

Component Design Bases Inspections

RIII External Engineering
Workshop
August 2006

Topics

- Overview of CDBI
- Additional Inspection Activities
- Effective Logistics
- Communication
- Status of Inspections
- Types of Findings
- NRC Activities
- Where do we go from here?

Overview of CDBI

- Component, not system based
- Sample based on risk and margin, not just safety significance
- Operating Experience
- Emphasis on component/operations interface
 - Do operating procedures, training, etc. match actions credited in design or licensing bases?
 - Are operators trained, knowledgeable, capable of performing the risk-significant activities?

Overview of CDBI

- NRC team
 - Lead inspector
 - SRA (as needed)
 - Operations inspector
 - 2 engineering inspectors (Mechanical/Electrical)
 - 2 contractors (Mechanical/Electrical Design)
 - Observer

Overview of CDBI

- Request for Information Letter
- In office prep - Team Leader and SRA
- 1st: Onsite preparation – team plus SRA
- 2nd: In office (prep & non-inspection activities)
- 3rd: Onsite preparation and inspection
- 4th: In office (inspection & other activities)
- 5th: Onsite inspection
- 6th: In office (inspection & other activities)
- 7th: Onsite inspection and exit meeting

Overview of CDBI

- Coordination

- PRA: interface with SRA during preparation and for potentially risk significant findings
- Operations: walking down procedures and mock performance of JPMs, may involve simulator time
- System/Component engineering: address component-specific questions, system walk downs, operating experience, system/component health
- Design engineering: address questions related to calculations, processes, etc.
- Regulatory Assurance: Logistics, meeting schedule, licensing information, etc.

Additional 'Inspection' Activities

- TI 2515/166, Pressurized Water Reactor Containment Sump Blockage – Portions of TI may be reviewed
- Review of commitments - 10 CFR 50.54f
Letter response

Effective Logistics

- Engineering Brief
- Accommodations
 - Team room
 - Computers/printer
 - Phones
 - Interview room/separate area
- Daily Interface
 - Individual contacts for inspectors
 - Daily brief between NRC and Licensee team leads
- Question List
 - Shared understanding of the question asked
 - Status

Communication

- Responding to questions
 - Best to put inspector question in writing
 - Target response within 24 hours; however, communicate to lead and inspector if more time is needed (verified answer)
 - Anticipate questions

Status of RIII inspections

- Kewaunee – Pilot – Complete
- Perry, Duane Arnold, Monticello – Complete
- Quad Cities, Point Beach – Information gathering
- Byron, Palisades – No activity yet

Status of CDBI – Nationwide

Region	Complete	In Progress	Findings*
I	5	2	9+2 URIs
II	5	1	12
III	3	1	13+2 URIs
IV	3	0	8

*includes preliminary findings, overall numbers may change

Types of Findings

- Vortexing
- Impact from Tornados
- TMI modification – ability to close RCIC suppression pool suction valves on containment isolation
- Diesel generator frequency
- Operator Actions
- Corrective Actions

NRC Activities

- Monthly calls with other Regions and HQ
 - Coordination with contractors
 - Types of findings – potential generic communications
 - Inspection report format
 - Resource use

NRC Activities – Region III

- Knowledge Transfer between teams
 - Reflection on what went well and what we'd like to change on the next inspection
 - Letter to licensee
 - Lead Inspector preparation
 - Schedule for prep week (removing 1 week onsite)
 - Developing Inspection Aid

Future of CDBI

- Starting 2nd Inspections at Pilot Sites
- Discussions to begin in November at the Regional Level



Questions?