



# **NTTF Recommendation 4.2**

**Eric E. Bowman**  
**Senior Project Manager**  
**Division of Policy and Rulemaking**  
**Office of Nuclear Reactor Regulation**  
**December 8, 2011**

## **NTTF Recommendation 4:**

**Strengthen SBO mitigation capability at all operating and new reactors for design-basis and beyond design-basis external events.**

**4.2 Order licensees to provide reasonable protection for equipment currently provided pursuant to 10 CFR 50.54(hh)(2) from the effects of design-basis external events and to add equipment as needed to address multiunit events while other requirements are being revised and implemented.**

# **Objectives (from SECY 11-0124)**

- 1. Provide reasonable protection of the equipment from external events**
- 2. Establish and maintain capacity to mitigate multiunit events**
- 3. Expand strategies to address SBO conditions**

# **Reasonable Protection**

- **Protection from external events**
- **Definition of reasonable protection**
- **Acceptance Criteria**
  - **To support a safety conclusion regarding protection of equipment**

# **Reasonable Protection Questions**

**Protection from design basis events may be considered under adequate protection exception to backfit rule.**

- **What standard is appropriate?**
  - **General Design Criterion 2?**
  - **Reasonable protection defined differently?**

# **Multunit Event Mitigation**

- **Current requirements address a localized event.**
- **Time-sharing of equipment for core and SFP strategies is permitted.**

# **Multiunit Event Mitigation Questions**

- **What capacity is appropriate?**
- **What equipment?**
  - **Pumping capability**
  - **Associated hoses, etc.**
- **Is there a need to change the characteristics of the equipment?**

# **Expansion of Strategies to Address SBO**

- **Initiating events currently limited to losses of a large area of the plant due to explosions or fire.**
  - **Should they include prolonged SBO?**
  - **Would it be more appropriate to use an effects-based descriptor such as “mitigate challenges to key safety functions?”**
  - **Are changes to existing guidance needed?**