

Presentation to the Commission

Combined License Application Review Vogtle Units 3 and 4

Environmental Overview Panel 1

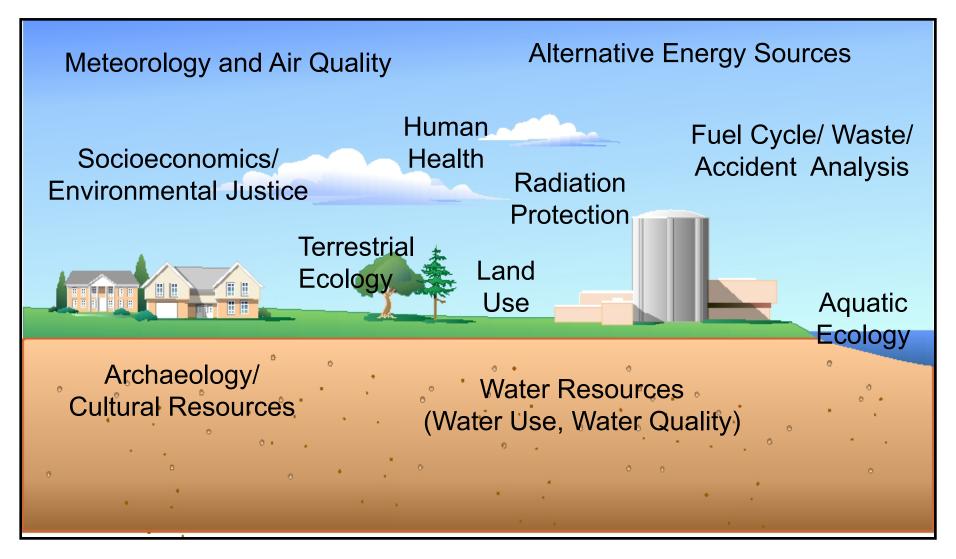
September 27 – 28, 2011

Environmental Review: Presentation Overview

- Explanation of role of Final Environmental Impact Statement (FEIS) for the Vogtle Early Site Permit (ESP) proceeding.
- Description of staff evaluation process.
- Summary of staff's COL analysis and conclusions as documented in Supplemental EIS (SEIS).

- COL applications referencing ESP
 - By regulation, review takes the form of a supplement to ESP FEIS
 - Scope of review focused by 10 CFR 51.92
 - Emphasis on new and significant information
- Vogtle COL application references the Vogtle Early Site Permit and Limited Work Authorization (August 2009)
- ESP FEIS is the key starting point for development of COL SEIS

Resource Areas



- Vogtle ESP
 - First ESP not to use "Plant Parameter Envelope"
 - No unresolved environmental issues at ESP stage
 - Even "optional" issues addressed
 - Minimal time gap between ESP and COL applications

Summary of Environmental Impact Conclusions in Plant Vogtle ESP FEIS

- SMALL impacts for air quality, water use and quality, environmental justice, health (radiological and nonradiological), and from postulated accidents and fuel cycle.
- SMALL to MODERATE impacts for land use, ecology, and socioeconomics.
- MODERATE impacts for historic and cultural resources.
- For many resource areas, EIS analysis explained why impacts would only be temporary or would be mitigated.

Summary of ESP FEIS (contin.)

- Staff concluded SMALL impacts in majority of resource areas
 - Air quality
 - Water use and quality
 - Environmental justice
 - Health impacts, both radiological and nonradiological)
 - Postulated accidents
 - Fuel cycle

- Summary of ESP FEIS (contin.)
 - SMALL to MODERATE impacts
 - Land use
 - Ecology
 - Socioeconomics
 - MODERATE impacts
 - Historic and cultural resources

- Summary of ESP FEIS (contin.)
 - Demonstrated need for power
 - No environmentally preferable energy or system design alternatives
 - No environmentally preferable alternative site;
 therefore no obviously superior site
- SEIS review aligned with structure of ESP FEIS

Environmental Review: Staff Review Process

- Multi-disciplinary team from NRC and Pacific Northwest National Laboratory (PNNL)
 - Reviewers with expertise in numerous technical and scientific fields
 - Prior experience with development of NRC EISs
 - Most team members also reviewers for Vogtle ESP

Environmental Review: Staff Review Process

- Focus on new and significant information
 - Staff guidance
 - NUREG-1555, Environmental Standard Review Plan (ESRP)
 - Provides definitions of new and significant
 - Describes methods for identifying and evaluating new information
 - Site audits
 - Used both for evaluating applicant's process and for gathering information for staff's independent evaluation
 - Evaluation of applicant's process for identifying new and significant information

Environmental Review: Staff Review Process

- Focus on new and significant information
 - Requests for additional information (RAIs)
 - Interactions with public and with governmental agencies
 - Appropriate Federal, State, local, and Tribal coordination
 - Received public comments on Draft SEIS
 - Remained aware of design changes associated with safety review (including AP1000)

- The staff evaluated new information warranting further analysis in several areas.
- SEIS describes staff analysis of whether the new information changed the staff conclusion.
- With the exception of terrestrial ecology, the impact levels in the SEIS did not change from the ESP FEIS.

- Examples of resource areas with new information warranting further analysis:
 - Land use
 - Small change in affected acreage
 - Meteorology and air quality
 - Updated traffic analysis supported the ESP-stage staff conclusion; verified continued attainment of NAAQS standards
 - Water use and quality
 - Minor revisions to intake structure design and location;
 hydrological alterations remain localized and temporary
 - No change in thermal plume size associated with small increase in effluent discharge rate

- Examples of resource areas with new information warranting further analysis (contin.):
 - Terrestrial ecology
 - Aquatic ecology
 - Section 401 & Section 404 / Section 10 permits obtained
 - Conference consultation on Atlantic sturgeon, no change to potential impacts examined at ESP-stage
 - Historic/cultural resources
 - Historic cemetery identified; MOU with GA SHPO to protect site from disturbance

- Examples of resource areas with new information warranting further analysis (contin.):
 - Need for power
 - GA Public Service Commission certification issued
 - Supports ESP conclusions regarding need for power in the region of interest
 - Alternatives, consistent with 10 CFR 51.92
 - Change in GPC demand-side management plan was already accounted for in Integrated Resource Plan and not available to offset need for new baseload
 - New EPA rule regarding emissions from stationary source facilities would not alter comparative relationship between Vogtle units and viable energy alternatives evaluated in ESP FEIS

Environmental Review: Second LWA

- Applicant submitted second LWA request in October 2009.
 - Per regulations, application includes ER for LWA.
- Impacts previously evaluated in ESP EIS in connection with LWA-1.
- COL SEIS references previous evaluation and confirmed that analysis and conclusions remained valid for LWA-2 activities.
- Staff NEPA review in SEIS accordingly supports issuance of both COLs and LWAs.

Environmental Review: Integration of Analysis for ESP Amendments

- License Amendment Requests (LAR) in April and May 2010 addressing backfill issues.
- Staff developed three Environmental Assessments for the LARs.
- Additional impacts outside the previously analyzed plant footprint to southeastern pocket gopher and sandhills milkvetch.
- Changed impact level to MODERATE for terrestrial ecology in the COL FEIS.

Environmental Review: Summary

- Review approach consistent with 10 CFR 51.92 & staff guidance.
- Realized benefits of supplementing a recent and thorough ESP FEIS.
- Drew on experience of multi-disciplinary team.
- Supports issuance of COLs and second LWAs.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of)
SOUTHERN NUCLEAR OPERATING CO.)) Docket Nos. 52-025-COL and 52-026-COL
(Vogtle Electric Generating Plant Units 3 and 4))))

CERTIFICATE OF SERVICE

I hereby certify that copies of "Exhibit NRC000014" have been served upon the following persons by Electronic Information Exchange this 20th day of September, 2011:

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Dated at Rockville, Maryland this 20th day of September, 2011