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Vogtle 3 & 4 COL

Southern Nuclear Operating Company
VEGP Units 3 & 4
Combined Licenses and
Limited Work Authorization

Mandatory Hearing

Safety – Panel 2

September 27, 2011

Amy Aughtman – SNC
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Selected Topics – Chapters 3 & 6

- Soil Structure Interaction
- LWA-B
- Squib Valves
- Engineered Safety Features (ESF) Systems
- Containment Cleanliness Program
- Control Room Habitability

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Soil Structure Interaction

- VEGP GMRS compared to AP1000 CSDRS showed exceedances at certain frequency ranges, therefore a site specific analysis was performed.
- A 2-D VEGP-specific seismic evaluation performed for the ESP demonstrated the acceptability of the Vogtle site for LWA-A.
- A 3-D VEGP-specific seismic evaluation was performed for the COLA. This evaluation considered.
  - In-Structure Response Spectra for six key locations
  - Lower bound, best-estimate, and upper bound soil properties
- The 3-D model results provided in the COLA demonstrate that the standard AP1000 plant certified design is fully acceptable for the Vogtle site.

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LWA-B

- LWA-B requests authorization to continue safety-related NI foundation work
  - base mat reinforcing steel, including the rebar and other embedded items
  - sumps and drain lines
  - base mat concrete
- ESP FEIS resolved LWA-B environmental impacts
- Foundation design incorporated by reference from AP1000 DCD

Squib Valves

- Design and qualification addressed by DCD
  - This information incorporated by reference into COLA at FSAR Sections 3.1 through 3.11, and 3A through 3G, 3H & 3I
- COLA addresses testing in FSAR Subsection 3.9.6.2.2
  - IST Program will address industry and regulatory guidance
  - IST program will include lessons learned from:
    - Design process for the valves
    - Qualification process for the valves

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Engineered Safety Feature Systems

- Fully addressed by DCD
  - Chapter 6 – Engineered Safety Features
  - Design Descriptions and Evaluations
  - ITAAC by system
  - This information incorporated by reference into COLA at FSAR Chapter 6
- COLA FSAR discusses only ESF materials
  - FSAR Section 6.1
  - COL 6.1-1 - controlling special features fabrication
  - COL 6.1-2 - addresses coatings programs
    - Applies applicable quality assurance controls
    - Applies applicable industry and NRC guidance

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Containment Cleanliness Program

- DCD subsection 6.3.8.2 addresses Long-Term Recirculation Water availability following a LOCA
  - Recirculation screen design
  - Testing to assess screen performance & downstream effects
  - Completed study of effects of screen and downstream effect/performance on long-term cooling
  - COL Item to address preparation of Containment Cleanliness Program
- STD COL 6.3-1 describes program to minimize amount of debris left in containment following entry/exit
  - Addresses containment entry/exit, housekeeping, and a sampling program

Control Room Habitability

- DCD addresses generic information
  - Tier 2 Section 6.4 – Habitability Systems
  - Design Descriptions and Evaluations
  - ITAAC by system
  - This information incorporated by reference into COLA at FSAR Section 6.4

- COLA FSAR addresses site specific considerations
  - Subsection 2.2.3 – Evaluation of Potential Accidents
  - Subsection 6.4.3 – Procedures and training
  - Subsection 6.4.4 – Site-specific chemicals
  - Subsection 6.4.4 – Dual unit evaluations

Abbreviations and Acronyms

- ACRS Advisory Committee on Reactor Safeguards
- ESF Engineered Safety Features
- COL Combined License
- COLA Combined License Application
- DCD Design Control Document
- FSAR Final Safety Analysis Report
- IST In-Service Testing
- ITAAC Inspections, Tests, Analyses, and Acceptance Criteria

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	
	)	**Docket Nos. 52-025-COL and 52-026-COL**
Southern Nuclear Operating Company	)	
	)	
(Vogtle Electric Generating Plant, Units 3 and 4)	)	**September 20, 2011**

CERTIFICATE OF SERVICE

I hereby certify that copies of EXHIBIT SNC000007 for the Vogtle Units 3 & 4 COL Mandatory Hearing in the above-captioned proceeding have been served by electronic mail as shown below, this 20th day of September, 2011, and/or by e-submittal.

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Respectfully submitted,

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