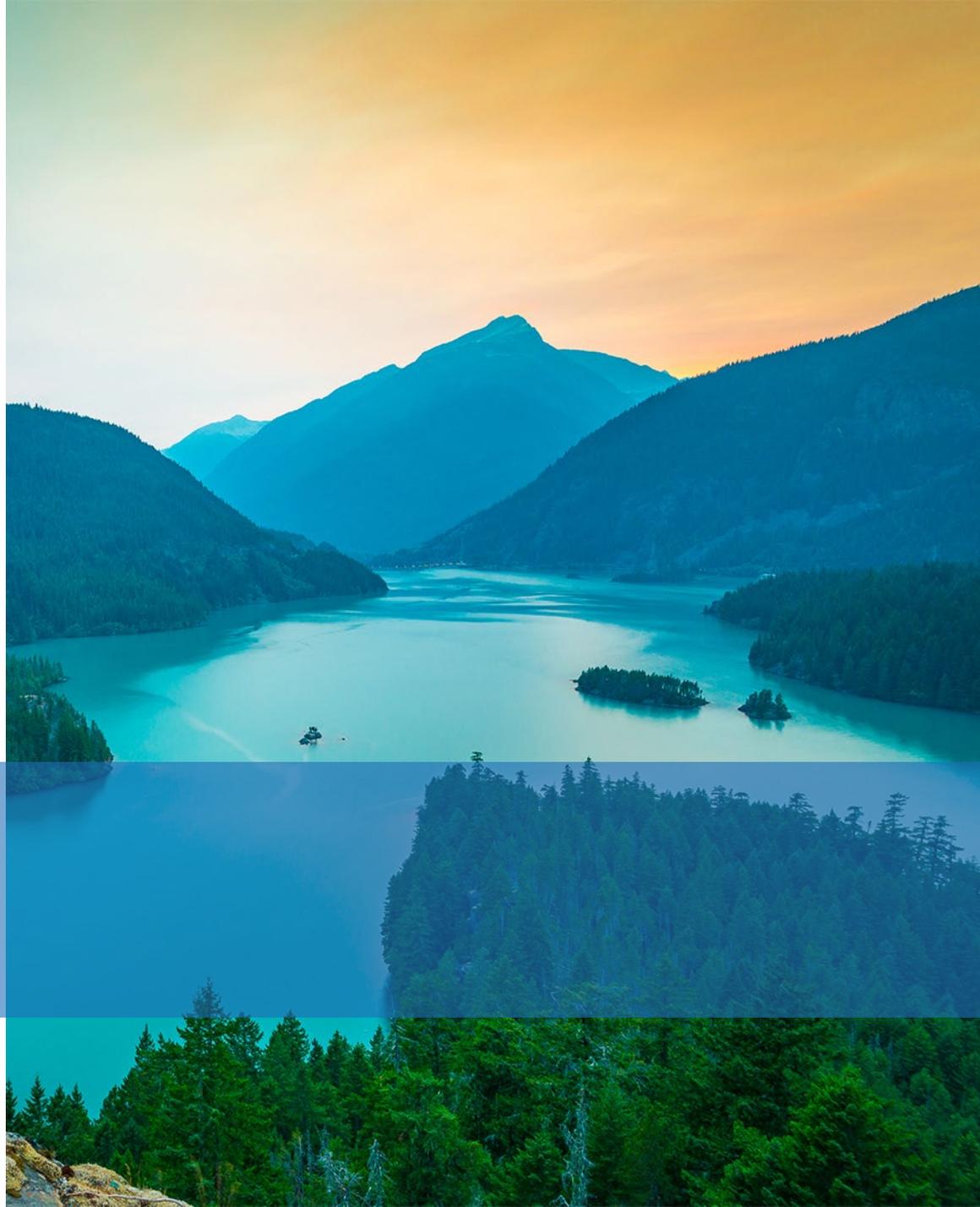


Physical and Cyber Security Input on Section 507 of the ADVANCE Act

Presented by NEI

January 29, 2025





Input for ADVANCE Act Section 507

UNIQUE SECURITY CONSIDERATIONS

Introduction

- NEI sent a letter on October 28, 2024, that provided feedback on aspects of the ROP including, security.
- NEI along with the Security Working Group has identified specific examples that are unique.
- The suggestions are aligned with D1- D4 assessment areas of Section 507 of the ADVANCE Act.
- The suggestions have been evaluated against the NRC evaluation criteria presented at the January 15, 2025, public meeting.

AA Sec. 507 D1: Elements of Oversight and Inspections that may be Modified Using Technology, Improved Planning, and Continually Updated Risk-Informed, Performance-based Assessment



- Optimize the use of fleet-level inspections. Revise inspection guidance to perform fleet-level inspections to minimize duplication of effort, provide efficient use of inspector resources and minimize burden on fleet resources.
 - FFD Example – Potentially up to 95% of the inspection can be completed at fleet level
- Optimize use of Requests For Information (RFIs) to streamline and improve baseline inspection preparation. Limit RFIs to only those pertinent to the inspection scope and allotted hours.
 - Baseline inspection RFIs
 - Evaluated Force on Force RFIs
- Credit existing performance indicators for inspection efficiencies. Remove inspection elements in 71130.04, Equipment Performance, Testing, & Maintenance that are already being assessed with the Protected Area Security Equipment Performance Index and expand credit for good indicator performance.
- Re-allocate inspection resources to gain efficiencies in travel resources. Assess current inspection scope for the resident inspectors, region, and headquarters and divide the scope to gain efficiency.
 - Target sets
 - Lock and key
 - Evaluated Force on Force

AA Sec. 507 D2: Measures to Improve Oversight and Inspections

- Review inspection procedures and eliminate duplicative inspection requirements. Review inspection procedures to identify and eliminate unnecessary repetition of activities.
 - Inspection Procedures 71130.03 and 71130.05
- Revise cyber-security program inspection procedure to reflect the maturity of licensee programs. Expedite and expand the current efforts to revise the frequency, duration, and team size, and elimination of unnecessary and redundant RFIs.
- Eliminate blind testing submittals to the HHS laboratory. The U.S. Department of Transportation reduced blind specimen requirements in 2000, but then fully eliminated them in 2017 because they concluded that the burden imposed by the testing far outweighed the value provided.

AA Sec. 507 D3: Advance Risk-Informed Procedures

- Redefine the minor/more-than-minor threshold. Use risk insights to assess and re-align the thresholds for minor/more than minor violations. Expand the examples to ensure consistent interpretation and application by inspectors. Conduct periodic training of staff and leadership on the application of the Commission's standard of reasonable assurance of adequate protection.
- Apply risk-informed and performance-based principles. Prioritize and scope each inspection and frequency of inspection to be commensurate with risk and licensee performance, considering previous inspection findings, performance indicators, and Corrective Action Program (CAP) reviews.
 - Comprehensive review of inspection frequencies
 - Performance based inspection model to include sample sizes

AA Sec. 507 D3: Advance Risk-Informed Procedures, continued

- Simplify the Baseline Security Significance Determination Process (BSSDP) for power reactors. The BSSDP can be improved to eliminate complexity, account for defense-in-depth, and incorporate risk insights.
 - Programmatic deficiencies versus human performance error
 - Minor/more-than-minor threshold concurrent with this revision
- Optimize qualifications for armed response force members that continue to meet the reasonable assurance standard.
 - Consider NEI Annual Exercise Whitepaper.
- Credit for licensee performance during force-on-force inspections. Implement an inspection model like the emergency preparedness evaluated exercises as an approach to demonstrate reasonable assurance in force-on-force inspections if a licensee's baseline performance warrants (e.g. no action matrix movement due to security performance).

AA Sec. 507 D4: Enable Licensee Innovations that may Advance Nuclear Reactor Operational Efficiency and Safety

- Augment current urine testing with oral fluid testing for all testing conditions. Provide a regulatory pathway to enable U.S. Department of Transportation requirements for oral fluid testing. This approach will provide efficiencies to both the licensee and regulator, while strengthening the insider mitigation program through mitigating subversions.



Questions?
