

Southern Nuclear

Stewart County Project
NRC /FEMA COLA Planning Meeting

August 31, 2016



A SOUTHERN COMPANY

Purpose of Meeting

Discuss emergency preparedness aspects of a Combined License Application (COLA) for a Greenfield site

Topics for Discussion

- SCP Project and Site Overview
- Emergency Planning Zone Development
- Evacuation Time Estimate
- State and Local Emergency Plans
- Emergency Plan Approach
- Public Alert and Notification System Design
- NUREG 0654/FEMA REP 1 Revision
- Emergency Action Level Scheme
- Emergency Planning ITAAC
- Letters of Agreement
- Potential EP Related License Conditions
- COLA Development Communications

Overview of Stewart County Project

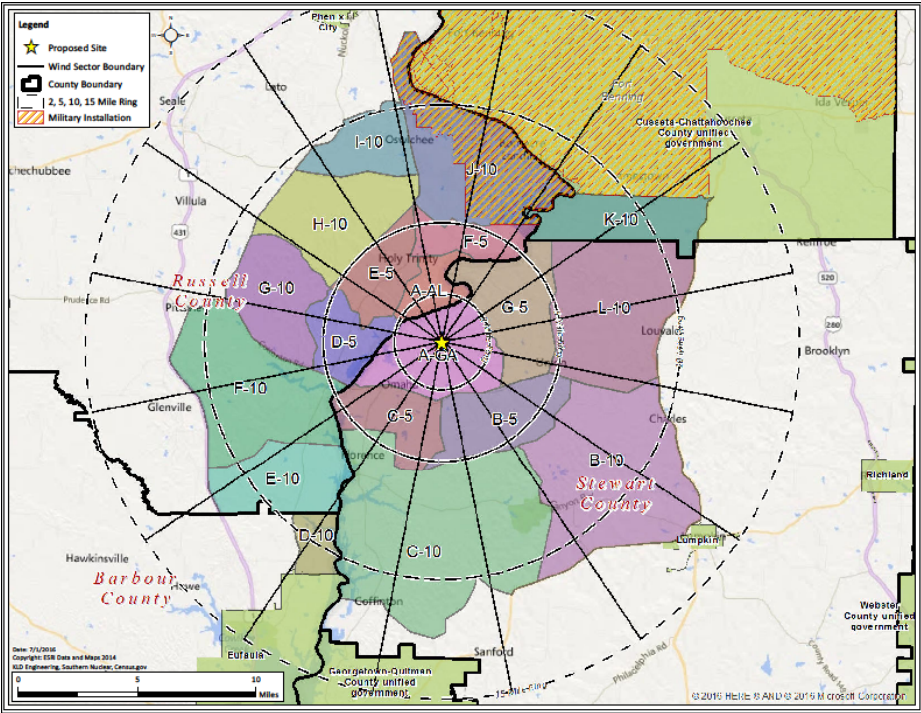
- Obtain a COL for a new site in Georgia
- “Preserve the option” for new nuclear generation
 - No plan for ESP/LWA
- Owner – Georgia Power Company
- Licensee – Southern Nuclear Operating Company
- Reactor technology decision pending – AP1000 or ESBWR

Emergency Planning Zone Development

- 10 Mile Emergency Planning Zone (EPZ)
 - Propose EPZ with Emergency Response Planning Areas (ERPA)
 - Resolve Fort Benning Considerations
 - Present draft EPZ to State and local officials
 - Revise EPZ based on feedback
 - Obtain State and local approval of EPZ
 - Submit proposed EPZ with COLA
- 50 Mile EPZ
 - Identify Counties to be included in 50 mile EPZ
 - Obtain State approval of Counties to included in 50 mile EPZ
 - Draft revisions to affected State emergency plans
 - Include list of impacted counties in emergency plan

Emergency Planning Zone Development

Preliminary Draft 10 Mile EPZ with ERPAs



Evacuation Time Estimate

- Evacuation Time Estimate (ETE) – conform to NUREG/CR-7002
- ETE contractor supporting establishment of a proposed EPZ
- Treatment of portions of Fort Benning within 10 mile EPZ to be resolved
- Final selection of reception centers may be deferred in accordance with a License Condition

State and Local Emergency Plans

- Affected State Plans
 - Georgia Radiological Emergency Plan – Base Plan
 - Annex F – Ingestion Exposure Pathway Plans for Fixed Nuclear Facilities
 - Annex ? – Stewart County Project (To be developed)
 - Alabama Radiological Emergency Preparedness Plan – Nuclear Power plants
 - EPZ County Emergency Plans
 - Russell County Radiological Emergency Plan (Alabama)
 - Barbour County Radiological Emergency Plan (Alabama)
 - Chattahoochee County Radiological Emergency Plan (Georgia)
 - Stewart County Radiological Emergency Plan (Georgia)
 - Host Counties TBD
- Markups of Affected Plans to be submitted to FEMA for review and approval (44 CFR 350)
 - State and local plans will conform to NUREG-0654/FEMA REP-1
- Final level of detail to be resolved

Emergency Plan Approach

- Use existing SNC Standard Emergency Plan (SEP) as a base
- Develop draft of SEP as necessary for Stewart County
- Develop draft site specific Annex

Public Alert and Notification System Design

- ANS System to meet the requirements of REP Manual Section V and 10 CFR 50 Appendix E
 - Expectations are to be consistent with other SNC Plants – Subject to technological improvements.
 - Primary ANS
 - Back-up – Reverse Phone Dialing
 - ANS Design to be determined based on field studies following general approval of the EPZ.
- Basic design report to be provided at a later date
- Design to be verified via EP ITAAC

Emergency Action Level Scheme

- EAL Scheme to be based on NEI 07-01
 - License Condition to be Submitted IAW existing Combined License Practices

Emergency Planning ITAAC

- EP ITAAC based on generic EP ITAAC for Greenfield site
- EP ITAAC informed by previous Greenfield COLA ITAAC
- Use generic ITAAC from NUREG-0800, Table 14.3.10-1
- Format adjusted to meet standard ITAAC format used in COL's issued to-date

Letters of Agreement

- Certification letters in accordance with 10 CFR 52.79(a)(22)
- Final letters of agreement addressed via license condition (Modeled after existing SNC sites)

Potential EP Related License Conditions

- EAL Scheme
- NEI 10-05 Staffing Assessment
- NEI 12-01 Assessments
 - Staffing
 - Communications
- Letters of Agreement
- Reception center(s) location
- EOF integration
- Emergency planning implementing procedures

COLA Development Communications

- Communication Plan to be finalized
- Periodicity determined for other Stakeholders

Meeting Summary

- SNC Actions from the meeting
- NRC Actions from the meeting
- FEMA Actions from the meeting