



10 CFR 50.48(c), NFPA 805 RULE

Briefing to Commissioner Jaczko

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NFPA 805 - Performance-Based Standard for Fire Protection for LWRs

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- Rule Structure
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NFPA 805 - Background

- 1975 - Browns Ferry Fire
- 1980 - Appendix R
- 1998 - SECY 98-058, RI/PB FP Std
- 1998 - Reg. Guide 1.174, PRA
- 2000 - SECY 00-009, Rulemaking Plan
- 2001 - NFPA 805 Published
- 2002 - Proposed Rule Published
- 2004 - Rule Approved

Rule Structure

- Incorporates NFPA 805, 2001 Edition into 10 CFR 50.48(c) as a voluntary alternative to 50.48(b), Appendix R
- Identifies 7 exceptions to the standard
- Plant wide evaluation is required
- License amendment required to adopt
- Decommissioning plants may also adopt

NFPA 805 Highlights

- Provides guidance on nuclear safety analysis and fire modeling
- Has minimum design elements and a fundamental fire protection program
- Allows grandfathering of existing exemptions and engineering evaluations
- Maintains safety margin & defense-in-depth

NFPA 805 Highlights

- Differences from Appendix R
 - ◆ All modes of operation
 - ◆ Hot stand-by vs cold shutdown
 - ◆ Emergency lighting (sufficient vs 8 hr)
 - ◆ No alternate/dedicated shutdown areas
 - ◆ Recovery actions (manual & repair) allowed during hot shutdown
 - ◆ Radiation release criteria

NFPA 805 - Advantages

- Voluntary alternative to Appendix R
- Sets performance goals and criteria
- Focus on risk significant issues
- Clarify fire protection licensing basis
- Allows risk-informed, performance-based changes without NRC prior approval

Enforcement Discretion

- Policy approved with the Rule
- Two years of discretion for transition
- Signup deadline for discretion to cover existing noncompliances
- Policy amended to extend the deadline to December 2005
- Issue with utilities transitioning all their sites over multiple years and additional time needed to develop fire PRA
- Discretion policy will be evaluated during Transition Pilot Program

Implementation

- Regulatory Guide
 - ◆ NEI Implementation Guide, NEI 04-02
 - ◆ NEI Circuit Analysis, NEI 00-01
- Risk-informed inspection procedures
- Pilot transition program
 - ◆ Review technical adequacy of fire PSAs
- Non-pilot transition
- ROP monitors future changes

Transition Schedule

- Duke Energy
 - ◆ 2005 to 2007: Oconee, Units 1, 2, & 3 **(Pilot)**
 - ◆ 2006 to 2008: McGuire, Units 1 & 2
 - ◆ 2007 to 2009: Catawba, Units 1 & 2
- Progress Energy
 - ◆ 2005 to 2008: Shearon Harris, Unit 1 **(Pilot)**
 - ◆ 2006 to 2009: Crystal River, Unit 3
 - ◆ 2007 to 2010: H. B. Robinson, Unit 2
 - ◆ 2008 to 2011: Brunswick, Units 1 & 2