

*Bellefonte 3&4*

*Lee Nuclear 1&2*

*Summer 2&3*

*Vogtle 3&4*

*Harris 2&3*



## **AP1000 Design-Centered Work Group**

### **Meeting with NRC Staff October 24, 2006**

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**AP1000**



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# AP1000 DCWG Agenda

- **Status Update**
- **TSC Location**
- **Containment Leak Rate Test Operational Program**



**AP1000 DCWG  
Status Update**

# AP1000 Status Update

- **COLA development**
  - On schedule (48 of 163 sections drafted at x.y)
- **Technical Reports**
  - 34 of 72 Westinghouse TRs completed/submitted; several additional under consideration
  - 23 of 23 RAI question responses (all within 30 days)
  - 0 of 8 COL DCWG TRs (#1 planned for late Oct/early Nov)
- **Technical meetings ongoing**
- **Key milestones**

■ DG1145 draft	complete
■ 10 CFR 52 PFR	complete
■ LWA NOPR	complete
■ DG1145 comments (NEI)	complete
■ NUREG-0800 "for use and comment"	Mar 2007
■ AP1000 Rev 16 (TBV)	May 2007
■ COLA submittals	Oct 2007



**TSC Location**

## TSC Background

- **AP1000 design (DCD Revision 15) provides TSC location within a unit**
  - Single large room with adjacent conference rooms (total of ~3400 ft<sup>2</sup>), and peripheral facilities (kitchen, restroom)
  - Described in Tier 1 as “across the hall” from control room
- **Five ITAAC in Tier 1:**
  - Space requirements (75 sq ft x 25 occupants = 1875 sq ft)
  - Communication requirements (TSC with MCR, OCR, EOF and NRC)
  - Plant parameter retrievability
  - Location (across from MCR)
  - Habitable environment
- **Tier 2 information includes:**
  - TSC mission/function
  - Ventilation
  - Diesel power support

## TSC Considerations

- **DCD based on single unit and does not:**
  - Address implementation for two-unit site
  - Address collocation and integration with existing operating units
- **Various options for TSC location: MCR proximity is only Tier 1 requirement that might be a challenge**
  - Space requirements can be met or exceeded
  - Communication requirements and plant parameter retrievability readily met with current communications technology
  - Habitable environment can be met
- **Location (across from MCR) less important with advent of communication/data technology**
  - Supported by DG-1145: “Advanced communication capabilities may be used to satisfy the two minute travel time”



## Options Being Evaluated

- **Unit-specific TSCs (as per DCD)**
- **One TSC for both AP1000s**
  - As per DCD for one unit
  - Separate common facility
- **Common TSC for entire site (site with existing units)**
  - Designated unit
  - Stand-alone common facility

## Path Forward

- **Proposal:**
  - Eliminate specific location from Tier 1
  - Standardize on approach to meeting remaining Tier 1 requirements while maintaining flexibility
  - Complete evaluation and selection location(s)
- **Benefits of flexibility**
  - Facilitates integration with existing emergency management program
  - “Human factors” implications (i.e., knowing which TSC to staff in an emergency)
  - Enables selection without unnecessary constraint on specific location
- **Future submittal to identify**
  - What should be maintained in Tier 1 and why
  - Changes needed to existing DCD
- **Address in future TR, DCD Rev 16**



# Containment Leak Rate Testing Operational Program



# Containment Leak Rate Testing Program

- **Operational program required by 10 CFR 50.54(o)**
- **COL information item 6.2-1: applicant responsible for developing containment leakage rate testing program and identifying Option A or B as defined by Appendix J**
- **AP1000 Technical Report describes program elements and identifies selection of option B and establishes program in accordance with NEI 94-01 and RG 1.163**
- **Technical Report**
  - Pre-application activity as described in DG-1145 C.IV.7
  - Provide standard approach for AP1000 plants
  - Vehicle to close COL information item



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**Future Interactions**

## Future AP1000 Interactions

- **November/December 2006**
  - “All-DCWG” Workshop
  - DAC workflow process
  - Plans for addressing COL information items
  - Relationship of COL application and possible DCD revision (TBV)
  - Additional TRs and specific technical interactions
- **To be scheduled (1Q2007 or beyond)**
  - Potential policy issues – dependent in part on 10CFR52 and DG1145
  - Plans to request limited work authorization
  - QA inspection

# Operational Programs

- **NEI**
  - QA
  - Security
  - Radiation Protection
  - Training
  - Emergency Planning (EALs)
  - Maintenance Rule
- **AP1000**
  - RV Material Surveillance
  - Process & Effluent Monitoring & Sampling
  - Preservice & Inservice Inspection
  - Preservice & Inservice Testing
  - Environmental Qualification
  - MOV Program



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