

# Digital Instrumentation and Control Inspection IP 52003 Changes

*Douglas Bollock  
IRIB/DRO/NRR*

# Digital I&C Inspection items

- Inspection Procedure (IP) 52003, “Digital Instrumentation and Control Modification Inspection,” is used for major digital modifications that a Region would like to inspect.
- Not a ROP Baseline IP (IMC 2515 Appendix C)
- These modifications required a license amendment

# ISG-06 Revision 2

- Digital Instrumentation and Controls (I&C) Interim Staff Guidance (ISG)-06, Revision 2 contains licensing review guidance for the Tiered (or Traditional) Review Process and the new Alternate Review Process (ARP)
- The Tiered Review Process is based on the review and approval of a completed design that has undergone factory acceptance testing
  - The staff's licensing review is focused on the system architecture and the lifecycle development outputs

# ISG-06 Revision 2

- The ARP allows for approval of a license amendment (LA) for digital I&C modifications prior to licensee's completion of system design or development.
  - The staff's licensing review is focused on the system architecture, development plans and the licensee's vendor oversight plan (VOP)
  - The VOP documents the activities that, when executed, will ensure that the vendor develops the system in accordance with the amendment

# Digital I&C Inspections

- Inspections for a modification approved using the Tiered Review Process focus on site activities like Site Acceptance Testing (SAT) and system installation
- Inspections for a modification approved using the ARP focus on those licensee and vendor implementation and test activities that take place after the design is approved, as well as site activities (e.g., SAT)

# Digital I&C Inspections

- For the ARP, NRC's inspection approach adjusted from verifying installation activities to also verifying that the system was designed, developed, tested in accordance with the amendment
  - Vendor inspections during modification development (no change to NRC vendor inspection process)
  - Inspection using IP 52003 to verify the licensee performs its VOP after the amendment is issued.



# IP 52003 changes

- Update to IP 52003
  - Added inspection of licensee oversight of vendor for LA approved under the ARP
    - Additional inspection hours for VOP inspections
    - Inspection of licensee oversight activities to be performed at vendor facility and licensee site.
  - Incorporate lessons learned during NRC inspections performed on digital I&C systems used in the AP1000 units at Vogtle.
  - Regional led inspections with potential technical support from HQ.

# Questions?