Exhibit SCE000015

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

Mandatory Hearing

October 12-13, 2011

Safety – Panel 3

Amy Monroe (SCE&G)

Robert Williamson (SCE&G)

Timothy Schmidt (SCE&G)

James LaBorde (SCE&G)

Topics

- Emergency Planning
- Toxic Gas Evaluations
- Auxiliary Systems
- Offsite Power System

Emergency Planning

- 10 CFR 52.79(a)(21) requires a COLA to include an emergency plan
- The Radiological Emergency Plan is provided as Part 5 of the COLA
  - Establishes the concepts, evaluation and assessment criteria, and protective actions that are necessary to limit and mitigate the consequences of potential or actual radiological emergencies
  - Single plan for Units 1, 2, and 3

Emergency Planning

- Emergency Plan Content
  - Part 1 – Introduction
  - Part 2 – Planning Standards and Criteria
  - Annex 1 – Unit 1
  - Annex 2 – Unit 2
  - Annex 3 – Unit 3
  - Appendices, including:
    - Letters of Agreement
    - Procedure Cross-Reference to the Emergency Plan
    - Evacuation Time Estimate Study
    - Regulatory Requirements Cross Reference Document

Emergency Planning Zone

- COLA utilized existing Emergency Planning Zone (EPZ) from Unit 1
- Existing EPZ based on NUREG-0396 and NUREG-0654
- Encompasses four counties with boundaries based on demography, topography, land use characteristics, access routes and jurisdictional boundaries
- Risk populations are included in existing EPZ
- EPZ boundaries were affirmed by elected officials and endorsed by state emergency management agency

Emergency Planning

- Departure (VCS DEP 18.8-1) to Relocate Emergency Facilities
  - Technical Support Center (TSC)
  - Operational Support Center (OSC)
  - Evaluated in COLA Part 7, Section A

Emergency Planning

- Emergency Planning Milestones
  - Full participation exercise conducted within 2 years of scheduled date for initial loading of fuel
  - Onsite exercise conducted within 1 year before the scheduled date for initial loading of fuel
  - Detailed implementing procedures for Emergency Plan submitted at least 180 days prior to scheduled date for initial loading of fuel
  - Emergency Response Data System (ERDS) implementation program submitted at least 180 days prior to scheduled date for initial loading of fuel

Toxic Gas

- Accidents involving the release of toxic chemicals from onsite storage facilities and nearby mobile and stationary sources are considered in Final Safety Analysis Report (FSAR) Section 2.2.3.1.3
- Areal Locations of Hazardous Atmospheres (ALOHA) air dispersion model was used to predict the concentrations of toxic chemical clouds as they disperse downwind
- Formation of a toxic vapor cloud following an accidental release of the analyzed hazardous materials would not adversely affect the safe operation or shutdown of new units

Chapter 9 - Auxiliary Systems

- Site-specific auxiliary systems include:
  - Raw Water System (RWS)
    - Site-specific system
    - No safety-related function
    - Failure of the system will not affect the ability of a safety system to perform its function
  - Waste Water System (WWS)
    - Site-specific system
    - No safety-related function
    - Includes common plant outfall for both units

WWS Design Considerations

- Meets 10 CFR 20.1406
- Incorporated industry Operating Experience and lessons learned into the WWS design
  - High Density Polyethylene (HDPE) utilized versus carbon steel, ductile iron or fiberglass
  - No pumps, valves or vacuum breakers along the line
  - Blowdown flow is via gravity
- Commitment to implement groundwater monitoring program

WWS Construction Considerations

- Construction requirements ensure long-term integrity
  - Qualified welders and processes
  - Proven installation techniques based on operating experience
  - Weld inspections
  - Hydrostatic testing
- Expect long life with HDPE
  - Over 40 years industrial experience with HDPE

Off-site Power

- 12 overhead transmission lines connect the new 230 kv switchyard to other substations
- Switchyard is robust
- Failure Analysis performed
- Grid Stability Study performed
  - Includes the Westinghouse interface requirement for maintaining Reactor Coolant Pump voltage for 3 seconds after a turbine trip