

Status of NRC Licensees' Implementation of Cyber Security Plans

NRC/FERC Joint Commission Meeting February 23, 2017



Agenda

- James Andersen, Director, Division of Physical & Cyber Security Policy, Office of Nuclear Security & Incident Response
- Cyber Program Requirements
- Implementation Milestones and Progress
- Looking Beyond Full Implementation

NRC Power Reactor Cyber Security Over 15 years of progress

- 2009: 10 CFR 73.54, Cyber Security Rule
- 2012: Implementation/Oversight of Interim Cyber Security measures
- 2015: 10 CFR 73.77, Cyber Security Event Notification Rule
- 2017: Full implementation of Cyber Security requirements

Continuing FERC/NRC Cooperation

FERC/NRC discussions on potential regulatory gaps

Establishment of a "Bright Line"

 Memoranda of Agreement between NRC and FERC, and NRC and NERC

Interim Milestones (1-7) Addressed Significant Threats

 Implemented controls for the most risk significant assets

Implemented by end of 2012

Inspections completed 2013-2015

Continued Program Implementation

- Key Lessons Learned for Milestones 1-7
 - Identification of digital assets
 - Selecting security controls
 - Securing portable media and mobile devices
 - Determining the effectiveness of cyber security programs

NRC and Industry Preparing for Full Implementation (Milestone 8)

- Milestone 8 adds additional defensein-depth
- Tabletops and workshops to exercise specific aspects of the guidance
- Training for NRC inspection staff
- NRC anticipates initiating Milestone 8 inspections in July 2017

Looking Beyond Full Implementation

- NRC staff plans to conduct lessons learned workshops to:
 - Evaluate requirements and guidance documents
 - Discuss inspection team composition, inspection procedures, and inspection periodicity

NRC Updating Cyber Security Roadmap

- Initial Commission Paper June 2012
- Currently updating roadmap
- Evaluating need for cyber security requirements at additional types of NRC licensees
 - Fuel cycle facilities
 - Non-power reactors
 - Independent Spent Fuel Storage Installations
 - Byproduct materials licensees
 - Decommissioning plants

Interactions with other Agencies

- Cyber Security Forum for Independent and Executive Branch Regulators
- Understanding the threat environment, sharing information with:
 - Department of Homeland Security
 - Federal Bureau of Investigation

Interactions with other Agencies

- NRC staff participate in IAEA Expert Consultancy Meetings (CM) on Computer Security Regulation.
 Objectives of the CMs:
 - Enhance knowledge and information sharing regarding good practices and lessons learned in developing & implementing computer security regulation

Acronyms

- CDA Critical Digital Asset
- CM Consultancy Meeting
- CSP Cyber Security Plan
- FERC Federal Energy Regulatory Commission
- IAEA International Atomic Energy Agency
- NERC North American Electric Reliability Corporation