

NRC NFPA 805 Workshop

Piloting Process Improvements

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Piloting Process Improvements

- 2 BINS:
 - Improvement benefiting current applications in process or soon to be processed as well as future applications
 - Improvements for long term and future NFPA 805 applicants as well as other Risk-Informed initiatives

Piloting Process Improvements

- What's a 4.0 NFPA 805 Process?
 - Fire PRA Model Stability
 - (e.g., DC/COL-ISG-011, RG 1.200 met)
 - LAR Content minimizes audit & RAI efforts
 - LAR Audit Scope is Focused & Efficient
 - RAIs are focused & Responses are efficient
 - SE is predictable with self-approval granted
 - Costs are Reasonable & Predictable

What's a 4.0 NFPA 805 Process?

- Fire PRA is “frozen” early in NFPA 805 licensing process to facilitate FREs and Modification scope
- NRC RG 1.200 process is followed and the Licensee processes for updating the FPRAs are sound
- LAR Audits are smaller in scope because the LAR and Portal contain sufficient information for review
- RALs are fewer because the LAR addresses “generic” RALs in sufficient detail
- Review time for applications is on par with similar applications
- SEs have few or no license conditions

FPRA Model Stability - Pilot Ideas

- Modeling aspects of FPRA model “frozen” for LAR application
- NRC review focuses on RG 1.200 Peer Review Process met and adequacy of FPRA Configuration Control update process for inclusion of new information
 - New modeling data/issues addressed through model and application updates (per standard)
 - Post-LAR inspections (triennials) ensure licensees meet requirements
- Process similar to DC/COL-ISG-011, “Finalizing Licensing-basis Information”

DC/COL-ISG-011 – Licensing

Basis Freeze Point

- Freeze point for DC and COL Applications established for predictable schedule
- Licensee relies on its programs to evaluate, track and report (as appropriate) changes identified afterward
- Change control processes manage changes after NRC issues DC or COL

Applying DC/COL-ISG-011 Approach to NFPA 805 Process

- Could mirror this process for just FPRA or NFPA 805 in total
- Only certain changes would not be considered for deferral past freeze, due to relevance to staff SER
 - Significant errors
 - Compliance with regulations or other licensing basis document (e.g. Technical Specifications)
 - A significant vulnerability identified

Holistic Process Improvement - Idea

- Proposed pilot application
 - Earlier NRC Staff fire PRA review & focus:
 - Review focuses on results from RG 1.200 Fire PRA peer review
 - Review process for PRA model and applications update for inclusion of new information
- Objective:
 - PRA model stability improves downstream predictability
 - Allow transition to progress with separate process for handling emergent information
- Potential Pilot – Plant Hatch
 - Conduct audit after model peer review

LAR Submittal/RAIs - Ideas

- LAR template is a good practice
 - Template refinement is still beneficial
 - ✓ Details on “generic” RAIs
 - ✓ Fire Modeling info
 - ✓ Optimize content for some tables
 - ✓ Required Level of Detail on proposed modifications
- Improve focus of RAIs
 - Incorporate detail on “generic” RAIs in LAR or on portal
 - Categorize 60, 90, and 120-day RAIs
 - Resolve RAIs before significant re-quantification efforts
 - Optimize amount of docketed information needed on F&O resolution
- ▶ Reduce size of submittals

LAR Review - Ideas

- Process Improvements apply to plants that have not submitted, including Hatch
- Predictable process incentivizes transition of non-805 plants
- Provides predictability for other risk-informed applications.
 - LAR template includes common RAIs in sufficient details for reviewers
 - Smaller, focused team for LAR audit with specific, targeted pre-audit questions
 - Post-LAR questions primarily allow reviewer to ensure information needed for SE is docketed

SE and Transition Cost - Ideas

- Early determination of acceptability of FPRA prior to FREs & LAR submittal
- SE issued in a timely manner
- Simplified License Conditions
- NRC Review fee hours <3500 (\$1M)
- Utility modification scope stable, with detailed conceptual designs by SE date

Changes support an efficient process for LAR development and NFPA 805 Transition

