# Enclosure 3

NFPA-805 Public Meeting Handout

Duke Energy Carolinas, Inc.

July 17, 2008



# Oconee NFPA-805







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#### Overall

- Reconstitution
- B-1 Table
- B-2 Table
- B-3 Table
- Radioactive Release
- Non-power Ops
- PRA
- Configuration Control
- Documentation
- LAR and UFSAR



## Reconstitution

- Reconstitution should be completed prior to beginning
- Well documented Safe Shutdown Analysis with open items where deterministic requirements cannot be met
- Modification reviews



# B-1 Table

(Traditional Fire Protection)

- Approved exemptions to the original regulations
- Limited calculations from original Safe Shutdown Analysis
- "Grey" license statements
- Generation of a new calc for the B-1 Table
- License Amendment Request (LAR) Appendix T populated with license conditions brought forward for NRC clarification
- Some open items entered into the Corrective Action Program (CAP)





- Should be similar for all three Duke nuclear plants
- Generated a B-2 calculation
- Some open items, entered into the CAP



# B-3 Table

(Safe Shutdown Analysis)

- Due to Oconee Nuclear Station (ONS) design this was very complicated
- Final Safe Shutdown Analysis (SSA) for a given fire area turned into an iterative process
- Open items came out of the fire area analysis
- Team approach to resolving SSA
- Need more up front training prior to activating the team
- Change evaluations developed from this
- Manual action feasibility
- Thermal Hydraulic calculations required



PRA (Probabilitic Risk Assessment)

- ONS required separate models due to unit differences – not originally envisioned
- NUREG 6850 turned out to be somewhat conservative (however NUREG 6850 provides a good foundation to build a Fire PRA)
- Ideally the PRA model should be built with the new reconstituted SSA
- PRA/SSA Team interface
- PRA quality versus Appendix B concerns
- Separate Change Evaluation calculations



## **Energy** Radioactive Release

#### This went fairly smooth

- This was done by plant personnel
- Separate calculation generated



NPO (Non power Operations)

- ONS was very difficult to tie NPO components to Key Safety Functions
- Balance Of Plant Fire Area can present concerns as a "pinch point"
- Process submitted for approval
- FAQ 07-0040 was a very intense process to develop. Approval to be done via the LAR.



LAR (License Amendment Request)

- More up front training needed for review team
- Not enough time was allotted for review much overtime worked by all involved
- Station management review required two sessions for approval.
- Change Evaluation summary pending



- Three site modification review process developed
- The need for development of controls for new calcs and LAR information
- Post LAR, pre Safety Evaluation Report (SER) program development
- Project process controls
- Integration of the new Final Safety Analysis and Nuclear Safety Capability Assessment into existing Engineering documents



#### Overall

- Its all about teamwork and communications
- Lay out the proper sequence for transition LAR due date versus a completion of the program date
- Plant personnel frequently required for maintenance of running units or outage support
- Different level of details in UFSAR for nuclear plants present some challenges to a generic NFPA 805 UFSAR
- This is a very complicated process and will be new to plant personnel



# **Enclosure 4**

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July 17, 2008



### The NRC NFPA 805 Acceptance Review Process

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Public Meeting on NFPA 805 Pilot License Amendment Requests Two White Flint North Rockville, MD July 17, 2008



#### **Topics for Discussion**

- NFPA 805 Transition Status
- NFPA 805 Pilot Program
- NFPA 805 Pilot License Amendment Requests (LAR)
- NRC Staff Acceptance Review
- NRC Staff Review of LAR
- NRC Infrastructure



#### **NFPA 805 Transition Status**

- Letters of Intent for 47 Units at 29 Sites.
- 44 Units at 27 Sites are Actively Transitioning.
- 36 Month Discretion Period to Transition.
- 12 Pilot Observation Visits Completed.
- Frequently Asked Question (FAQ) Process.
- 24 Public Meetings w/ NEI 805 Task Force.
- 2 Non-Pilot Workshops



### NFPA 805 Pilot Program

- Two Pilot Plants identified:
  - Oconee
  - Shearon Harris
- Facilitated close coordination between industry and NRC staff for identifying issues and transmitting lessons learned to non-pilots
- Process includes:
  - Pilot Observation Meetings and associated trip reports
  - Public Meetings
  - Workshops



#### **NFPA 805 Pilot Program- continued**

- Transition Implementation Guidance Documents have benefited from this open process
  - NEI 04-02
  - Regulatory Guide 1.205
  - NUREG/CR-6850
- Included the development of the Frequently Asked Question (FAQ) Process
  - Monthly public meetings with NEI NFPA 805 Task Force
  - Structured avenue to seek NRC staff interpretations and clarifications to guidance documents (NEI 04-02, Regulatory Guide 1.205, NUREG/CR-6850)



#### NFPA 805 License Amendment Request Submittal

- Formal start of the NRC staff review and approval process
  - Required by regulations
  - Addresses legal requirements as well as technical requirements
  - Includes a detailed record of Fire Protection Licensing Basis going forward



#### NFPA 805 Pilot License Amendment Requests

- On May 29, 2008 Progress Energy submitted a License Amendment Request to transition the Shearon Harris NPP to a Risk-Informed, Performance-Based Fire Protection Program in accordance with 10 CFR 50.48(c) and NFPA 805
- On May 30, 2008, Duke Energy submitted a License Amendment Request to transition the Oconee NPP to a Risk-Informed, Performance-Based Fire Protection Program in accordance with 10 CFR 50.48(c) and NFPA 805



#### **NRC Staff LAR Acceptance Review**

- High level review of submittal to assess sufficiency for the more detailed review
  - Scope
  - Level of detail
  - Completeness
- Acceptance review will result in letter back to licensee in accordance with the normal NRC acceptance review process (as currently defined in LIC-109)



#### NFPA 805 LAR Review

- Detailed review of complete submittal package
- NRC staff will "pilot" draft Standard Review Plan (SRP) guidance in review process
- In addition to proof of concept as part of pilot process, the SRP review also fulfills licensing requirements for the pilot plants being reviewed



#### **NRC Infrastructure**

- As part of the pilot process, the NRC staff is in the process of developing/revising the necessary regulatory documents associated with NFPA 805:
  - Regulatory Guide 1.205
  - Acceptance Review Guidance
  - Standard Review Plan
  - Inspection Procedures



#### Summary

- NFPA 805 Transition is well underway
- NFPA 805 Pilot Process has facilitated the process
- NRC Staff is in the process of reviewing the Pilot plant LARs
- Significant effort is underway addressing the regulatory infrastructure to address NFPA 805 transition