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NFPA 805

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HSB Global Standards
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NFPA 805

- NFPA 805 – Voluntary consensus standard developed by the National Fire Protection Association
- Developed by diverse & balanced committee of experts representing licensees, equipment vendors, insurers, special experts, NEI, DOE, NRC
- Full & open consensus process with public participation led to adoption as American National Standard
- Builds on NFPA 803, GDC 3, R.G. 1.189, Appendix R, & accepted practices
- Contentious issues resolved through consensus of experts and public stakeholders

NFPA 805

Enhancements

- Adds nuclear safety (first time in NFPA standard)
- Provides Goals, Objectives for nuclear safety and release (Ch. 1)
- Allows deterministic (4.2.3)
  OR
  Performance-Based (4.2.4) approaches to meet goals
- P-B approach implemented by fire modeling (4.2.4.1) or fire risk evaluation (4.2.4.2)
- Maintains fundamental requirements for minimum fire protection (Ch. 3)
- Provides guidance on selection and use of methods
- Adds change control processes (2.2, 2.4.4, 2.6, 2.7)

NFPA 805

Fully Risk-Informed?

Provides framework for Risk-Informed, Performance-Based Fire Protection

Supplementing NFPA 805 for Risk-Informed fire protection:

- **NEI Implementing Guidance**
- **SFPE *Engineering Guide to Performance-Based Fire Protection Design & Analysis of Buildings***
- ***Risk-Informed, Performance-Based Industrial Fire Protection*** (*www.fireriskforum.com*)
- **Proposed ANS Standard on Fire PRA Methodology**
- **NFPA 805 Appendices**
  - **Explanatory info and possible methodology for nuclear safety analysis, circuit analysis, application of fire models, use of PSA methods**
  - **Not part of standard**
  - **"Should," "sufficient," "adequate," "appropriate," "consider"**

NFPA 805

Benefits of Voluntary Implementation

- Provides licensees flexibility in meeting objectives while maintaining existing prescribed levels of safety
- Allows for innovation
- Solutions may be more risk-specific & risk-effective
- Meets NRC requirements for defense-in-depth, protection of public health & welfare, PRA risk principles, safety margins, QA
- Reduces regulatory burden by allowing voluntary relief from prescriptive requirements
- Implements PL 104-113 for the use of voluntary consensus standards