NRC – ESBWR DCWG Meeting June 11, 2008

Control Room Dose Changes
(Related to DCD Revision 5)

DCD Approach: Control Room X/Q Values (Accident Analyses)

- **Determination of ESBWR Standard Plant Parameters**
  - **Method: ARCON96 code (Reg. Guide 1.194)**
  - **Used various published meteorological data sets**
  - **Considered possible combinations of onsite receptor and source locations for the ESBWR design**
- **DCD results reviewed; bounding X/Q values selected for each accident source**

COLAs Referencing DCD (Rev 4)

- **Applicability: R-COLA, S-COLAs**
- **Site Characteristics (FSAR Sections 2.0 and 2.3.4.3)**
  - **ESBWR design**
  - **Use site specific meteorological data**
  - **Same methodology at ESBWR DCD (ARCON96, Reg. Guide 1.194)**
  - **Same collection of receptor/source pairs**
- **Demonstrate in COLA Submittal 1 that DCD Rev 4 site parameters bounded site characteristic X/Q values**

COLA IMPACTS

- **Redetermination of site characteristic control room X/Q values**
  - **Use same method as DCD Rev 5**
  - **Same receptor / source pairs**
  - **Includes RB-VS, RW-VS, TB-VS to each possible receptor location**
- **Expectation: DCD Rev. 5 values will bound site characteristic X/Q values**
- **Key Impacts**
  - **FSAR 2.0: Updated site characteristics and demonstration that DCD Rev 5 is bounding**
  - **FSAR 2.3.4: Update to reflect DCD Rev 5 method**

Questions?