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Docket No.: 52-011

AR-06-2612

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Southern Nuclear Operating Company
Vogtle Early Site Permit Application
Safety Review Site Audit Information Needs

Ladies and Gentlemen:

On November 1-3, 2006, the U.S. Nuclear Regulatory Commission (NRC) performed a safety review audit of the Vogtle Electric Generating Plant (VEGP) site as part of their hazard analysis and physical security technical review of Southern Nuclear Operating Company's (SNC's) Vogtle Early Site Permit (ESP) application. During the audit, the NRC provided SNC with a list of information needs, identified as part of the audit, to support their technical review of the Vogtle ESP application. This list of NRC information needs is provided in the enclosure to this letter. SNC has also provided responses to the security-related information needs (Enclosure Items 18 through 28). The remaining NRC information needs from the enclosure (i.e., hazard analysis) will be provided to the NRC by December 11, 2006.

SNC determined that the security-related information contained in this letter is not sensitive in nature (i.e., safeguard information, restricted data or national security information); and therefore, is not required to be withheld from public inspection in accordance with 10 CFR 2.390.

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The SNC licensing contact for this information requests letter is J. T. Davis at (205) 992-7692.

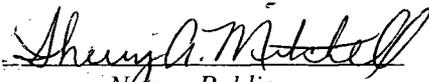
Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY



Joseph A. (Buzz) Miller

Sworn to and subscribed before me this 16th day of November, 2006



Notary Public

NOTARY PUBLIC STATE OF ALABAMA AT LARGE
MY COMMISSION EXPIRES: Dec 17, 2008
BONDED THRU NOTARY PUBLIC UNDERWRITERS

JAM/BJS/dmw

Enclosure: NRC Information Needs from November 2006 Safety Review Site Audit for Vogtle ESP Application

cc: Southern Nuclear Operating Company

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Nuclear Regulatory Commission

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Mr. M. D. Notich, Environmental Project Manager
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Georgia Power Company

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Oglethorpe Power Corporation

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Southern Nuclear Operating Company

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Enclosure

NRC Information Needs

from

November 2006 Safety Review Site Audit

for

Vogtle ESP Application

| # | SSAR Section | Information Need | Discipline Name | Reviewer Name |
|----|--------------|--|-----------------|-------------------|
| 1 | 2.2.3.1.1 | Provide clarification on how the six chemicals identified in the analysis of truck traffic were selected | Site Hazards | Seshagiri Tammara |
| 2 | 2.2.3.1.1 | In order for the staff to perform a confirmatory analysis, provide the wind speed and stability class used for the analysis | Site Hazards | Seshagiri Tammara |
| 3 | 2.2.3.1.1 | Provide a description of the method used to evaluate the potential formation of flammable vapor clouds from truck accidents | Site Hazards | Seshagiri Tammara |
| 4 | 2.2.3.1.1 | In order for the staff to perform a confirmatory analysis, provide the resultant concentrations generated from the vapor cloud analysis | Site Hazards | Seshagiri Tammara |
| 5 | 2.2.3.1.3 | Provide clarification on the use of No. 2 diesel fuel oil stored at Plant Wilson as a bounding analysis for waterway traffic. | Site Hazards | Seshagiri Tammara |
| 6 | 2.2.3.1.4 | Provide the percentage breakdown of the railroad chemical shipments that were listed on page 2.2-11 to confirm that these are the major shipments by rail. | Site Hazards | Seshagiri Tammara |
| 7 | 2.2.3.1.4 | Provide the basis for the selection of cyclohexane and ammonia for the detailed analysis | Site Hazards | Seshagiri Tammara |
| 8 | 2.2.3.1.4 | In order for the staff to perform a confirmatory analysis, provide the wind speed and stability class used for the analysis | Site Hazards | Seshagiri Tammara |
| 9 | 2.2.3.1.4 | Provide a description of the method used to evaluate the potential formation of flammable vapor clouds from railroad accidents | Site Hazards | Seshagiri Tammara |
| 10 | 2.2.3.1.4 | In order for the staff to perform a confirmatory analysis, provide the resultant concentrations generated from the vapor cloud analysis | Site Hazards | Seshagiri Tammara |
| 11 | 2.2.3.2.1 | For the toxic hazards analysis relating to truck accidents, provide the basis for the selection of gasoline, ammonia, and chlorine as discussed on page 2.2-13 | Site Hazards | Seshagiri Tammara |

| # | SSAR Section | Information Need | Discipline Name | Reviewer Name |
|----|--------------|---|-------------------|-------------------|
| 12 | 2.2.3.2.1 | For the toxic hazards analysis relating to truck traffic, provide the concentration of gasoline | Site Hazards | Seshagiri Tammara |
| 13 | 2.2.3.2.1 | Clarify the discussion of fuel oil concentration due to the rupture of a barge along the Savannah River as discussed on page 2.2-13 | Site Hazards | Seshagiri Tammara |
| 14 | 2.2.3.2.2 | In order for the staff to perform a confirmatory analysis, provide the resultant concentrations of fuel oil for the toxicity analysis at the control room | Site Hazards | Seshagiri Tammara |
| 15 | 2.2.3.2.2 | Provide the basis for only having selected chlorine and ammonia as potential chemicals stored at SRS | Site Hazards | Seshagiri Tammara |
| 16 | 2.2.3.2.3 | Provide the quantities, stability class, wind speed, and distance to the control room for use in the analysis for hydrazine and methoxypropylamine | Site Hazards | Seshagiri Tammara |
| 17 | 2.2.3.2.3 | Provide the results of the analysis for hydrazine, methoxypropylamine, and phosphoric acid | Site Hazards | Seshagiri Tammara |
| 18 | 13.6 | <p>Discussion with respect to 100. 21(f) of 10 CFR Part 100, planning and consideration on how the site characteristics are such that adequate security plans and measures can be developed; particularly, what differences or enhancements will be effected in contrast to the existing unit?</p> <p><i>Physical protection of both the proposed Vogtle units 3 and 4 and the existing Vogtle units 1 and 2 will rely upon the time-proven elements of detection, delay, and response. It is anticipated that, during the operational phase, all four units will be circumscribed by a contiguous Protected Area (PA) boundary. Although it is anticipated that the actual number of security personnel dedicated to the protection of the proposed units will be slightly less than that required for the existing units due to the plant design characteristics, these officers will be enveloped into the existing</i></p> | Physical Security | Marc Brooks |

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| | | <p>security organizational structure. As a result of the open design window related to the proposed units, it is probable that elements of enhanced communication, surveillance, and response will be incorporated into the design of the physical protection system for these units which will also enhance the protection of the existing units.</p> | | |
| 19 | 13.6 | <p>Discussion with respect to site characteristics that may require mitigation in order to control close approaches to the facility (e.g., cliffs, depressions, hills, mounds, waterways, etc.)?</p> <p>Based on the current site plan for proposed Vogtle units 3 and 4, mitigation with respect to topographical features of the site is not anticipated. Based on preliminary calculations, the area surrounding the proposed site is adequate for the installation of an engineered vehicle barrier system designed to deny close approach of unauthorized vehicles. The land based close approaches to the facility have been covered by the security orders that were issued against the existing units. The Savannah River is at a sufficient distance from the vital areas of the proposed units such that waterborne approach does not present a credible threat to the units. Water borne threats have also been covered as part of the protection of the existing units.</p> | Physical Security | Marc Brooks |
| 20 | 13.6 | <p>Discussion with respect to the existing protected area (PA) boundary for the power block structures and safety-related cooling tower(e.g., enlargement, re-design, etc.)?</p> <p>An area surrounding proposed Vogtle units 3 and 4 will be defined as a Protected Area (PA) boundary in accordance with regulation. At this time, it is anticipated that the PA boundary for planned</p> | Physical Security | Marc Brooks |

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| | | <p><i>Vogtle units 3 and 4 will be combined with the existing PA boundary for Vogtle units 1 and 2 to form a contiguous barrier circumscribing all four units. It is recognized that temporary measures will be required during the period of construction defined by the interval between fuel receipt for unit 3 and unit 4. The PA boundary will be demarcated and provided with intrusion detection capability in accordance with applicable regulation.</i></p> | | |
| 21 | 13.6 | <p>Discussion with respect to the existing OCA/PA vehicle checkpoint (e.g., proposed additions, re-location, etc.)?</p> <p><i>There are currently no plans to modify the current practice of performing an OCA badge check at the current checkpoint location on the plant entry road. Changes to the location of the vehicle search checkpoint with respect to authorized entry inside the required vehicle access denial system around either the existing Vogtle units 1 and 2 or proposed Vogtle units 3 and 4 have not been determined to date. It is anticipated that a common vehicle search area will be utilized; however, subsequent evaluation may determine the need for separate vehicle search areas dedicated to each unit pair. Location, operation, and manning of any and all such vehicle search checkpoints will be in accordance with applicable regulation.</i></p> | Physical Security | Marc Brooks |
| 22 | 13.6 | <p>Discussion with respect to all roads and railroads that penetrate the OCA, particularly, the projected railroad track proximity to proposed siting of Units 3 & 4?</p> <p><i>All roads and railroads within the Vogtle OCA boundary will be controlled in accordance with the Physical Security Plan (PSP) filed with the COLA. Roads and railroads that penetrate the required vehicle access denial system will be provided with appropriate</i></p> | Physical Security | Marc Brooks |

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| | | access control in accordance with existing regulation and the PSP filed with the COLA. | | |
| 23 | 13.6 | <p>Discussion with respect to the proposed location of the intake structure?</p> <p>The proposed location of the intake structure for Vogtle units 3 and 4 will be outside the site area anticipated to be circumscribed by either the required vehicle access denial system or PA boundary. The intake structure for proposed Vogtle units 3 and 4 will not house any equipment that performs functions related to safe shutdown of the units.</p> | Physical Security | Marc Brooks |
| 24 | 13.6 | <p>Discussion with respect to existing or planned culverts (greater than 254 square inches in cross-section area) that extend from outside to inside either the PA, the area for power blocks structures, and/or the area for safety related cooling towers?</p> <p>Plant layout for proposed Vogtle units 3 and 4 with respect to physical characteristics of this nature has not been finalized to date. Upon completion of design activities in this area, physical characteristics of this nature will be subject to applicable regulation.</p> | Physical Security | Marc Brooks |
| 25 | 13.6 | <p>Discussion with respect to barge slips within the OCA?</p> <p>Any barge slips located on the Savannah River required to facilitate construction of proposed Vogtle units 3 and 4 will be outside the site area anticipated to be circumscribed by either the required vehicle access denial system or PA boundary. Large equipment transported to the site from the river will be subject to search prior to entry inside the vehicle access denial system in accordance with applicable regulation.</p> | Physical Security | Marc Brooks |

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| 26 | 13.6 | <p>Discussion with respect to the Savannah River shoreline (e.g., posted warning signs, access control, etc.)?</p> <p><i>Postings are provided along the Savannah River shoreline of the Vogtle OCA and are consistent with the postings placed along the inland boundaries of the OCA with respect to informational content. Postings were placed in such a manner as to be visible from approaching watercraft prior to landfall. Access control to the portion of the OCA contiguous to the river is also consistent with that afforded to the inland boundaries of the OCA.</i></p> | Physical Security | Marc Brooks |
| 27 | 13.6 | <p>Discussion with respect to integrated response coordination (e.g., MOA/MOU, etc.) with the DOE Savannah River Site, particularly, regarding the utilization of their harbor, air, surveillance and response capabilities?</p> <p><i>The existing integrated response plan for Vogtle units 1 and 2 does not include a written agreement with the Department of Energy's Savannah River Site (DOE SRS). However, there currently exists an excellent working relationship between the security forces of the respective sites as evidenced by past instances of cooperation involving the use of DOE resources such as river patrol and air support. Official response coordination between the two parties is considered to be under the purview of the Department of Homeland Security (DHS) as part of its integrated response plan for critical infrastructure.</i></p> | Physical Security | Marc Brooks |
| 28 | 13.6 | <p>Discussion with respect to any potential revisions to OCA patrols (e.g., patrol frequency, increased staffing, surveillance technology, etc.)?</p> <p><i>Since the current Vogtle OCA boundary is not impacted by the</i></p> | Physical Security | Marc Brooks |

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| | | <i>construction and subsequent operation of proposeded Vogtle units 3 and 4, there is no definitive plan to modify the current OCA patrol strategy as a result of the addition of the new units. It is anticipated that new surveillance technologies such as infrared thermal imaging and video motion detection will be evaluated for use in monitoring the Vogtle OCA. Surveillance of the Vogtle OCA will continue to satisfy regulatory requirement regardless of the methodology (personnel, technology, or combination) used and will be described in the PSP submitted with the COLA.</i> | | |