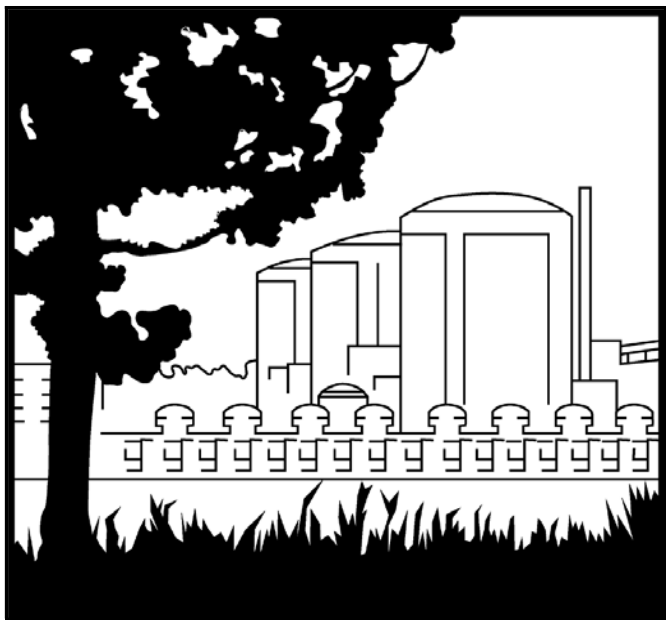

NRC Pilot Plants Observation Meeting UFSAR Change for Oconee

April 14-16, 2008

Charlotte, NC

Duke Presenter

D.J. Goforth

Duke Energy

NFPA-805 Technical Lead

ONS UFSAR Outline

9.5.1 Fire Protection

- 9.5.1.1 Design Basis Summary
- 9.5.1.2 Systems Description
- 9.5.1.3 Safety Evaluation (Fire Hazards Analyses)
- 9.5.1.4 Inspection and Testing
- 9.5.1.5 Personnel Qualification and Training

Regulatory Guide 1.70, *Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants, Revision 3, November 1978*

UFSAR Changes and Reporting

Regulatory Guide 1.181, *Content of the Updated Final Safety Analysis Report in Accordance with 10 CFR 50.71(e), September 1999*

- RG 1.181 states *"The objectives of 10 CFR 50.71 (e) are to ensure that licensees maintain the information in the UFSAR to reflect the current status of the facility and address new issues as they arise, so that the UFSAR can be used as a reference document in safety analyses."*
- RG 1.181 endorses NEI 98-03, Revision 1, "Guidelines for Updating Final Safety Analysis Reports", dated June 1999 as providing methods that are acceptable to the NRC staff for complying with the provisions of 10 CFR 50.71(e).

NEI 98-03 Guidance, June 1999 - discusses

- Process for Updating and Modifying the UFSAR
- Use of References and Incorporation by Reference in UFSARs
- Removing Unnecessary Information from UFSARs
- Removing Commitments from UFSARs
- UFSAR Description, Scope (Content), and Level of Detail
- Reporting Requirements for Changes

9.5.1.1 Design Basis Summary

- 9.5.1.1 Design Basis Summary
  - 9.5.1.1.1 Application of NFPA 805
  - 9.5.1.1.2 Defense-in-Depth
  - 9.5.1.1.3 Performance Objectives
  - 9.5.1.1.4 Codes of Record

- **Note: This section will provide a high level description of approach and point to the NEI 04-02, B-1 Tables, Upper Tier Design Documents (DBD, etc.) by reference, as appropriate**

9.5.1.2 Systems Description

- 9.5.1.2 Systems Description
  - 9.5.1.2.1 Applicable Systems
    - NEI 04-02 Table B-1 – Transition of Fundamental FP Program and Design Elements (NFPA 805 Chapter 3)
    - NEI 04-02 Table B-3 – Fire Area Transition

      A listing of the required active fire suppression sprinkler systems is provided in TABLE 9.5.1-1.
  - 9.5.1.2.2 Definition of “Power Block” Structures

- **Note: This section will provide a high level description of approach and point to the NEI 04-02, B-1 and B-3 Tables, Upper Tier Design Documents (DBD, etc.) by reference, as appropriate.**

9.5.1.3 Safety Evaluation
(Fire Hazards Analyses)

- 9.5.1.3 Safety Evaluation (Fire Hazards Analyses)
  - NFPA 805 Fire Protection Program the Fire Safety Analysis (FSA)
  - Individual change evaluations, as needed, are documented in the Fire Safety Analysis (FSA) performed for each fire area.

- **Note: This section will provide a high level description of approach and point to the B-1 and B-3 Tables or Fire Safety Analysis (FSA) sections, as appropriate**

9.5.1.4 Inspection and Testing

- 9.5.1.4 Inspection and Testing
  - 9.5.1.4.1 Surveillance Requirements
    - NEI 04-02 Table B-3 – Fire Area Transition.
      Table B-1 – Transition of Fundamental FP Program and Design Elements
  - 9.5.1.4.2 Monitoring
    - Transition Report, Revision 0 Section 4.6
- **Note: This section will provide a high level description of approach and point to the NEI 04-02, B-1 Tables, Surveillance Documents, and Monitoring Program by reference.**

9.5.1.5 Personnel Qualification and Training

- 9.5.1.5 Personnel Qualification and Training
  - 9.5.1.5.1 Program Management
  - 9.5.1.5.2 Fire Brigade
    - Table G-1 – Radioactive Release Transition

- **Note: This section will provide a high level description of approach and point to the NEI 04-02, B-1 & G-1 Tables, Surveillance Documents, and Monitoring Program by reference.**

Conclusions

- Provides “Roadmap” to New Licensing and Design Basis under 10 CFR 50.48(c) and NFPA 805

- Changes per Regulatory Guide 1.181 and NEI 98-03 Guidance, June 1999

Alternative UFSAR Outline

- 9.5.1.1 Regulatory Requirements and Commitments
- 9.5.1.2 Fire Safety Analysis
- 9.5.1.3 Non-Power Operations
- 9.5.1.4 Radioactive Release
- 9.5.1.5 Probabilistic Risk Assessment
- 9.5.1.6 Risk-Informed, Performance-Based Evaluations
- 9.5.1.7 Fire Protection Program