

# Industry Input\* on NRC Fuel Cycle Cyber Security Implementation Costs

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On Behalf of NEI's Fuel Operations Committee

NRC Public Meeting – October 12, 2016

\*Industry's implementation cost estimates are based on our interpretation of the material presented during the NRC August 25, 2016 public meeting and does not reflect the content of any discussions during the meeting which may lead to future changes in the draft rule or regulatory guide. Therefore, similar to the NRC staff's preliminary cost estimates, our estimates may change as the rule language and regulatory guide evolve.

# Key Comments

- **Industry estimates \$14.2 million in implementation costs for the fleet**
  - Average \$1.8 million per facility (6.5X larger than NRC estimate)
  - Estimates range from \$892,000 to \$2.8 million per facility
- **NRC estimates do not account for costs beyond first year of implementation**
  - Industry conservatively estimates \$300,000 per facility to maintain compliance on a yearly basis
- **NRC estimated labor rates do not reflect actual costs**
- **Cyber Security Plan (CSP)**
  - Industry costs to establish Cyber Security Team – estimated at \$40,000 per facility
  - Estimate \$76,000 (700 hours) per facility to develop CSP

# Cost Categories

- **Analysis of Digital Assets and scoping of Vital Digital Assets (VDAs)**
  - Average estimate of \$244,000 per facility (2000 hours)
  - Category I: Estimate of 13,000 digital assets; ~800 VDAs
  - Category III/Part 40: Estimate of 1,000 digital assets; low # VDAs
  - Overly burdensome process in light of existing analysis already completed, i.e. ISA and security plans
- **Documentation of controls to VDAs**
  - Average of \$300,000 per facility (2600 hours)
- **Hardware/Software modifications: \$900,000 per facility**
  - Estimate of \$50,000 per VDA for application of hardware/software controls
- **Initial training: \$60,000 per facility**
- **NRC review: \$50,000 per facility**

# Summary

- **Key issues remain** with significant implications for ultimate direction of rule and related guidance
  - Policy issue for licensees not subject to the DBTs
  - Forthcoming NRC decision on NEI petition PRM-73-18
- **Scoping out** accredited, unclassified systems will significantly reduce implementation costs
- **Cost/benefit** justification for current regulatory approach is not apparent
- **Industry appreciates** management and staff's support of extensive stakeholder outreach and encourages continued communication as the rulemaking process progresses