

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Project 2008-06 – Cyber Security Order 706
CIP-002-4: Informational Presentation on Changes from Last Posting

Howard Gugel

Standards Development Coordinator

December 6, 2010

to ensure
the reliability of the
bulk power system

- Overview of Project 2008-06
- Examine changes to CIP-002-4
- Q & A

- **FERC Order 706**
- SDT appointed – August 2008
- CIP Version 2 – September 2009
- CIP Version 3 – March 2010
- CIP Version 4 – Ongoing Effort

CIP-002-4 First Ballot

- Posted September 20, 2010
- 101 sets of comments
 - 125 companies
 - 9 out of 10 industry segments
- First Ballot – 43.33% affirmative

Overview of Changes

- Applicability
- Effective Date
- Requirements R1 & R2
- Attachment 1

- 4.2. The following are exempt from Standard CIP-002-4:
- 4.2.1 Facilities regulated by the Canadian Nuclear Safety Commission.
 - 4.2.2 Cyber Assets associated with communication networks and data communication links between discrete Electronic Security Perimeters.
 - 4.2.3 Cyber Assets associated with Cyber Security Plans submitted to and verified by the U. S. Nuclear Regulatory Commission pursuant to 10 C.F.R. Section 73.54.

5. Effective Date: The first day of the ~~third~~ **eighth** calendar quarter after applicable regulatory approvals have been received (or the Reliability Standard otherwise becomes effective the first day of the ~~third~~ **ninth** calendar quarter after BOT adoption in those jurisdictions where regulatory approval is not required)

R1. Critical Asset Identification — The Responsible Entity shall develop a list of its identified Critical Assets determined through an annual application of the criteria contained in CIP-002-4 Attachment 1 – Critical Asset Criteria. The Responsible Entity shall ~~update review~~ this list ~~as necessary at least annually~~, and ~~update review~~ it at least annually ~~as necessary~~.

R2. Critical Cyber Asset Identification — Using the list of Critical Assets developed pursuant to Requirement R1, the Responsible Entity shall develop a list of associated Critical Cyber Assets essential to the operation of the Critical Asset. ~~The Responsible Entity shall update review this list as necessary at least annually, and update review it at least annually as necessary.~~

For each group of generating units (including nuclear generation) at a single plant location identified in Attachment 1, criterion 1.1, the only Cyber Assets that must be considered are those shared Cyber Assets that could, ~~within 15 minutes,~~ adversely impact the reliable operation of any combination of units that in aggregate ~~equal or exceed Attachment 1, criterion 1.1 within 15 minutes.~~ ~~The Responsible Entity shall review this list at least annually, and update it as necessary.~~

R3. Annual Approval — The senior manager or delegate(s) shall approve annually the list of Critical Assets and the list of Critical Cyber Assets. Based on Requirements R1 and R2 the Responsible Entity may determine that it has no Critical Assets or Critical Cyber Assets. The Responsible Entity shall keep a signed and dated record of the senior manager or delegate(s)'s approval of ~~the risk-based assessment methodology~~, the list of Critical Assets and the list of Critical Cyber Assets (even if such lists are null.)

M3. The Responsible Entity shall make available its ~~approval~~ records of ~~annual~~ approvals as specified in Requirement R3.

1.2. The RE shall serve as the CEA with the following exceptions:

~~4.1.11.2.1~~ For entities that do not work for the Regional Entity, the Regional Entity shall serve as the Compliance Enforcement Authority. ~~Regional Entity for Responsible Entities that do not perform delegated tasks for their Regional Entity.~~

1.2.2 For Reliability Coordinators and other functional entities that work for their Regional Entity, the ERO shall serve as the Compliance Enforcement Authority. ~~ERO for Regional Entity.~~

~~4.1.21.2.3~~ For Responsible Entities that are also Regional Entities, the ERO or a Regional Entity approved by the ERO and FERC or other applicable governmental authorities shall serve as the Compliance Enforcement Authority.

~~4.1.31.2.4~~ For the ERO, a third-party monitor without vested interest in the outcome for the ERO shall serve as the Compliance Enforcement Authority. ~~Third-party monitor without vested interest in the outcome for NERC.~~

CIP-002-4 Compliance (cont.)

~~1.2 Compliance Monitoring Period and Reset Time Frame~~

~~Not applicable.~~

CIP-002-4 Attachment 1 Criterion 1.1

- 1.1. Each group of generating units (including nuclear generation) at a single plant location with an aggregate highest rated net Real Power capability of the preceding 12 months equal to or exceeding 1500 MW.

CIP-002-4 Attachment 1 Criterion 1.2

- 1.2. Each reactive resource or group of resources at a single location (excluding generation Facilities) having aggregate net Reactive Power nameplate rating of 1000 MVARs or greater.

1.3. Each generation Facility that the Planning Coordinator or Transmission Planner designates **and informs the Generator Owner or Generator Operator as necessary to avoid BES Adverse Reliability Impacts in the long-term planning horizon** required for reliability purposes.

CIP-002-4 Attachment 1 Criterion 1.4

- 1.4. Each Blackstart Resource identified in the Transmission Operator's restoration plan.

1.5. The Facilities comprising the Cranking Paths and **meeting the** initial switching requirements from the Blackstart Resource to the **first interconnection point of the generation** unit(s) to be started, ~~as identified in the Transmission Operator's restoration plan~~ or up to the point on the Cranking Path where **two or more multiple** path options exist, **as identified in the Transmission Operator's restoration plan.**

CIP-002-4 Attachment 1 Criterion 1.6

1.6. Transmission Facilities operated at 500 kV or higher.

CIP-002-4 Attachment 1 Criterion 1.7

1.7. Transmission Facilities operated at 300 kV or higher at stations **or substations** interconnected at 300 kV or higher with three or more other transmission stations **or substations**.

1.8. Transmission Facilities at a single station or substation location that are identified by the Reliability Coordinator, Planning Authority or Transmission Planner as critical to the derivation of ~~, if destroyed, degraded, misused or otherwise rendered unavailable, violate one or more~~ Interconnection Reliability Operating Limits (IROLs) and their associated contingencies.

1.9. Flexible AC Transmission Systems (FACTS), at a single station or substation location, that are identified by the Reliability Coordinator, Planning Authority or Transmission Planner as critical to the derivation of ~~, if destroyed, degraded, misused or otherwise rendered unavailable, violate one or more~~ Interconnection Reliability Operating Limits (IROLs) and their associated contingencies.

1.10. Transmission Facilities providing the generation interconnection required to ~~directly~~ connect generator output to the transmission system that, if destroyed, degraded, misused, or otherwise rendered unavailable, would result in the loss of the assets **identified by any Generator Owner as a result of its application of ~~described in~~ Attachment 1, criterion 1.1 or 1.3.**

CIP-002-4 Attachment 1 Criterion 1.11

1.11. Transmission Facilities identified as essential to meeting Nuclear Plant Interface Requirements.

1.12. Each Special Protection System (SPS), Remedial Action Scheme (RAS) or automated switching system that operates BES Elements that, if destroyed, degraded, misused or otherwise rendered unavailable, **would cause violate** one or more Interconnection Reliability Operating Limits (IROLs) **violations for failure to operate as designed.**

1.13. Each system or Facility that performs ~~Common control system(s) capable of performing~~ automatic load shedding, without human operator initiation, of 300 MW or more implementing Under Voltage Load Shedding (UVLS) or Under Frequency Load Shedding (UFLS) as required by the regional load shedding program ~~within 15 minutes.~~

1.14. Each control center, ~~control system,~~ or backup control center, ~~or backup control system~~ used to perform the functional obligations of the Reliability Coordinator, ~~Balancing Authority, or Transmission Operator.~~

1.15. Each control center or backup control center used to control generation **at multiple plant locations, for any generation Facility or group of generation Facilities identified in criteria 1.1, 1.3, or 1.4. identified as a Critical Asset,** Each control center or backup control center ~~or~~ used to control generation **equal to or exceeding greater than an aggregate of 1500 MWs** in a single Interconnection.

1.16. Each control center or backup control center used to perform the functional obligations of the Transmission Operator that includes control of at least one asset identified in criteria 1.2, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 1.11 or 1.12. ~~Any additional assets that the Responsible Entity deems appropriate to include.~~

1.17. Each control center or backup control center used to perform the functional obligations of the Balancing Authority that includes at least one asset identified in criteria 1.1, 1.3, 1.4, or 1.13. Each control center or backup control center used to perform the functional obligations of the Balancing Authority for generation equal to or greater than an aggregate of 1500 MW in a single Interconnection.

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Questions?

to ensure
the reliability of the
bulk power system

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Thank you

to ensure
the reliability of the
bulk power system