



Harold Barrett, PE

Senior Fire Protection Engineer

Fire Protection Branch

Division of Risk Assessment

Office of Nuclear Reactor Regulation

Staff Observations on the current Non-Pilot LARs

NFPA 805 Public Meeting

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Topics for Discussion

- Previously Identified “Generic RAIs”
- General Observations
- New Observations
- Summary

Previously Identified “Generic RAIs”

- Some have been fixed or are on a path to resolution
 - Monitoring Program – FAQ 10-0059
 - Total CDF/LERF
 - UFSAR (FAQ12-0062)
 - Fire Brigade issues

Previously Identified “Generic RAIs”

- One went away
 - Post-Seismic Fire Fighting capability
- Some Still Working
 - NEI 04-02 Template Changes
 - Defense-in-Depth / Safety Margin
 - Post Transition Change Process

Previously Identified “Generic RAIs”

- Some continue to be issues
 - Inappropriate use of “Complies with Clarification”
 - Gap analysis to NEI 00-01, Revision 2
 - Reference to Appendix R in B-2 Table compliance statements
 - Intent to use EPRI performance-based methods to adjust fundamental program surveillance/PM frequencies

General Observations

Pilots vs. Non-Pilots

- There has been a general trend to provide less detailed information in the B-3 Table in Non-Pilots compared to Pilots
 - Harris clearly stated when targets (VFDRs) were not in the Zone of Influence (ZOI) of fixed or risk significant ignition sources
 - Non-Pilots are only stating that the Δ risk is OK

General Observations

Pilots vs. Non-Pilots

- Pilots stated explicitly what the resolution for each VFDR is (Δ risk, modification, Recovery Action)
 - This has not been consistently applied by the Non-Pilots

New Observations

- Issues related to IEEE-383 cable qualifications
 - From a Chapter 3 standpoint, IEEE-383 qualification only deals with FLAME SPREAD
 - Assumptions related to damage threshold in either the Fire PRA or Fire Modeling Performance-Based Approach must be based on the material characteristics

New Observations – continued

- Quality issues
 - Unlike the pilots, some licensees are not committing to compliance to NFPA 805 Section 2.7.3 for future engineering analyses
 - Review
 - Verification and Validation
 - Limitations of Use
 - Qualification of Users
 - Uncertainty Analyses

New Observations – continued

- Quality issues

- Vast majority of the NFPA 805 analysis work is/was done by contractors
- The staff is concerned about NFPA 805 Program quality after transition
 - Qualification of licensee analysts
 - Integration of Fire Protection into plant change processes
 - Use and maintenance of the numerous engineering databases
 - Performance /revision of some of the more sophisticated engineering analyses (FDS, CFAST, HRA, NSCA, etc.)

New Observations – continued

- Monitoring Program capability is evolving
 - One licensee has proposed quantitative methods to monitor performance of programmatic elements

New Observations – continued

- Fire Modeling Issues
 - Treatment of corners and walls
 - Verification and Validation
 - Software – recoding spreadsheets from the Fire Dynamics Tools (NUREG 1805), input processing
 - Use of NUREG 1824 with no verification that inputs are in the validated range
 - Use of newer versions of software than was V&V'd in NUREG 1824

Summary of Staff Observations

- The NRC staff and the industry continue to work through the generic issues being identified with the Non-Pilot NFPA 805 applications
- The staff will work with the NEI NFPA 805 task force to resolve these issues to the extent possible so that future NFPA 805 applications incorporate necessary information