



# Scope of On-Shift Staffing Analysis

NRC Public Meeting  
March 29, 2011

# Agenda for Today

## (Category 2 Public Meeting)

10 minutes	Welcome/Introduction/Logistics	NRC
60 minutes	Discussion on scope of on-shift staffing analysis	NRC
20 minutes	Break	
60 minutes	NEI/Industry questions and comments on scope of the on-shift staffing analysis	NRC/NEI/ Industry
20 minutes	Opportunity for public comment	Public
10 minutes	Closing Remarks	NRC

## Scope of On-Shift Staffing Analysis

- 10 CFR Part 50, Appendix E, Section IV.A.9
- Interim Staff Guidance (ISG)
- NEI 10-05, “Assessment of On-Shift Emergency Response Organization Staffing and Capabilities”
- Public Meeting March 2, 2011

# Scope of On- Shift Staffing Analysis

- Included in Emergency Plan
- Minimum Expectations
- Not All Inclusive
  - Site-Specific Commitments
  - Unique Licensing Attributes

## Scope of On- Shift Staffing Analysis

- Design Basis Accidents (DBA)
- Design Basis Threat (DBT)
- 10 CFR 50.54(hh)(1)
- IN 95-48, “Results of Shift Staffing Study”

## Design Basis Accidents (DBA)

- Condition IV Events – Examples:
  - Reactor Coolant Pipe Rupture [SRP 15.6.3, 15.6.5]
  - Rod Ejection (PWR) [SRP 15.4.8]
  - Rod Drop (BWR) [SRP 15.4.9]
  - Secondary System Pipe Rupture [SRP 15.1.5, 15.6.4]
  - Reactor Coolant Pump Seizure (PWR) [SRP 15.4.8]
  - Recirculation Pump Seizure (BWR) [SRP 15.4.8]
- At least one event results in General Emergency and doses exceed Environmental Protection Agency (EPA) protective action guides (PAGs)

## Design Basis Threat (DBT)

- Hostile threat is neutralized
- No adverse consequences to plant safety
- Sufficient staff available to simultaneously implement both emergency plan and security plan in DBT environment
  - As a minimum, consideration for restricted movement of site personnel.

## **10 CFR 50.54(hh)(1)**

- Notification of potential aircraft threat
- Emergency response actions taken prior to aircraft impact
- Actions necessary to enhance capability to mitigate consequences
- Loss of large areas of the plant due to explosions or fire
- Consider fire brigade

## **IN 95-48, “Results of Shift Staffing Study”**

- Two Scenarios
  - Fire leading to reactor trip with complications
  - Control room fire leading to evacuation and remote shutdown

## Considerations/Assumptions

- Actions prior to position being augmented
- Major functional areas – NUREG-0654, Table B-1
- All on-shift positions evaluated
- Events that need not be considered
  - Off-normal
  - Anticipated operational transients
- Events that may warrant consideration/inclusion
  - Station blackout (SBO)
  - Appendix R “safe shutdown” fire
  - Severe accident management guidelines (SAMGs)
  - Rationale for non-inclusion