



# **FIRE PROTECTION LESSONS LEARNED FROM SHEARON HARRIS**

**November 3, 2009**

# Agenda

- Closure Plan Progress
  - Jack Grobe, NRR
- NFPA 805 Activities
  - Alex Klein, NRR
- Update on Fire PRA
  - Donnie Harrison, NRR
- Fire Research – Mark Salley, RES
- Summary – Jack Grobe, NRR

# Fire Protection Closure Plan Progress

- Accomplishments and status
  - Completed Tasks
  - On-going Tasks
    - Operator manual actions
    - Multiple spurious actuations

# NFPA 805 Activities

- Regulatory Infrastructure
  - RG 1.205, Rev. 1 (Jan. 2010)
  - Standard Review Plan 9.5.1.2 (Jan. 2010)
    - Safety Evaluation template (2Q CY 2010)
  - Preparations for inspections

# NFPA 805 Activities

- NFPA 805 pilot plant license amendment request reviews
  - Status
    - Challenges
    - Schedule

# NFPA 805 Activities

- NFPA 805 pilot plant lessons learned
  - Safety benefits
  - Communication
  - Planning

# NFPA 805 Activities

- NFPA 805 non-pilot plant license amendment requests
  - Early to mid-2010 requests
  - Fall 2010 requests

# Fire PRA Infrastructure

- 10 CFR 50.48(c) (2004)
  - NFPA 805 (2001)
- RG 1.205, Rev. 1 (Jan. 2010)
  - RG 1.174, Rev. 1 (Nov. 2002)
  - RG 1.200, Rev. 2 (Mar. 2009)
  - NUREG/CR-6850 (Sept. 2005)



# Fire PRA Lessons Learned

- Frequently Asked Question process
- Testing needed to address some uncertainties

# Key Focus of Fire Research Activities

- Support User Office
  - User Need Requests
- Collaboration with Technical Partners
  - Electric Power Research Institute
  - National Institute of Standards and Technology
  - National Laboratories

# Key Focus of Fire Research Activities

- Fire Modeling
- Fire PRA
- Experimental Activities
  - Cable Functionality Testing
  - Cable Combustibility Testing
- Knowledge Management

# Acronyms

- CFR – Code of Federal Regulations
- NFPA – National Fire Protection Association
- NRC – Nuclear Regulatory Commission
- NRR – Office of Nuclear Reactor Regulation

# Acronyms

- PRA – Probabilistic Risk Assessment
- RES – Office of Nuclear Regulatory Research
- RG – Regulatory Guide