Waiver from INT-003 — Interchange Transaction Implementation
- Enhanced Scheduling Agent Waiver from INT-003 — Interchange Transaction Implementation

Also, two standards are being revised

- BAL-006-2 — Inadvertent Interchange
- INT-003-3 — Interchange Transaction Implementation

RSDP *****

Synopsis: The modified Reliability Standards Development Procedure is open for a re-ballot. All entities are applicable. The initial ballot results were voided and all previous votes have been removed from the count. Voters have been asked to resubmit their votes and any applicable comments.

The modification were:

- The procedures to develop and approve of the Violation Risk Factors and the Violation Severity Levels were modified.
- National security emergencies were integrated.
- The Joint Interface Committee was dissolved.

Project 2007-17 *****

Synopsis: **Project 2007-17 (“Transmission and Generation Protection System Maintenance and Testing”)** has opened for a comment period. This project is applicable to **GO, TO, & DP**. This project consolidated four existing NERC standards (PRC-005-1, PRC-008-0, PRC-011-0, and PRC-018-0) into one standard. (PRC-005-2)

This consolidated standard will allow the Protection System owner to have a time based, condition based, and/or a performance based maintenance program; the Protection System owner will have the flexibility to take advantage of different levels of monitoring.

Should the Protection System owner have a Protection System component which does not have self-monitoring alarms or if self-monitoring alarms are available and those alarms are not transmitted to a location where action can be taken for those alarmed failures, then the maintenance interval will be as short as those listed in table 1a (“Maximum Allowable Testing Intervals and Maintenance Activities for Unmonitored Protection Systems”); however, should a Protection System component have self-monitoring alarms which are transmitted to a location where action can be taken for those alarmed failures, then the maintenance intervals can be expanded to those listed in table 1b (“Maximum Allowable Testing Intervals and Maintenance Activities for Partially Monitored Protection System Components”). For example, if a protection system owner had an unmonitored protection relay, it would have to maintain this relay every 6 years, but this owner could connect this relay to SCADA or have a person check this relay daily for alarm failures, then this relay could be maintain every 12 years.

Another feature of this standard is that it more clearly delineates which generation Protection Systems will be required to be included in a maintenance program.

“Categorizing Cyber Systems – An Approach based on BES Reliability Functions” Concept Paper *****

Synopsis: Concept Paper to modify existing NERC Reliability CIP-002 through CIP-009 Standards pursuant to FERC order 706. All Entities are applicable. Comments and Suggestions are due September 4, 2009. These comments and suggests are to cover four specific areas of interest:

1. BES reliability functions
2. identification of BES subsystems and BES cyber systems
3. mapping of BES subsystems
4. categorization of cyber systems

Order 706 B Nuclear Plant Implementation Plan *****

Synopsis: The Applicable entity is a Nuclear power plant. FERC’s Cyber Security Order 706B told NERC to create an implementation plan for the CIP-002-1 through CIP-009-1 standards across nuclear power plants. This implementation plan is open for simultaneous commenting and balloting period to be closed on August 14, 2009.

Changes to NERC functional Model *****

Synopsis: The NERC Reliability Standards are based on the NERC functional model. This model along with its technical supporting document (Separate NERC email announcement) has been revised and comments on these revisions are due back August 19, 2009. All entities are applicable.

The revisions were:

- Consideration of comments from Planning Committee regarding Demand Resources function and associated responsible entities
- Review of all Planning functions and respective responsible entities
- Review of Interchange function and Interchange Authority as the responsible entity
- Review of Load Serving Entity and Distribution Provider
- Review of Terminology and Definitions for consistency with other NERC documents

Project 2006-08 (TLR) *****

Synopsis: A comment period has open for this project 2006-08(“Reliability Coordination – Transmission Loading Relief”); this project is applicable to RC and BA entities.

The SDT has revised IRO-006 and IRO-006-EAST in phases. This third phase addressed previous industry comments.

Project 2009-09 CIP-001-1R2

Synopsis: This is a ballot for which *Covanta Energy* is requested an interpretation of *CIP-001-1 R2 (Project 2009-09)* on two points (All entities are applicable):

Question: Please clarify what is meant by the term, “appropriate parties.” Moreover, who within the Interconnection hierarchy deems parties to be appropriate?

Interpretation: CIP-001-1 R2 refers collectively to entities with whom the reporting party has responsibilities and/or obligations for the communication of physical or cyber security event information. Those entities to which communicating sabotage events are appropriate would be identified by the reporting entity and documented within the procedure required in CIP-001-1 R2.

Regarding “who within the Interconnection hierarchy deems parties to be appropriate,” the drafting team knew of no interconnection authority that has such a role.

Project 2009-14 *****

Synopsis: This interpretation (Project 2009-14) will be re-circulated since a negative comment was received; this interpretation responds to three questions asked by PacifiCorp:

(Applicable entities are TP & PA):

1. Does TPL-002-0 R1.3.10 require that all elements that are expected to be removed from service through normal operation of the protection systems be removed in simulations?

Interpretation: TPL-002-0a R1.3.10 does require that all elements expected to be removed from service through normal operations of the Protection Systems be removed in simulations.

2. Is a Category B disturbance limited to faults with normal clearing where the protection system operates as designed in the time expected with proper functioning of the protection system(s) or do Category B disturbances extend to protection system misoperations and failures?

Interpretation: This standard does not require an assessment of the Transmission System performance due to a Protection System failure or Protection System misoperation.

3. Does TPL-002-0 R1.3.10 require that planning for Category B contingencies assume a contingency that results in something other than a normal clearing event even though the TPL-002-0 Table I — Category B matrix uses the phrase "SLG or 3-Phase Fault, with Normal Clearing"?

Interpretation: TPL-002-0a R1.3.10 does not require simulating anything other than Normal Clearing when assessing the impact of a Single Line Ground (SLG) or 3-Phase (3Ø) Fault on the performance of the Transmission System.

Note: The NERC Glossary of Terms defines **Normal Clearing** as “A protection system operates as designed and the fault is cleared in the time normally expected with proper functioning of the installed protection systems.”

Project 2006-06 RC *****

Synopsis: A comment period for project 2006-6 (“Reliability Coordination”) has opened; this project is applicable to the following entities: RC, BA, TSP, TOP, DP, GOP, PSE, and LSE.

The SDT reviewed four standards: COM-001-2(“Communications”), COM-002-3(“Communications and Coordination”), IRO-001-2(“Reliability Coordination – Responsibilities and Authorities”), and IRO-014-2(“Coordination Among Reliability Coordinators”).

The SDT was tasked with **1)** ensuring that the reliability-related requirements applicable to the Reliability Coordinator are clear, measurable, unique, and enforceable, **2)** ensuring that this set of requirements is sufficient to maintain reliability of the Bulk Electric System, and **3)** revising the group of standards based on FERC Order 693. The SDT incorporated changes due to the work of the IROL Standards Drafting Team, and two standards from the original Standards Authorization Request (PER-004 and PRC-001) were moved to other projects due to scope overlap.

Project 2007-23 (VSL) & Project 2008-08 (EOP VSL) *****

Synopsis: A 30-day pre-ballot review for 9 sets of Violation Severity Levels (VSL) from two projects 2007-23 (VSL) and 2008-08 (EOP VSL) has been proposed. All entities are applicable.

In June 2008 FERC had expressed that several VSLs should be clarified to remove ambiguous terms, should be made more consistent with requirements, and should be based on one single violation. The standard drafting teams revised the associated VSL and this revision was published for comments in April 2009. The respective SDTs have considered the industry comments submitted and have revised the VSL, accordingly. The latest revisions are available in this 30-day pre-ballot review.

Project 2009 -17*****

Synopsis: Y-W Electric and Tri-State have requested an interpretation of PRC-004-1 R1 & R3 and PRC-005-1 R1 & R2. Applicable entities are: TO, DP, & GO.

Question - Y-W Electric Association, Inc. (Y-WEA) and Tri-State Generation and Transmission Association, Inc. (Tri-State) respectfully request an interpretation of the term "Transmission Protection System" and specifically whether protection for a radially-connected transformer protection system energized from the BES is considered a transmission Protection System and is subject to these standards.

NERC Response - The term Transmission Protection System is applicable to any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES). In general, a radially connected transformer protection system energized from the BES would not be considered a Transmission Protection System. In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission system faults, then these Protection Systems would be considered transmission Protection Systems. It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity.

Project 2009-13 *****

Synopsis: A ballot pool has opened for project 2009-13 (Interpretation of CIP-006-1 R1.1 for PacifiCorp). All entities are applicable. The following questions were asked and the Cyber Security Order 706 SAR drafting team submitted some responses on behalf of NERC.

Question: If a completely enclosed border cannot be created, what does the phrase, "to control physical access" require? Must the alternative measure be physical in

nature? If so, must the physical barrier literally prevent physical access e.g. using concrete encased fiber, or can the alternative measure effectively mitigate the risks associated with physical access through cameras, motions sensors, or encryption? Does this requirement preclude the application of logical controls as an alternative measure in mitigating the risks of physical access to Critical Cyber Assets?

Response: For Electronic Security Perimeter wiring external to a Physical Security Perimeter, the drafting team interprets the Requirement R1.1 as not limited to measures that are “physical in nature.” The alternative measures may be physical or logical, on the condition that they provide security equivalent or better to a completely enclosed (“sixwall”) border. Alternative physical control measures may include, but are not limited to, multiple physical access control layers within a non-public, controlled space. Alternative logical control measures may include, but are not limited to, data encryption and/or circuit monitoring to detect unauthorized access or physical tampering.

Project 2009-12 *****

Synopsis: A ballot pool has opened for project **2009-12 (Interpretation of CIP-005-1 R4.2.2 and R1.3 for PacifiCorp)**. All entities are applicable. The following questions were asked and the Cyber Security Order 706 SAR drafting team submitted some responses on behalf of NERC.

Question #1: What kind of cyber assets are referenced in 4.2.2 as “associated”? What else could be meant except the devices forming the communication link?

Response #1: In the context of applicability, associated Cyber Assets refer to any communications devices external to the Electronic Security Perimeter, i.e., beyond the point at which access to the Electronic Security Perimeter is controlled. Devices controlling access into the Electronic Security Perimeter are not exempt.

Question #2: Is the communication link physical or logical? Where does it begin and terminate?

Response #2: The drafting team interprets the data communication link to be physical or logical, and its termination points depend upon the design and architecture of the communication link.

Question #3: Please clarify what is meant by an “endpoint”? Is it physical termination? Logical termination of OSI layer 2, layer 3, or above?

Response #3: The drafting team interprets the endpoint to mean the device at which a physical or logical communication link terminates. The endpoint is the Electronic Security Perimeter access point if access into the Electronic Security Perimeter is controlled at the endpoint, irrespective of which Open Systems Interconnection (OSI) layer is managing the communication.

Question #4: If “endpoint” is defined as logical and refers to layer 3 and above, please clarify if the termination points of an encrypted tunnel (layer 3) must be treated as an “access point? If two control centers are owned and managed by the same entity, connected via an encrypted link by properly applied Federal Information Processing

Standards, with tunnel termination points that are within the control center ESPs and PSPs and do not terminate on the firewall but on a separate internal device, and the encrypted traffic already passes through a firewall access point at each ESP boundary where port/protocol restrictions are applied, must these encrypted communication tunnel termination points be treated as "access points" in addition to the firewalls through which the encrypted traffic has already passed?

Response #4: In the case where the "endpoint" is defined as logical and is \geq layer 3, the termination points of an encrypted tunnel must be treated as an "access point." The encrypted communication tunnel termination points referred to above are "access points."

Project 2009-10 *****

Synopsis: A recirculation pool has opened for **project 2009-10 (Interpretation of PRC-005-1 By Compliance Monitoring Processes Working Group)**. Applicable entities are **Transmission Owner, Distribution Provider, and Generator Owner**. The following questions were asked and the Protection System Maintenance and Testing Standard Drafting Team (assigned to Project 2007-17) submitted some responses on behalf of NERC.

Question #1: Does R1 require a maintenance and testing program for the battery chargers for the "station batteries" that are considered part of the Protection System?

Response #1: While battery chargers are vital for ensuring "station batteries" are available to support Protection System functions, they are not identified within the definition of "Protection Systems." Therefore, PRC-005-1 does not **currently (This change was the only change added to this interpretation since the latest recirculation pool)** require maintenance and testing of battery chargers.

Question #2: Does R1 require a maintenance and testing program for auxiliary relays and sensing devices? If so, what types of auxiliary relays and sensing devices? (i.e. transformer sudden pressure relays)

Response #2: The existing definition of "Protection System" does not include auxiliary relays; therefore, maintenance and testing of such devices is not explicitly required. Maintenance and testing of such devices is addressed to the degree that an entity's maintenance and testing program for DC control circuits involves maintenance and testing of imbedded auxiliary relays. Maintenance and testing of devices that respond to quantities other than electrical quantities (for example, sudden pressure relays) are not included within Requirement R1.

Question #3: Does R1 require maintenance and testing of transmission line re-closing relays?

Response #3: No. "Protective Relays" refer to devices that detect and take action for abnormal conditions. Automatic restoration of transmission lines is not a "protective" function.

Question #4: Does R1 require a maintenance and testing program for the DC circuitry that is just the circuitry with relays and devices that control actions on breakers, etc., or

does R1 require a program for the entire circuit from the battery charger to the relays to circuit breakers and all associated wiring?

Response #4: PRC-005-1 requires that entities 1) address DC control circuitry within their program, 2) have a basis for the way they address this item, and 3) execute the program. PRC-005-1 does not establish specific additional requirements relative to the scope and/or methods included within the program.

Question #5: For R1, what are examples of "associated communications systems" that are part of "Protection Systems" that require a maintenance and testing program?

Response #5: "Associated communication systems" refer to communication systems used to convey essential

Protection System tripping logic, sometimes referred to as pilot relaying or teleprotection.

Examples include the following:

- communications equipment involved in power-line-carrier relaying
- communications equipment involved in various types of permissive protection system applications
- direct transfer-trip systems
- digital communication systems (which would include the protection system communications functions of standard IEC 618501 as well as various proprietary systems)

Comments on FERC docket RM08-13-000 issued May 21, 2009 (NERC Reliability Standard PRC-023)

This docket pertains to PRC-023("Relay Loadability"). The commission is requesting feedback from industry to address such issues as:

- The interplay between the TPL, PRC, and FAC reliability standards.
- Expanding the BES protection systems to all facilities rated 100kV and above; plus, expanding the BES protection systems to facilities below 100kV on a case-by-case basis.
- Listing criteria to assess the capability of the most limiting piece of equipment per facility rating (line or transformer)(R1.10).
