

## **Design Certification Lessons Learned**

(Chapter 12)

General:

- Cross reference DCD sections to direct reader to sections where related information is addressed
- Provide examples of design features mentioned
- Clearly identify all information to be provided by COL applicant

### 12.2 (Plant Sources)

- Provide basis for source terms listed
- Plant layout and shield design should consider deposition of activated corrosion and wear products
- Provide locations and quantitative parameters of contained sources
- Provide concentration of airborne radioactivity in each building for normal and shutdown conditions

### 12.3 (Radiation Protection)

- Address 20.1406 issues with respect to contamination of facility and environment, facilitating decommissioning, and minimizing the generation of rad wastes
- Identify on layout drawings all areas > 100 rads/hr and all very high radiation areas (for these, include isometric drawings and access controls). Include description of access controls to spent fuel transfer tube
- Identify personnel access and egress paths during normal and shutdown conditions
- Provide composition and thickness of shield walls
- Identify areas of the plant with the potential for becoming significant airborne areas and verify that airborne radioactivity monitors are capable of measuring 10 DAC hrs of the most limiting particulate and iodine species in each monitored area
- Provide a complete list of post-accident dose rates for all areas of the plant and list all vital areas (include access/egress paths, integrated dose, activities to be performed for each vital area)

### 12.4 (Dose Assessment)

- Provide complete dose assessment using RG 8.19 criteria and incorporate industry experience