

Early Site Permit

September 8, 2005



SNC - Early Site Permit



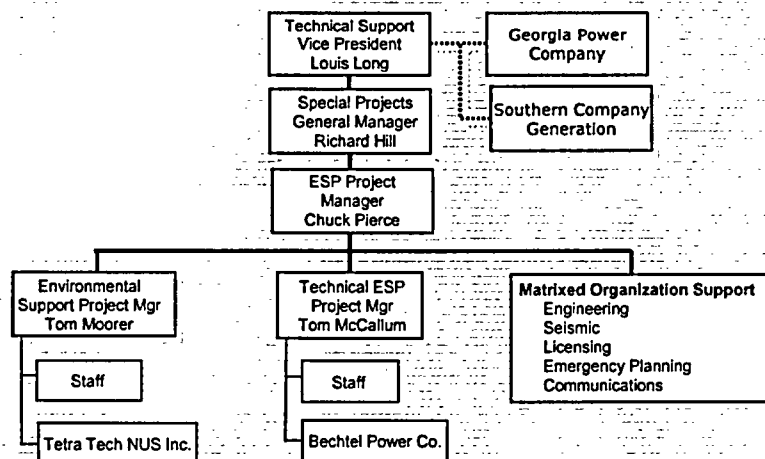
Agenda	
Topic	Presenter
<ul style="list-style-type: none">• Introduction• Early Site Permit Organization	Louis B. Long, Technical Support Vice President
<ul style="list-style-type: none">• SNC Program and Plan<ul style="list-style-type: none">◦ Status of ESP Schedule• Early Site Permit Topics<ul style="list-style-type: none">◦ Lessons Learned◦ Permit Ownership◦ QA Program◦ Seismic Response Spectra Approach◦ Emergency Plan Approach◦ Environmental Report Approach• NRC Interface• ESP Analysis Scope	Charles R. Pierce, Early Site Permit Project Mgr.

Strategic Overview



- ◆ Southern Company projects a need for additional base load generation beginning in 2015
- ◆ Analysis indicates nuclear is a viable option
- ◆ Southern Company directed SNC to pursue licensing activities that would provide the option for new nuclear base load generation by June 2015

Early Site Permit Organization



Program and Plan

◆ Review Time Assumptions

April 6, 2005 Commission Briefing:

- ESP - 36 months
- Design Certification – 42 to 60 months
- COL referencing an ESP & DC - 27 months

July 11, 2005 EPRI/Duke presentation:

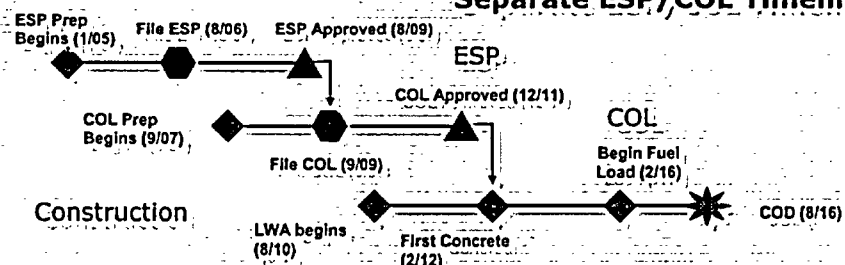
- Existing Site Combined ESP/COL referencing DC – 35-39 months

Nuclear News Flashes – Tuesday, August 16, 2005

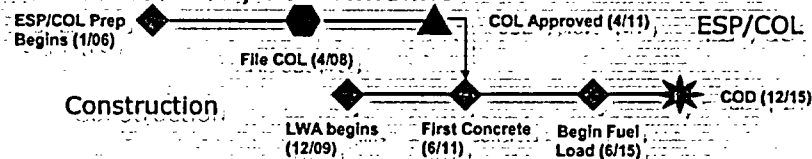
- Exelon ESP delay – 7 to 9 months
- Dominion ESP delay – 4 months
- Entergy ESP delay – 4 months

Program and Plan

Separate ESP/COL Timeline



Combined ESP/COL Timeline



Review time assumptions with 10CFR52 Standard process

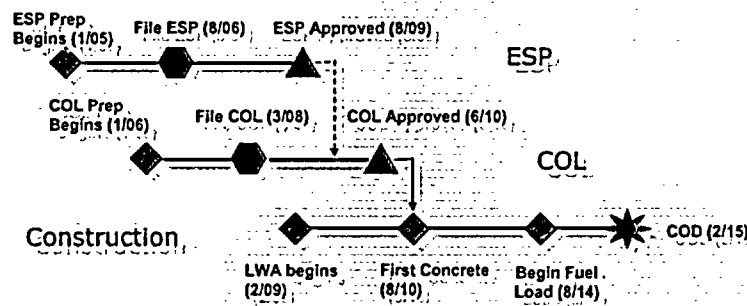
Program and Plan

◆ SNC ESP/COL Licensing Approach

- Submit ESP on current schedule
- Resolve all site suitability issues in ESP proceeding
- Submit COL filing in spring of 2008
- Reference the ESP application in the COL filing
- Coordinate ESP – COL proceedings
- Update COL filing with ESP results

Program and Plan

SNC Proposed Process & Timeline



Review time assumptions with COLA filed before ESP approval

Program and Plan

◆ Status of ESP Schedule

- Feasibility study performed Jan.-March 2005
- Began ESP development in April 2005
- QA Program established
- Data gathering and analysis ongoing
- Soil borings in progress
- Application sections being developed
- Submittal planned for August 15, 2006

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ESP Topics for Discussion

- ◆ Lessons Learned from Current Applicants
- ◆ Permit Ownership
- ◆ QA Program
- ◆ Seismic Response Spectra
- ◆ Emergency Plan Approach
- ◆ Environmental Report Approach

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◆ **Technical Lessons Learned from Current Applicants**

- **Greater finality in PPE approach**
 - **SNC will limit ESP to at most 2 reactor technologies and address each individually**
 - **SNC will use certified or recently submitted designs Accident Analysis**
- **NRC Review Standard approach**
 - **SNC has reviewed RAIs and will provide more detail as appropriate. Examples: seismology, hydrology & meteorology**
- **QA Program approach**
 - **SNC has a 10CFR50 Appendix B program for ESP**
- **Emergency Plan Approach**
 - **SNC will provide complete EP with ITAAC for open items**

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◆ **Environmental Lessons Learned from Current Applicants**

Environmental Reports finality approach

- **PPE design Impacts In ER**
 - **SNC will address specific reactor impacts**
- **ER deferred items**
 - **SNC will address all NEPA ER topics**
 - **Address all environmental issues at ESP**
 - **Address new & significant process at COL**
 - **SNC has reviewed RAIs and will address additional detail as appropriate**
 - **SNC will fully address construction and site preparation activities and resources**

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◆ **Permit Ownership**

- **Current joint owners in existing licensed units entered into development agreement for future units in May, 2005**
 - **Development agreement grants each joint owner the right to participate at current ownership level**
 - **Specific ownership percentages adjusted in 2006-08**
 - **SNC plans to list all current joint owners in ESP submittal**
 - **Final ownership percentages will be adjusted as applicable**
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◆ **QA Program**

- **10 CFR 50 Appendix B Program**
 - **ESP QA Manual developed and issued**
 - **Project Management Controls developed**
 - **Records Management Process in place**
 - **Data source requirements defined**
 - **Writers guide developed**
 - **SNC Internal audit by QA staff scheduled**
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◆ **Environmental Report Approach**

- SNC will address all NEPA Issues in the ESP application
 - SNC will address each technology individually
 - SNC will include the following in ER
 - Conceptual cooling tower, intake and discharge design
 - Detailed description of site preparation, construction activities and construction resources
 - Decommissioning Study based on analysis and DOE study
 - SAMA Analysis – demonstrate site is bounded by DC SAMA analysis
 - Need for Power
 - T-Line routing and design for electric shock and T&E species impact
 - NRC approach for transportation of radioactive materials
 - Metrication – SNC plans to use U.S. units only
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NRC Interfaces

- ◆ **Seismic Borings**
 - ◆ **QA Program**
 - ◆ **Other**
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