



Presentation to the Commission

Summer Units 2 and 3 Combined License Application Overview

October 12, 2011

Overview of the Staff's Review of the Summer COL Application

- Summer COL Application
- Summer COL Overview – Safety Review
 - Summary of Staff Safety Findings
- Summer COL Overview – Environmental Review
 - Summary of Staff Environmental Findings
- Overview of Staff's Presentations

Summer COL Application

- Summer COL application submitted March 27, 2008
 - Application docketed July 31, 2008
- Summer COL application incorporates by reference the Westinghouse AP1000 Design Certification (DC) and DC amendment Revision 19.
- Summer application contents:
 - Material incorporated by reference (IBR) from the AP1000 DCD
 - Staff's safety evaluation for DC reflected in NUREG-1793 and its supplements and the DC amendment SER issued in August 2011

Summer COL Application

- Summer application contents (continued)
 - Standard content material (applicable to all AP1000 COL applicants)
 - Standard content evaluation material is double indented and italicized
 - Standard content evaluation contains language from Bellefonte and Vogtle safety evaluation reports
 - Bellefonte safety evaluation with open items to capture evaluations that were performed when Bellefonte was the reference COL (RCOL)
 - Vogtle final safety evaluation report to reflect transition of Vogtle to the RCOL and closure of standard content open items from Bellefonte.
 - Site specific information

Summer COL Overview

Part Number	Description	Evaluation
1	General and Administration Information	Section 1.5.1
2	Final Safety Analysis Report	In appropriate SER Chapters
3	Environmental Report	Final Environmental Impact statement
4	Technical Specifications	Chapter 16
5	Emergency Plan	Section 13.3
6	Limited Work Authorization	Not applicable
7	Departure Reports	In appropriate SER Chapters
8	Security Plan	Section 13.6
9	Withheld Information	In appropriate SER Chapters
10	Proposed Combined License Conditions (Including ITAAC)	In appropriate SER Chapters

Summer COL Overview

Part Number	Description	Evaluation
11	Subsurface report detailing the results of geotechnical exploration	Section 2.5
12	Seismic Technical Advisory Group Review Letter	Section 2.5
13	Quality Assurance Program Description	Chapter 17
14	Mitigative Strategies Document for loss of large areas of the plant due to explosions or fire	Appendix 19.A
15	Cyber Security Plan	Section 13.8
16	Special Nuclear Material Control and Accounting Program Description	Section 1.5.5
17	New Fuel Shipping Plan	Section 1.5.5
18	Supplemental Information in Support of 10 CFR Part 70 Special Nuclear Material License Application	Section 1.5.5

Summer Overview – Safety Review

- Advisory Committee on Reactor Safeguards Review
 - Two AP1000 Subcommittee meetings
 - One Full Committee meeting
 - ACRS letter report received February 17, 2011
 - Staff response provided March 26, 2011
- Staff issued Summer FSER on August 17, 2011

Summer COL Safety Findings

Summary of Findings in accordance with 10 CFR 52.97 (a)(1)

- The applicable standards and requirements of the Atomic Energy Act and the Commission's regulations have been met,
- Required notifications to other agencies or bodies have been duly made,
- There is reasonable assurance that the facility will be constructed and will operate in conformity with the license, the provisions of the Atomic Energy Act, and the Commission's regulations,
- The applicant is technically and financially qualified to engage in the activities authorized, and,
- Issuance of the license will not be inimical to the common defense and security or to the health and safety of the public.

Summer COL Overview – Environmental Review

- U.S. Army Corps of Engineers was a cooperating agency for the development of the Environmental Impact Statement
- Staff performed a detailed environmental review including:
 - Conducting public scoping meetings
 - January 27, 2009, in Winnsboro, SC
 - January 28, 2009, in South Blair, SC
 - Issued scoping summary report and considered scoping comments in preparing the draft EIS
 - Consulted with Federal, State, and local agencies and Tribes

Summer COL Overview – Environmental Review

- Environmental Review (continued)
 - Issued draft EIS in April 2010
 - Held two public meetings on May 27, 2010, to provide an overview and solicit comments on the draft EIS
 - Developed responses to comments received on the draft EIS and provided these responses in the final EIS
 - Issued NUREG-1939, “Final Environmental Impact Statement for Combined Licenses for Virgil C. Summer Nuclear Station, Units 2 and 3: Final Report,” on April 22, 2011
 - NUREG-1939 recommendation related to the environmental aspects of the proposed action is that the COLs should be issued

Summer COL Environmental Findings

Summary of Findings in accordance with 10 CFR 51.107 (a)

- The requirements of Section 102(2) (A), (C), and (E) of NEPA and regulations in 10 CFR Part 51 have been met.
- The staff independently considered the final balance among conflicting factors contained in the record of the proceeding with a view to determining the appropriate action to be taken.
- The staff determined, after weighing the environmental, economic, technical, and other benefits against environmental and other costs, and considering reasonable alternatives, that the COLs should be issued.
- The staff's NEPA review has been adequate to inform the Commission's action on the COL request.

Summer Overview of Panel Presentations

Panel Number	Issues to be Discussed	Evaluation
SER Panel 1	<ul style="list-style-type: none"> • Introduction and interfaces • Unique and Novel issue associated with wet bulb temperature exemption request • Geography and Demography • Nearby industrial, transportation and military facilities 	FSER chapter 1 and sections from chapter 2, 5, 6, and 9
SER Pane 2	<ul style="list-style-type: none"> • Hydrology • Geology, seismology, and geotechnical engineering • Ground motion response spectra • Seismic margins analysis • External events frequencies 	FSER section 2.4, 2.5 and sections from Chapter 3 and 19
SER Panel 3	<ul style="list-style-type: none"> • Emergency planning review including unique and novel issue associated with the emergency planning zone • ACRS recommendation associated with the use of the HABIT computer code • ACRS letter observation associated with monitoring for leakage from the radioactive waste discharge line • Offsite power 	FSER section 13.3 and sections from chapters 6, 9, and 8

Summer Overview of Panel Presentations - continued

Panel Number	Issues to be Discussed	Evaluation
EIS Panel 1	<ul style="list-style-type: none"> • Summary of the process for developing the FEIS • Summary of environmental impacts • Analysis of alternatives • Summary of conclusions and recommendations 	FEIS
EIS Panel 2	<ul style="list-style-type: none"> • Discussion of two unique and novel issues <ul style="list-style-type: none"> ➤ Environmental justice review ➤ Interactions with the U.S. Army Corps of Engineers 	FEIS