




UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 29, 2008

MEMORANDUM TO: Alexander R. Klein, Chief
Fire Protection Branch
Division of Risk Assessment
Office of Nuclear Reactor Regulation

FROM: Paul Lain, Senior Fire Protection Engineer 
Fire Protection Branch
Division of Risk Assessment
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF JUNE 19, 2008, CATEGORY 3 NON-PILOT
WORKSHOP REGARDING TRANSITION TO NATIONAL FIRE
PROTECTION ASSOCIATION STANDARD 805

On June 19, 2008, the U.S. Nuclear Regulatory Commission (NRC) staff hosted a workshop to discuss the topics associated with transition to the risk-informed, performance-based fire protection regulation in Title 10 of the *Code of Federal Regulations*, Part 50.48(c), "National Fire Protection Association (NFPA) 805 Rule," in order to benefit the non-pilot plants that will be undertaking this transition in the future.

NFPA 805 allows the use of performance-based methods, such as fire modeling, and risk-informed methods, such as Fire Probabilistic Risk Assessment (Fire PRA), to demonstrate compliance with the nuclear safety performance criteria. The meeting was held at the Hyatt Regency Bethesda, One Bethesda Metro Center, Bethesda, MD.

The NRC staff and several stakeholders gave presentations relative to the issues and challenges associated with transition to NFPA 805, including the change evaluation process, development of the Fire PRA models, and the detailed analysis techniques needed to implement NFPA 805. There were several members of the public in attendance; however, no public meeting feedback forms were received.

The original meeting agenda was scheduled for one and a half days (attached as Enclosure 1), however, the whole meeting agenda was covered the first day and there was no need for a second day of meetings. The meeting handouts are available in the Agencywide Documents Access and Management System at Accession No. ML081840360.

Enclosure: As stated

PUBLIC WORKSHOP TO DISCUSS TRANSITION
TO NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 805,
"PERFORMANCE BASED STANDARD FOR FIRE PROTECTION"

JUNE 19 & 20, 2008

AGENDA

June 19: 8:30 AM: Welcome

NFPA 805 Program Status

- Enforcement Discretion Extension
- Nuclear Energy Institute (NEI) 04-02 and Regulatory Guide 1.205 Revision
- License Amendment Request (LAR) vs. License Renewal Application
- Post Transition Inspections

Status/Results on EPRI/RES Efforts

- Incipient Detection
- Fire Ignition Frequency Update
- Large Oil Pump Fires
- Hot-Short Duration
- Manual Suppression Effectiveness
- Fire Development Timelines
- Heat Release Rate Correlations for Stacked Cable Trays

Non-Pilot Fire PRA Transition Implementation Experiences

- Highlights of a Non-FRANC/Non-CAFTA Fire Probabilistic Risk Assessment (FPRA) - RISKMAN, NUPRA, etc.
- Fire Scenario Development
 - Unique Screening Techniques
 - Detailed Fire Modeling (Zone Modeling & FDS)
- Transient Fire Screening
- Multiple Spurious Operation Analysis Techniques
 - NRC methodology
 - Frequently Asked Question-12 methodology
- Human Reliability Analysis Treatment of Recovery Actions
- Treatment of Control Room Fires
- Change Evaluations
 - Various Methods
 - Examples
- In-Cabinet Incipient Detection Credit
- Reviewing Defense-In-Depth/Safety Margin
- Configuration Control & Monitoring
- FPRA Uncertainties Calculation
- Non-Pilots LAR submittals; Quality & Content

5:00 PM: Adjourn

Enclosure

June 20: 8:30 AM: Welcome Again

Pilot Transition

- Shearon Harris LAR Submittal Lessons Learned
- Oconee LAR Submittal Lessons Learned
- NRC Review of Pilot Plant Submittals
 - NFPA 805 Standard Review Plan
 - LAR Acceptance Review
 - Site Visit/Audit
- Significant Transition (Parking Lot) Issues
- NRC Review of the FPRA
 - Realistic LAR Total Fire Core Damage Frequency (CDF)/Large Early Release Frequency (LERF) Estimates (Pre- & Post Transition)
 - Calculating Delta CDF/LERF (Going Forward/Fully Compliant/Baseline FPRA)
 - FPRA Quality
 - NEI Peer Review Guide
 - American Nuclear Society/American Society of Mechanical Engineers Fire Standard and Regulatory Guide 1.200
 - Internal Events Model
 - Staff Review Lessons Learned
 - Industry Peer Reviews
 - Reporting Facts & Observations (F&Os) and Findings
- Change Evaluations (transition and post-transition)
 - Staged Approach for Calculating Delta-CDF

12:00 Noon: Adjourn

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