

# **Digital I&C**

## **Industry Perspective**

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# Topics

- Objectives
- Progress To-Date
- Remaining Effort
- Continuing Concerns
- Requested Activities



# Objectives

- Develop a digital licensing process that is stable, predictable, and timely
- Provide guidance for the licensing process that is understandable and useable
- Facilitate application of digital technology that enhances plant safety, availability, and reliability



# Progress To-Date

- Successful project plan implemented
  - Problem statements
  - Milestones
  - Deliverables
- Interim Staff Guidance (ISG) status
  - Four ISGs are finalized
    - Cyber security
    - PRA
    - Communications
    - Human Factors



# Progress To-Date

- One ISG being revised
  - Diversity and Defense in Depth (May09)
- Two ISGs are in development
  - Licensing process
  - Fuel cycle facilities
- Issues identified beyond Project scope
  - Project scope limited to creating ISGs
  - NRC & Industry resolving issues together



# Remaining Effort

- Complete DI&C-ISG-06 Licensing Process
  
- Important work beyond Project scope:
  - Address operational issues
  - Define adequate diversity
  - Research PRA modeling
  - Incorporate operational experience



# Continuing Concerns

- Licensing process is burdensome and is a disincentive for licensee submittals
  - Scope/detail of NRC review
    - Detailed design review versus
    - Reasonable assurance of regulatory compliance
  - Extent of document submittals
    - Those necessary for Staff development of a Safety Evaluation Report (SER) versus
    - Those available for audit/inspection
  - Credit for existing Appendix B Programs
  
- Crucial that basis be on a finding of reasonable assurance



# Requested Activities

- Refine current digital licensing process through
  - Resolution of remaining issues
  - Applying lead projects lessons learned
  - Processing additional LARs
- Change existing deterministic Commission Policy on diversity and defense-in-depth
  - Policy established in SRM to SECY 93-087
    - Requires use of best estimate methods in analyzing defense against common-mode failure
    - Silent on use of risk informed decision making
  - Policy change necessary fully enable the licensing of DI&C designs by allowing risk informed methods





# Requested Activities

- Complete permanent regulatory guidance this year
- Maintain Steering Committee through FY 2010
- Identify additional pilot plants
- Complete research (EPRI MOU)
- Commission briefing by the end of 2009

