


Cyber Security – Industry Experiences

NRC RIC
Jack Roe
NEI




Regulatory Documents

- Interim Compensatory Measures (2002)
- NUREG/CR-6847 (2003)
- Design Basis Threat Order (2003)
- NEI 03-12 Section 18 (2004)
- NEI 04-04 (2005)
- 10 CFR 73.1 Design Basis Threat Rule (2007)
 - RG 5.69
- 10 CFR 73.54 Cyber Security Rule (2009)
 - DG-5022 / RG 5.71




Licensing History

- Cyber Security Rule effective May 26, 2009
- Submittal required by November 23, 2009
- Industry expected regulatory guidance in-place in early 2009 (RG 5.71 was issued January 2010)
- NEI 08-09, Revision 0 submitted for NRC endorsement March 9, 2009
- Subsequently revised based on NRC comments and several meetings




NEI 08-09

- In July 2009, NRC indicated that NIST Digital Security Controls should be part of the Plan
- Industry/NRC iterations on NEI 08-09
 - Revision 2 was submitted on August 3
 - Revision 3 was submitted September 15
 - NEI regularly meeting with NRC staff to reach closure




Licensee Actions

- Plants are using NEI 08-09, Revision 3
- NEI 08-09 provides
 - Plan template w/limited bracketed text,
 - Two appendices of security controls,
 - Glossary of terms,
 - Model application, and
 - Model implementation schedule
- NEI 08-09 exceeds the requirements of the Rule
- Includes guidance not seen in early versions of RG 5.71
 - Reporting guidance
 - Model Implementation Schedule
 - Model Application (including changes to the FOL)



Licensee Actions

- Licensee action is submission of Plan and Implementation Schedule
 - Implementation schedule is not a part of Plan
- Following NRC endorsement of Revision 3 or resolution of issues, licensees will supplement initial submittals



Post-Submittal Licensing Expectations

- The NRC should clearly state the regulatory finding that is to be made
- ONRR Office Instruction LIC-101 should be used
- ONRR Acceptance Review Process (LIC-109) should have minimal impact
- Technical meetings, onsite audits should be used to facilitate timely staff review of the Plan



Post-Submittal Licensing Expectations

- Staff review should be focused on site/ licensee specific material:
 - Defensive Strategy
 - Implementation Schedule
 - Other bracketed text items
- Staff review and SE should be complete within 6 – 12 months from submittal
- Review/approval process should be consistent across all submittals



Defensive Strategy

- May be either site-specific or fleet-wide
- Needs to address all critical digital assets
- Bracketed text in NEI 08-09 provides points to consider



List of Systems in Scope of the Rule

- NEI 08-09 previously contained a template for listing systems in scope
- A list of systems is recommended to be part of the Plan but not required
- Most if not all plants will be referring to lists maintained onsite



Implementation Schedule

- Considered to be commitments
- Schedule should be based on detailed project plan established and maintained in-house
- Scope of work to implement Cyber Security Plan is uncertain at this time
 - Scope of systems has not been endorsed
- Implementation Schedule considers this uncertainty
- To further reduce risk and uncertainty, completion dates are linked to NRC approval of the submitted Plan



Reportability

- Clear guidance on what constitutes a Cyber Attack needs to be established to fully implement incident response and recovery procedures
- NEI 08-09 provides guidance to differentiate between a Cyber Incident (non-reportable) and a Cyber Attack (reportable)



FERC Order 706-B

- BOP systems must comply with NERC CIPs
 - NERC CIPs are Cyber Security Standards
- NERC - develop schedule for compliance
 - Industry participated - happy with outcome
 - FERC reviewing schedule
 - Schedule “begin work” contingent on FERC approval, exemption process establishment
- NERC established MOU with NRC



Outlook for 2010

- Finalization of cyber security plans
- Firm establishment of scope of systems between NRC and FERC
- Continued cyber program development for compliance w/ NRC and FERC Order 706-B
- Participation in NRC development of inspection materials and procedures
- Continued engagement of federal partners in DHS, FBI, and ODNI



Questions?