



Admitted: 11/07/2011  
Rejected:

Withdrawn:  
Stricken:



Exhibit SCER00012

# South Carolina Electric & Gas Company Virgil C. Summer Nuclear Station Units 2 and 3 Combined Licenses

Mandatory Hearing  
October 12-13, 2011

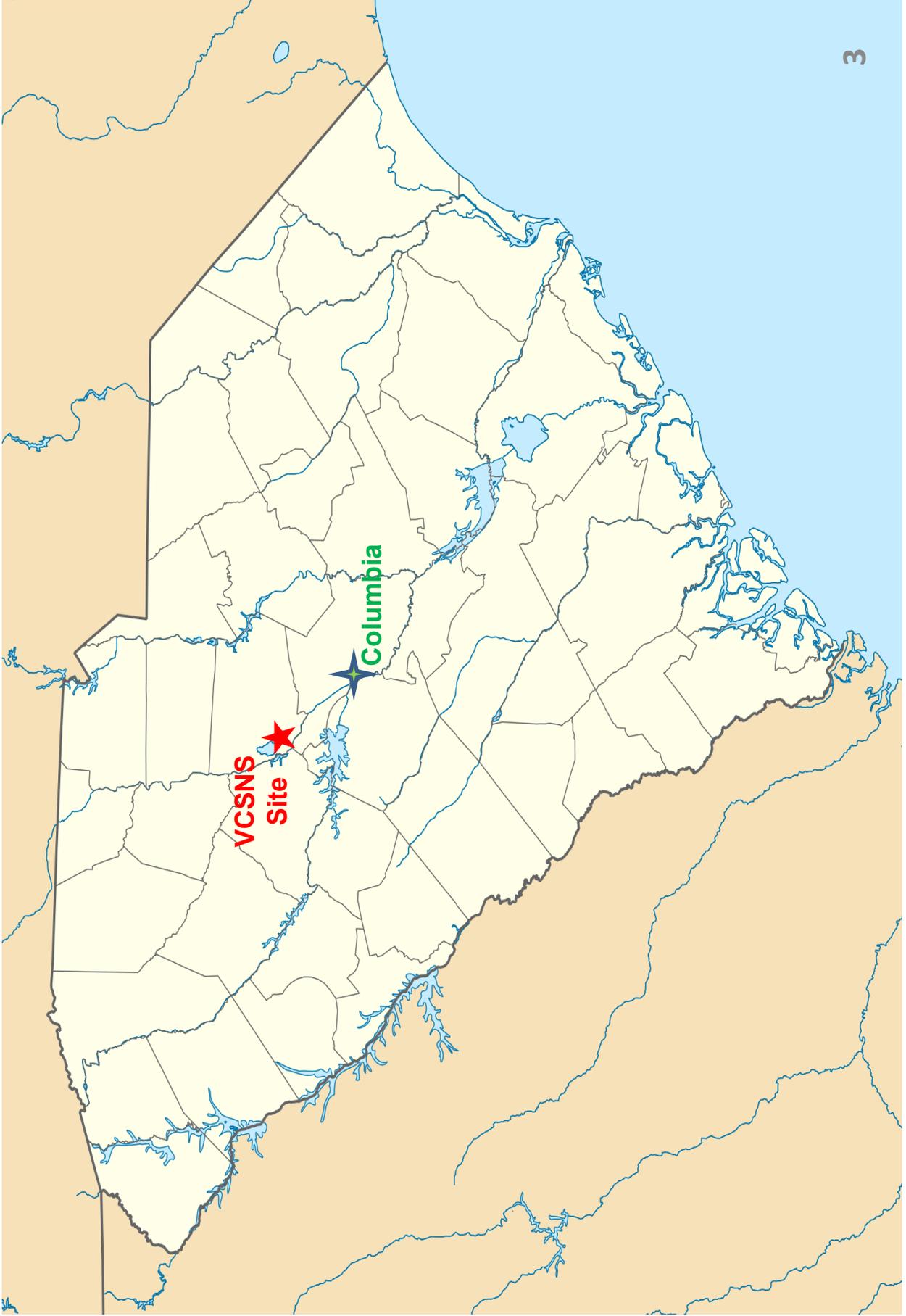
## Introduction and Overview

- Stephen Byrne (SCE&G)
- Alfred Paglia (SCE&G)
- Amy Monroe (SCE&G)
- April Rice (SCE&G)

# VCSNS Site



# VCSNS Site Location

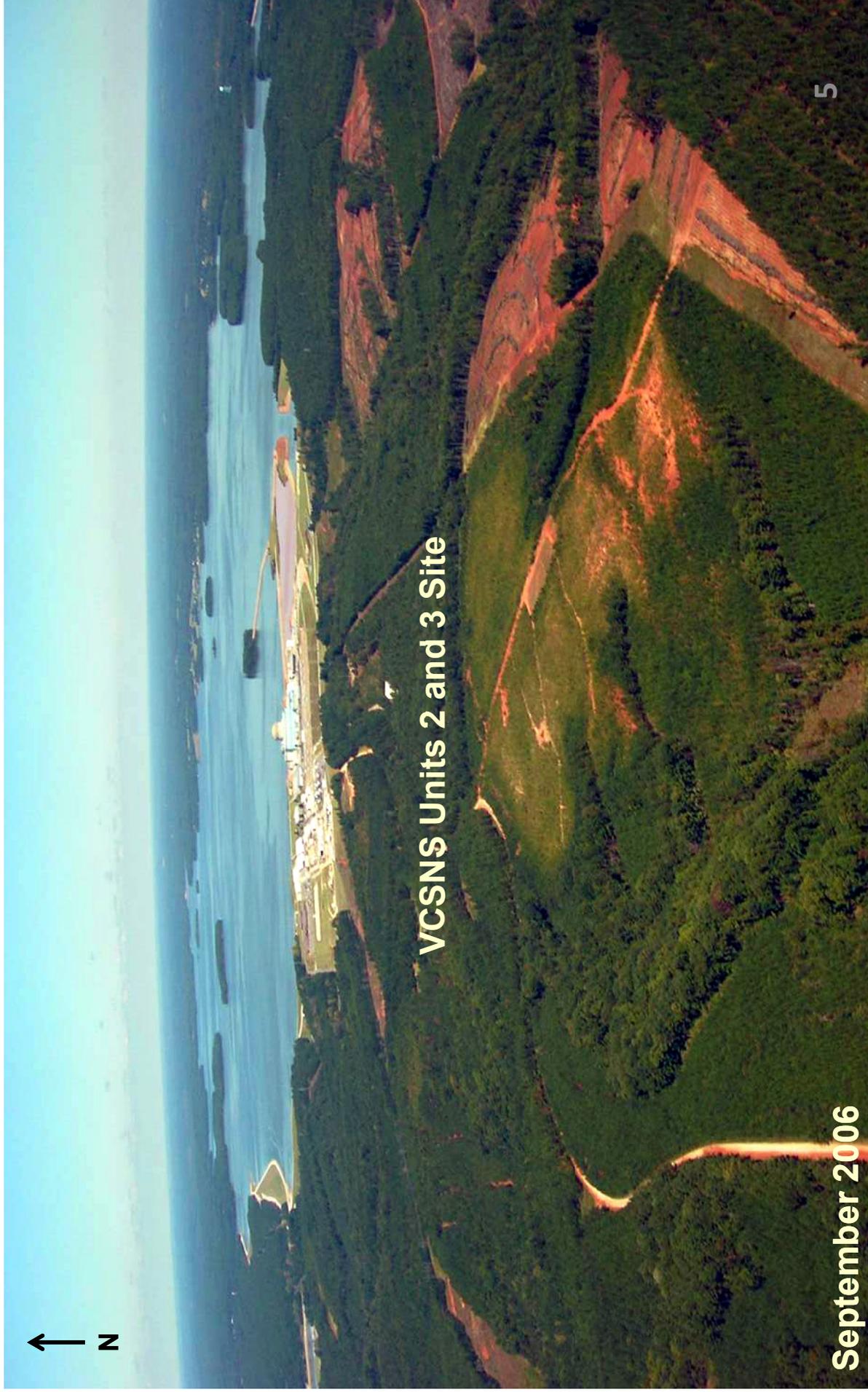


# VCSNS Site Development



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# VCSNS Site Development



# VCSNS Site Development

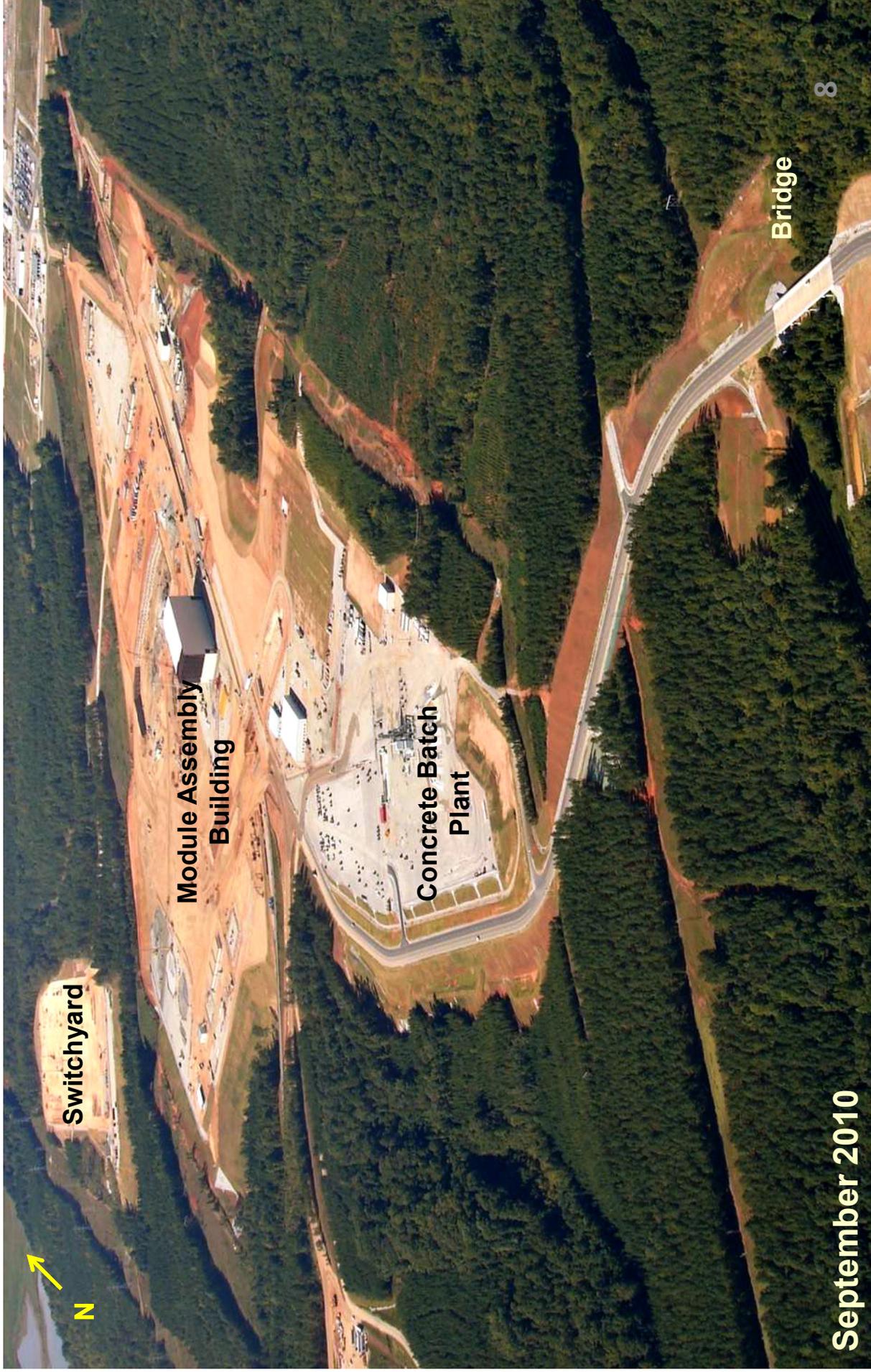


# VCSNS Site Development



November 2009

# VCSNS Site Development



September 2010



# VCSNS Site Development



# VCSNS Site Development



**Unit 2 Nuclear Island  
Excavation  
July 2011**

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# Application Content

- Combined License Application (COLA) for two units submitted March 2008
- Meets content requirements of Part 52, Subpart C, “Combined Licenses”
- Incorporates by Reference the AP1000 Design Control Document (DCD) Amendment
- First Subsequent (S)-COLA
- NRC Guidance Utilized
  - Regulatory Guide 1.206
  - NUREG-0800 (as updated for Part 52)
  - NUREG-1555
- Other industry documents promoting standardization

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## VCSNS COLA Submittal

- Incorporates by Reference the AP1000 DCD, Revision 19
- 17 distinct parts to the application
  - 10 containing primarily standard AP1000 information
    - 5 of these parts contain program information that is essentially identical to the Reference (R)-COLA
  - 7 site-specific parts
- S-COLA Overview

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# VCSNS COLA Safety Content

- Compliance with 10 CFR Part 52 Requirements
  - Sections 52.73, 52.75, 52.77, 52.79 and 52.80
- Compliance with 10 CFR 50.33
- Compliance with 10 CFR Part 52, Appendix D
- Utilized NRC Guidance – Regulatory Guide 1.206 and NUREG-0800
- Final Safety Evaluation Report (FSER) issued August 2011

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## VCSNS COLA Safety Content - Departures

- Standard
  - Final Safety Analysis Report (FSAR) Numbering and Organization (administrative)
  - Voltage Regulating Transformer Design
- Site-specific
  - FSAR Numbering and Organization for Chapter 2 (administrative)
  - Emergency Facility Locations
  - Wet-bulb

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## VCSNS COLA Safety Content - Exemptions

- Standard
  - DCD Numbering and Organization
  - Material Control and Accountability (MC&A) Program Description (Consistent with Part 50 requirements)
- Site-specific
  - Wet-bulb Exemption from DCD Site Parameter (Maximum Safety Noncoincident Wet Bulb Temperature)

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## VCSNS Environmental Report (ER)

- Prepared using NUREG-1555
- Two revisions to the ER
- Table 1.3-1 delineates 10 CFR Part 51 requirements
- Utilized previous environmental studies
  - Unit 1 License Renewal data
  - Unit 1 monitoring data
- Final Environmental Impact Statement (FEIS) issued April 2011



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# ER Content

- Chapter 1 – Introduction
- Chapter 2 – Environmental Description
- Chapter 3 – Plant Description
- Chapter 4 – Impacts of Construction
- Chapter 5 – Impacts of Station Operation
- Chapter 6 – Environmental Measurements and Monitoring Programs

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## ER Content

- Chapter 7 – Environmental Aspects of Postulated Accidents
- Chapter 8 – Need for Power
- Chapter 9 – Proposed Action Alternatives
- Chapter 10 – Environmental Consequences of the Proposed Action
- Appendix A – Agency Letters

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## Resource Areas

- Cultural Resources
- Aquatic and Terrestrial Ecology
- Water Use
- Land Use
- Socioeconomics/Environmental Justice
- Radiation Protection
- Alternatives

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# Key Agency Interfaces

## SC DEPT. OF HEALTH AND ENVIRONMENTAL CONTROL

- Stormwater Permits for land disturbance
- Batch Plant Air Permit
- Construction Permit for Water/Wastewater
- National Pollutant Discharge Elimination System Permit for Water/Wastewater
- 401 Water Quality Certification

## OTHER AGENCIES

- SC Dept. of Transportation Road Modification Permit
- Norfolk Southern Railroad Modification Permit
- State Historic Preservation Officer/U.S. Army Corps of Engineers (USACE) MOU
- SC Public Service Commission (CPCN)
- US DOE (spent fuel contract)
- FERC License Amendment (Issued October 12)
- USACE 404 Wetlands Permit
- SC Department of Natural Resources, US Fish and Wildlife Service, National Marine Fisheries Service

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## ER Environmental Conclusions

- Impacts of the project are SMALL except:
  - Localized traffic during construction (MODERATE to LARGE)
  - Transmission line construction (MODERATE)
- Benefits include:
  - Fuel diversity and emissions avoidance
  - Socioeconomic: jobs, local spending, and taxes

# VCSNS Site

