

**Selecting the Right Site for New Nuclear Generation**

Southern Nuclear Operating Company

Tom Moorer – Nuclear Development  
Environmental Manager

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**The Past**

- There are 104 operating nuclear units in the US, located at 65 sites in 31 states.
- The last unit was completed over 20 years ago

**The Present**

- Beginning in 2005, the first of four Early Site Permits (ESPs) were submitted to NRC for review.
- By the end of 2008, there were 17 COL applications in line for NRC review
- Volatile gas prices, the threat of Carbon controls, and an increasing need for baseload generation has brought nuclear to the top of the list as a new generation option.

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### Selecting the Right Site for New Nuclear Generation

- **The Future**
- As the first wave of new nuclear moves toward construction with online dates from 2016 to 2018, a second wave is building behind it for 2020 and beyond.
- Much of this first wave will be built at existing nuclear facilities.
- Many utilities now have nuclear in their long-range plans for future baseload generation
- However, few have identified future sites and the time for licensing and building a nuclear plant is ten years or more.

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### Selecting the Right Site for New Nuclear Generation

- Southern Company is actively investigating future generation sites
- Siting process begins on the office desktop and advances to the field
- Public may become aware as land owners are contacted, officials are notified, or as on-site studies occur (survey, environmental, drilling)
- Overall Approach
  - Internal resources are used to contact land owners
  - Studies are lead by internal resources and supplemented with external parties as needed
- For large multi-owner sites, footprint areas targeted for initial study to minimize cost, effort, and exposure
  - Communications managed internally
  - Other considerations managed case by case

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### Selecting the Right Site for New Nuclear Generation

- Southern Company began this process by organizing a siting committee.
- Committee made up of expertise in engineering, land acquisition, environmental, licensing, civil/geotechnical, seismic, EP, hydrology, socioeconomics...
- Screening process is used. Developed based on RegGuide 4.7, EPRI Siting Guide, local input
- Screening process produces a numerical score that is used to rank-order potential sites

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## Selecting the Right Site for New Nuclear Generation

### Communication Strategy

- As a normal course of business activity, we must plan and prepare for future customer demand and generation needs.
- We are in the process of investigating sites for future nuclear, coal, and gas fueled generation.
- Site investigations are a part of normal long term planning well before decisions to construct a plant of any kind are made.

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Questions?

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