Exhibit SCE000016

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

Mandatory Hearing

October 12-13, 2011

Environmental Overview – Panel 1

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Stephen Summer (SCANA Services)

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Topics

- Summary of the Environmental Review Process
- Environmental Impacts of the Proposed Action
- Alternatives to the Proposed Action
- Cost/Benefit of the Proposed Action

Summary of Environmental Review Process

- Environmental Report (ER) submitted to satisfy National Environmental Policy Act (NEPA) and NRC regulations
- ER defines purpose and need of the proposed action
- ER satisfies 10 CFR Part 51
  - ER Table 1.3-1 provides a comparison of Part 51 requirements and the responsive ER sections
- ER followed NRC guidance
  - NUREG-1555, "Standard Review Plans for Environmental Reviews for Nuclear Power Plants"

Summary of ER Development and Review

- ER Revision 0 - March 27, 2008
- ER Revision 1 - February 13, 2009
- ER Revision 2 - July 2, 2010
- Thorough NRC staff audits of ER and alternative site analysis
- Responded to over 70 environmental Requests for Additional Information (RAIs)
- Provided supplemental information on environmental topics
- Supported public meetings
- Public outreach
- Pre-application consultations with Federal, State, and Local Government entities

ER Contents

- 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
- Chapter 7 – Environmental Impact 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

Environmental Impacts of Proposed Action

- ER evaluates the impacts of construction and operation
  - Chapter 4 – construction impacts
  - Chapter 5 – operation impacts
- Significance level designated for each resource
  - SMALL – Environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource
  - MODERATE – Environmental effects are sufficient to alter noticeably, but not to destabilize, any important attribute of the resource
  - LARGE – Environmental effects are clearly noticeable and are sufficient to destabilize any important attributes of the resource

Environmental Impacts of Proposed Action Construction Impacts

- Land Use Impacts
  - Site and Vicinity – SMALL
  - Transmission Rights-of-Way – MODERATE
  - Air Quality – SMALL
- Water Related Impacts
  - Water Use – SMALL
  - Water Quality – SMALL
- Ecological Impacts
  - Terrestrial Ecosystems – SMALL
  - Aquatic Ecosystems – SMALL
  - Threatened and Endangered Species – SMALL

Environmental Impacts of Proposed Action Construction Impacts (continued)

- Socioeconomic Impacts
  - Physical Impacts – SMALL
  - Demography – SMALL
  - Economy – SMALL to LARGE (Beneficial)
  - Taxes – SMALL to LARGE (Beneficial)
  - Transportation – MODERATE to LARGE
  - Aesthetics – SMALL
  - Recreation – SMALL
  - Housing – SMALL
  - Public and Social Services – SMALL
  - Education – SMALL
  - Historic and Cultural Resources – SMALL
  - Environmental Justice – SMALL

Environmental Impacts of Proposed Action Operation Impacts

- Land Use Impacts
  - Site and Vicinity – SMALL
  - Transmission Rights-of-Way – SMALL
  - Air Quality – SMALL
- Water Related Impacts
  - Water Use – SMALL
  - Water Quality – SMALL
- Ecological Impacts
  - Terrestrial Ecosystems – SMALL
  - Aquatic Ecosystems – SMALL
  - Threatened and Endangered Species – SMALL

Environmental Impacts of Proposed Action Operation Impacts (continued)

- Socioeconomic Impacts
  - Physical Impacts – SMALL
  - Demography – SMALL
  - Economy – SMALL to MODERATE (Beneficial)
  - Taxes – SMALL to LARGE (Beneficial)
  - Transportation – SMALL to MODERATE
  - Aesthetics – SMALL
  - Recreation – SMALL
  - Housing – SMALL
  - Public and Social Services – SMALL
  - Education – SMALL
  - Historic and Cultural Resources – SMALL
  - Environmental Justice – SMALL

Chapter 9 - Alternatives

- No-Action Alternative
  - Alternative for NRC to not issue COLs for the new units
  - Potential consequences
    - No baseload power
    - May not meet need for power
    - Lower reserve margin
    - More expensive power
    - Less diverse fuel supply portfolio
    - Lower air quality
  - Need to implement energy alternatives or construct on alternative site

Chapter 9 - Alternatives

- Energy Alternatives
  - Evaluated alternatives that do not require new generating capacity
  - Evaluated alternatives that provide new generating capacity
  - Performed more detailed evaluation of reasonable alternatives
  - Conclusion: No environmentally preferable energy alternatives

Chapter 9 - Alternatives

- Alternative Sites
  - Region of Interest
  - 20 Potential Sites
    - Removed potential sites based on exclusionary criteria and environmental weighting factors
  - 5 Candidate Sites
    - V.C. Summer Site (Proposed Site)
    - Savannah River Site, Saluda Site, Cope Site and Fairfield-1 Site (Alternative Sites)
  - Detailed evaluation of alternative sites
  - No obviously superior site to V.C. Summer

Benefits of Proposed Action

- Benefits of the proposed action are addressed in ER Section 10.4.1
  - Baseload electricity generation
    - Need for power
    - Approximately 2,200 MW
    - 16,000,000 to 18,000,000 MWh per year
  - Fuel diversity and natural gas alternative
  - Advanced Light Water Reactor development
    - Fewer carbon emissions
    - Hedge against global warming

Benefits of Proposed Action

- Benefits (continued)
  - Emissions avoidance
  - Local economy
    - 2,500 jobs
  - Tax payments
    - Property taxes
    - Corporate income taxes

Costs of Proposed Action

- Costs of the proposed action are addressed in ER Section 10.4.2
  - Monetary
    - Cost to construct
    - Cost to operate
  - Unavoidable Impacts
    - Land use
    - Water related impacts
    - Ecological impacts
    - Socioeconomic impacts
  - Commitment of Resources
  - Radiological Impacts