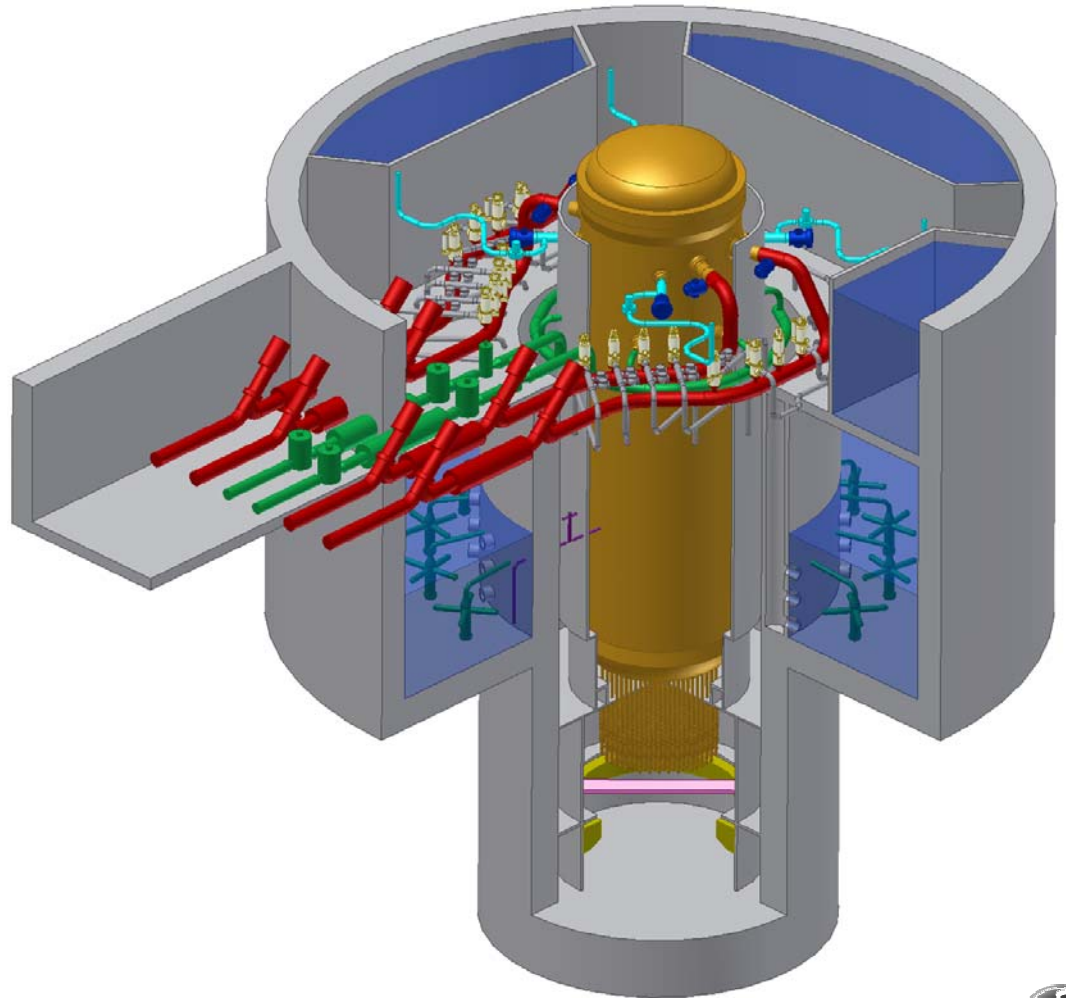


ESBWR DCD

Chapters 11, 12, 13 and 14



Alan Beard

September 28, 2005

Chapter 11 Radioactive Waste

- Radwaste Building Design Included
 - > Approximate Footprint of 2800 square meters
 - 85 m x 33 m
 - Located to minimize length of transfer lines
 - > Permanent tanks, transfer pipes and pumps are included on basemat
 - > Mobile Equipment Approach for processing
 - > Large Open floor area at grade level

Chapter 11 Radioactive Waste (cont)

- Mobile Equipment
 - > Low Conductivity Waste
 - > High Conductivity Waste
 - > Detergent Waste
 - > Solid Waste
 - Sorting
 - Decontamination
 - Storage

Chapter 12 Radiation Protection

- Design Adheres to ALARA principles
 - > Design Changes eliminate some high level exposure activities
 - > Expected doses are less than current BWR fleet operation
 - > Separation of contamination zones
- Includes evaluation of Radiation Sources
- Detailed Radiation Zone Maps

Chapter 13 Conduct of Operations

- Mostly a COL Responsibility
- Technical Support Center included in ESBWR
 - > Housed in Electrical Building
 - > Sized for 26 people
 - > In compliance with NUREG-0696
 - > Protects personnel from radiation exposure
 - HVAC available with electrical AC power
 - Power to TSC is from the PIP buses

Chapter 13 Conduct of Operations (cont)

- Security Assessment

- > Safeguards Information

- Has been completed and is being sent to NRC

- > Robust Design

Chapter 14 Initial Test Program

- Preoperational Test Program
 - > Objectives
 - > Outline of Test Program
 - > Key Tests Described
- Start-up Test Program
 - > Objectives
 - > Outline of Test Program
 - > Key Tests Described