U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

NRC Cost Estimates

Regulatory Analysis Developed to Support the Fuel Cycle Cyber Security Rulemaking

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Agenda

- **Compare Implementation Costs (initial figures)**
- **VDAs and Controls**
- **Hardware Considerations**
- **Path Forward**

Compare Implementation Costs (initial figures)

- **Cyber Security Team and Plan**

  CST staff - Security Mgr.; Cyber, Facility, and Safety Expert; Licensing/ADM

  400 hrs ≈ $63,000 700 hrs ≈ $116,000

- **Supporting technical information (analysis)**

  960 hrs ≈ $59,000 2000 hrs ≈ $244,000

- **Address controls and create procedures**

  1000 hrs ≈ $61,000 2600 hrs ≈ $300,000

- **Training and hardware modifications**

  Training ≈ $11,000 Training ≈ $60,000

  Hardware ≈ $131,000 Hardware ≈ $900,000

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VDAs and Controls

Lower # of vital digital assets due to …

- Accredited Systems – exclude Cat I digital assets protected by equivalent requirements
- Alternate means – equivalent substitute (no alternate controls)

Reducing the burden of controls

- Boundary – combine components necessary to perform the function
- Grouping - similar VDAs addressed by the same controls
- Common or Inherited Controls – Measures used to protect more than one VDA

Hardware Considerations

- Cost per VDA – $15,000 versus $50,000
  – credit existing programs

- Number of VDAs – approximately 12 per facility

- New alternate means – costs not included

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Path Forward

- Inform cost estimates based on stake holder feedback
- Place regulatory analysis into *Federal Register* proposed rule package
- Submit proposed rule package to the Commission, March 2017