January 28, 2008

Mr. Tom E. Tynan
Vice President - Vogtle
Southern Nuclear Operating Company, Inc.
7821 River Road
Waynesboro, GA 30830

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION, SECTION 2.1, 2.2 AND 2.3

Dear Mr. Tynan:

By letter dated June 28, 2007, Southern Nuclear Operating Company, Inc., submitted an application pursuant to 10 CFR Part 54, to renew the operating licenses for Vogtle Electric Generating Plant, Units 1 and 2, for review by the U.S. Nuclear Regulatory Commission (NRC or the staff). The staff is reviewing the information contained in the license renewal application and has identified, in the enclosure, areas where additional information is needed to complete the review. Further requests for additional information may be issued in the future.

Items in the enclosure were discussed with Chalmer Myer, and a mutually agreeable date for the response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-3191 or e-mail dja1@nrc.gov.

Sincerely,

/RA/

Donnie J. Ashley, Sr. Project Manager
License Renewal Branch A
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-424 and 50-425

Enclosure:
Request for Additional Information

cc w/encl: See next page

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Dear Mr. Tynan:

By letter dated June 28, 2007, Southern Nuclear Operating Company, Inc., submitted an application pursuant to 10 CFR Part 54, to renew the operating licenses for Vogtle Electric Generating Plant, Units 1 and 2, for review by the U.S. Nuclear Regulatory Commission (NRC or the staff). The staff is reviewing the information contained in the license renewal application and has identified, in the enclosure, areas where additional information is needed to complete the review. Further requests for additional information may be issued in the future.

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Sincerely,

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Donnie J. Ashley, Sr. Project Manager
License Renewal Projects Branch 1
Division of License Renewal
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DATE	1/17/08	1/18/08	1/28/08

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VOGTLE ELECTRIC GENERATING PLANT (VEGP), UNITS 1 AND 2
LICENSE RENEWAL APPLICATION (LRA)
REQUEST FOR ADDITIONAL INFORMATION (RAI)

RAI 2.1-1 Scoping and Screening Methodology Definitions

License renewal application (LRA) Section 2.1.2.1, "Title 10 CFR 54.4(a)(1) - Safety-related," states that 10 CFR 54.4(a)(1) requires that plant system, structure, and components (SSCs) within the scope of license renewal include safety-related SSCs which are those relied upon to remain functional during and following design-basis events (as defined in 10 CFR 50.49(b)(1)) to ensure the following functions:

(i) The integrity of the reactor coolant pressure boundary;

(ii) The capability to shut down the reactor and maintain it in a safe shutdown condition; or

(iii) The capability to prevent or mitigate the consequences of accidents that could result in potential offsite exposure comparable to the guidelines in 10 CFR 50.34(a)(1), 10 CFR 50.67(b)(2), or 10 CFR 100.11, as applicable.

LRA Section 2.1.2.1 also states that safety-related classifications for SSCs at the Vogtle Electric Generating Plant (VEGP) are reported in the final safety analysis report (FSAR) or in design-basis documents such as engineering drawings, evaluations, or calculations. Safety-related classifications for components are documented on engineering drawings and in the VEGP Q-List. The safety-related classification as reported in these source documents has been relied upon to identify SSCs satisfying one or more of the criteria of 10 CFR 54.4(a)(1). These SSCs have been identified as within the scope of license renewal.

During the audit, however, the staff noted that source documents used to identify the SSCs which met the scoping criteria of 10 CFR 54.4(a)(1), including the VEGP updated safety analysis report Section 3.2, and procedures AP 05-007, Section 6.1.4, and AP 23M-001, Section 4.17.1, have differing definitions of safety-related and also currently cite superseded regulatory text in establishing the scoping criteria to be used in identifying VEGP SSCs in accordance with 10 CFR 54.4(a)(1) requirements.

Therefore, the staff requests that the applicant provide a written evaluation that addresses the impact, if any, of the use of a differing definition of safety-related and of not having explicitly considered in its scoping methodology for VEGP those SSCs that are relied upon to ensure "the capability to prevent or mitigate the consequences of accidents that could result in potential offsite exposures comparable to the guidelines in 10 CFR 50.34(a)(1), 10 CFR 50.67(b)(2), or 10 CFR 100.11 of this chapter, as applicable," consistent with the facility's current licensing basis (CLB).

ENCLOSURE

RAI 2.1-2 10 CFR 54.4(a)(2) Scoping Criteria for Nonsafety-related SSCs

10 CFR 54.4 (a)(2) requires, in part, that all nonsafety-related SSCs, whose failure could prevent the satisfactory accomplishment of any of the functions identified in paragraphs 54.4(a)(1), are to be included within the scope of license renewal.

LRA Section 2.4.4 indicates the following:

> "Although not defined as essential, the Turbine Building includes components classified as safety-related that are used as sensors for providing input signals to, and as actuation devices for, the reactor trip and engineered safety features actuation systems (e.g., anticipatory reactor trip function on a turbine trip, turbine impulse pressure signal, steam dump solenoids, and turbine trip actuation on a reactor trip). The associated supports and raceways are classified in the CLB consistent with the components and are in the scope of license renewal under the 10 CFR 54.4(a)(1) criterion and scoped and evaluated under Section 2.4.12, Component Supports and Bulk Commodities."

LRA Section 2.1.2.2, "10 CFR 54.4(a)(2) - Nonsafety-Related SSCs Affecting Safety-Related SSCs," does not specifically address the use of the CLB to exclude nonsafety-related SSCs in the vicinity of safety-related SSCs in the turbine building from within the scope of license renewal.

During the U.S. Nuclear Regulatory Commission's audit, the staff reviewed the applicant's technical evaluation for nonsafety-related affecting safety-related SSCs which discussed the consideration of components located in the turbine building and identified as safety-related in the VEGP FSAR, a portion of the applicant's CLB. The applicant concluded in the technical evaluation that, although the turbine building contains components identified as safety-related in the FSAR, these components are not vulnerable to the effects of a failure of nonsafety-related SSCs in the non-seismic areas within the limits of the CLB. Therefore, no additional SSCs were included within the scope of license renewal based on the requirements of 10 CFR 54.4(a)(2).

The staff requests that the applicant provide the rationale and basis for not including nonsafety-related SSCs in the vicinity of safety-related SSCs in the turbine building within the scope of license renewal. Indicate the extent of condition by providing a description of the safety-related SSCs, the safety-related intended functions, the locations within the turbine building, and the CLB information used to make the determination.

In addressing this issue, indicate if your review concludes that use of the scoping methodology precluded the identification of non-safety SSCs that could interact with safety-related SSCs and were not specifically exempted by your CLB and, therefore, should have been considered within the scope of license renewal. Describe any additional scoping evaluations to be performed to address the 10 CFR 54.4(a)(2) criteria.

As part of your response, list any additional SSCs included within the scope as a result of your efforts, and list those SSCs for which aging management reviews were conducted. For each SSC, describe the aging management programs, as applicable, to be credited for managing the identified aging effects.

RAI 2.2-1

License renewal application Table 2.2-2 defines the Circulating Water System, System No. 1401, as not within the scope of license renewal. Similar plant designs have identified their Circulating Water Systems as being within scope based on 10 CFR 54.4(a)(2). Please provide additional information to justify exclusion of the Circulating Water System with respect to the applicable requirements of 10 CFR 54.4(a).

RAI 2.2-2

License renewal application Table 2.2-2 defines the Turbine Plant Closed Cooling Water System, System No. 1404, as not within the scope of license renewal. However, the Turbine Plant Cooling Water System, License Renewal Application (LRA) Section 2.3.3.7, is identified as being within the scope of license renewal based on 10 CFR 54.4(a)(2). It appears these two systems are very similar. Please provide additional information to justify exclusion of the Turbine Plant Closed Cooling Water System with respect to the applicable requirements of 10 CFR 54.4(a).

RAI 2.3.1-1

LRA Table 2.3.1.2 lists a "hold-down spring." Confirm that this is the same spring described in FSAR 3.9.5.1.2, Upper Core Support Assembly, which restrains axial movements of the upper and lower core support assemblies. If not, identify where the FSAR-referenced spring is included in the LRA.

RAI 2.3.2.2-1

In LRA Drawings 1X4LD122 and 131, the Emergency Core Cooling System (ECCS) sump screens are not designated as in-scope components. The staff believes these should be included for filtration. Clarify the status of the sump strains or justify the exclusion.

In FSAR Table 6.3.2-4, the boron injection surge tank is listed as an ECCS component, however, it is not discussed in the LRA. Clarify and support its LRA status.

In LRA Drawing 1X4LD118, the boric acid batching tank is highlighted but not listed in Table 2.3.2.2 or discussed in text. Verify it is included in-scope and identify the location of the discussion in the LRA or justify its exclusion.

In LRA Table 2.3.2.2, the Refueling Water Storage Tank (RWST) tank liner is listed. In FSAR 6.3.2.2.9; the tank is described as reinforced concrete tank with a stainless steel liner. Justify exclusion of structural support for the liner. Additionally, clarify the status of the filter on the outlet of the tank or justify the exclusion.

RAI 2.3.3.4-1

In license renewal drawings 1X4LD133-1, 1X4LD133-2, 2X4LD133-1, and 2X4LD133-2, locations G-6, G-7, and G-8 show Nuclear Service Cooling Water (NSCW) cooling tower fans as within the scope of license renewal based on criterion 10 CFR 54.4(a)(1). However, the fan casings and housings are not included in LRA Table 2.3.3.4 as a component type subject to an Aging Management Review (AMR). Provide additional information to explain why the NSCW

tower fan casings and housings are not included in LRA Table 2.3.3.4 as component types subject to an AMR.

RAI 2.3.3.4-2

License renewal drawings 1X4LD133-1 and 2X4LD133-1 (D-4) show pipe sections 131-1" and 130-1" and LRA drawings 1X4LD133-2 and 2X4LD133-2 (D-4) show pipe sections 132-1" and 369-1" that are within the scope of license renewal based on criterion 10 CFR 54.4(a)(2). None of these pipelines show in-scope anchoring that assures these pipelines are adequately anchored for spatial interaction. Provide additional information explaining how the pipelines listed above are adequately anchored to prevent spatial interaction.

RAI 2.3.3.4-3

License renewal drawings 1X4LD133-1, 2X4LD133-1, 1X4LD133-2, and 2X4LD133-2 (D-4) show pipe Sections 505-2", 057-2", 007-2", and 007-2", respectively, that are within the scope of license renewal based on criterion 10 CFR 54.4(a)(2). None of these pipe sections show in-scope anchoring that assures these pipe sections are adequately anchored for spatial interaction. Provide additional information explaining how all the pipelines listed above are adequately anchored to prevent spatial interaction.

RAI 2.3.3.4-4

License renewal drawing 2X4LD135-1, locations F-4, E-4, and D-2, show pipelines 351-1", 438-1", and 360-1", respectively, that are within the scope of license renewal based on criterion 10 CFR 54.4(a)(2) with continuations to LRA drawing 2X4LD144-2. No such matching continuations were found on LRA drawing 2X4LD144-2. It appears that pipelines 351-1", 438-1", and 360-1" continue from LRA drawing 2X4LD135-1 to LRA drawing 2X4LD212 at the respective locations D-7, D-8, and D-7. Provide additional information to explain where the drawing continuations of pipe sections 351-1", 438-1", and 360-1" from LRA drawing 2X4LD135-1 should be identified.

RAI 2.3.3.4-5

License renewal drawings 1X4LD135-2 and 2X4LD135-2, location E-5, show pipe section 451-1" within the scope of license renewal based on criterion 10 CFR 54.4(a)(2) and show a continuation to LRA drawings 1X4LD144-2 (G-8) and 2X4LD144-2 (G-8). The continuations were not found on LRA drawings 1X4LD144-2 or 2X4LD144-2. It appears that the 451-1" pipe section shown on LRA drawing 2X4LD135-2 continues to LRA drawing 2X4LD212 (D-5). However, the continuation drawing location for the 451-1" pipe section shown on LRA drawing 1X4LD135-2 could not be located. Provide additional information identifying the correct continuation drawing(s) and locations for the continuations of the 451-1" pipe sections from LRA drawings 1X4LD135-2 and 2X4LD135-2.

RAI 2.3.3.6-1

License renewal drawing 1X4LD139 (F-7) shows a drawing continuation of 004-2" piping and 005-2" piping that is within the scope of license renewal based on criterion 10 CFR 54.4(a)(2) to drawing 1X4LD110 (B-8). Instead, the actual drawing continuation location appears to be G-8 on drawing 1X4LD110 for both pipelines. Provide additional

information to clarify the correct drawing 1X4LD110 location for the continuation of the 004-2” piping and 005-2” piping with drawing 2X4DL139.

RAI 2.3.3.6-2

License renewal drawing 2X4LD138-1 (D-1) shows a drawing continuation of 177-8” piping within the scope of license renewal based on criterion 10 CFR 54.4(a)(2) to drawing 2X4LD139 (B-7). Instead, the actual drawing continuation location appears to be G-3 on drawing 2X4LD139. Provide additional information to clarify the correct drawing 2X4LD139 location for the drawing continuation of the 177-8” piping with drawing 2X4LD138-1.

RAI 2.3.3.12-1

In the Ventilation Systems – Auxiliary Building, Outside Air Supply and Normal HVAC System section, the Scope Determination Summary states that nonsafety-related fan housings in this system are relied upon as missile barriers (for the fan element). Please clarify why the fan housings for AB Normal A/C Unit Fan, (1(2)-1551-A7-001 & 1(2)-1551-A7-002), are not indicated as in-scope as boundary endpoint C2 on drawings 1X4LD208-1 and 2X4LD208-1.

RAI 2.3.3.13-1

Control Rod Drive Mechanism (CRDM) Unit Fans. The licensee has indicated in other areas that the housings for some fans in the containment building are considered in scope under 10 CFR Part 54.4(a)(2) criterion as missile barriers. This classification has included centrifugal fans as well as propeller and vane-axial. Please explain why the CRDM unit fan housings are not needed as missile barriers.

RAI 2.3.3.14-1

Fuel Handling Building Normal HVAC System. The Scope Determination Summary states that nonsafety-related fan housings associated with system are relied upon as missile barriers (for the fan element). The Fuel Handling Building Normal AC Unit Fans, A-1541-A7-001-000 & A-1541-A7-002-000, and the Fuel Pool Area Recirculating Air Handling Unit fans, A-1541-A7-003-000 and A-1541-A7-004-000, as shown on drawing AX4LD204-1 are not marked as in scope. Please explain why the housings for these fans are not needed as missile barriers as indicated in the Scope Determination Summary.

RAI 2.3.3.14-2

Fuel Handling Building Normal HVAC System. The Scope Determination Summary states that certain ductwork and dampers associated with the Fuel Handling Building Normal HVAC System interface with the Fuel Handling Building Post-Accident Exhaust System and must maintain integrity in order to maintain negative pressure in the Fuel Handling Building post-accident. Drawing AX4LD204-2 shows ductwork from PASS 1-2702-P5-SAP that is not in scope connecting to duct that is in scope (System 1-1541 line number 060). Please explain why the non-scope duct does not affect the integrity of the in scope duct and its ability to maintain negative pressure in the Spent Fuel Pit Heat Exchanger Train A area A53.

RAI 2.3.3.14-3

Fuel Handling Building Normal HVAC System. The Scope Determination Summary states that certain ductwork and dampers associated with the Fuel Handling Building Normal HVAC System interface with the Fuel Handling Building Post-Accident Exhaust System and must maintain integrity in order to maintain negative pressure in the Fuel Handling Building post-accident. Drawing AX4LD204-2 shows ductwork from PASS 2-2702-P5-SAP and Booster Fan 2-1541-B7-001-000 that are not in scope and are connecting to duct that is in scope (System 2-1541 line number 058). Please explain why the non-scope duct does not affect the integrity of the in scope duct and its ability to maintain negative pressure in the Spent Fuel Pit Heat Exchanger Train A area A91.

RAI 2.3.3.15-1

Diesel Generator Building Ventilation System. Scope Determination Summary for the Containment Building Lower Level Air Circulating System states that nonsafety-related fan housings in this system are relied upon as missile barriers (for the fan element). Drawing 1(2)X4LD212 shows propeller blade fans as the fan element style of concern for missiles. Please clarify why fan housings with propeller blades such as unit heaters and non-ESF Exhaust fan housings (1-1566-B7-005-000 and 1-1566-B7-006-000) (Drawing 1X4LD217) do not have to be considered as missile barriers for the fan elements and therefore to be in scope in accordance with 10 CFR 54.4(a)(2).

RAI 2.3.3.16-1

Auxiliary Feedwater Pumphouse Ventilation System. Scope Determination Summary for the Containment Building Lower Level Air Circulating System states that nonsafety-related fan housings in this system are relied upon as missile barriers (for the fan element). Drawing 1(2)X4LD212 shows propeller blade fans as the fan element style of concern for missiles. Please clarify why fan housings with propeller blades (as shown as part of the unit heaters on Drawing 1(2)X4LD227) do not have to be considered as missile barriers for the fan element and therefore to be in scope is not required in accordance with 10 CFR 54.4(a)(2).

RAI 2.3.3.17-1

Miscellaneous Ventilation Systems. The Electrical Tunnel Ventilation System shows that the exhaust duct and fan are in scope, but the makeup air duct for this space is not in scope. This is indicated on Drawing 1(2)X4LD238. Please clarify why the duct needed to provide makeup air for the air exhausted is not required to be in scope in accordance with 10 CFR 54.4(a)(2).

RAI 2.3.3.17-2

Miscellaneous Ventilation Systems. The Electrical Tunnel Ventilation System Drawing 1(2)X4LD238 shows that the Turbine Building and Auxiliary Building Train A Supply Fan (1(2)-1540-F7-005-000) and associated ducts are in scope yet the “N-S” Turbine Building Chase to “C.B.” Tunnel Ventilation Fan (1(2)-1540-B7-007-000) and associated duct are not in scope. This is indicated on Drawing 1(2)X4LD238. Please clarify why the fan and duct needed to exhaust the air provided by the supply air fan is not required to be in scope in accordance with 10 CFR 54.4(a)(2).

RAI 2.3.3.19-1

The following LRA drawings show fire protection system components as out of scope:

LRA drawing CX4LD173-2 shows the following fire protection system's components out of scope (i.e., not colored in red):

- Fire Hydrants
- Fire Protection Piping to Turbine Building, Steam Tunnel, and Radwaste Solidification Building
- Intake Structure

LRA drawing CX4LD173-4 shows the following fire protection system's components out of scope in the following locations (i.e., not colored in red):

- Dry Active Waste Processing Facility
- Dry Active Waste Storage Building

LRA drawing 1X4LD174-1 shows the following Halon 1301 fire protection system's components out of scope in the following locations (i.e., not colored in red):

- Computer Room Level A
- Computer CRT Display and Communication Rooms Level 1
- Radwaste Solidification Building Contamination Oil Room Level 1
- Radwaste Solidification Building Elevation 192'-0"

LRA drawing 2X4LD174-1 shows the following Halon 1301 fire protection system's components out of scope in the following location (i.e., not colored in red):

- Computer Room Level A

The staff requests that the applicant verify whether the above systems and components are in the scope of license renewal in accordance with 10 CFR 54.4(a) and subject to an AMR in accordance with 10 CFR 54.21(a)(1). If these components are excluded from the scope of license renewal and not subject to an AMR, the staff requests that the applicant provide justification for the exclusion.

RAI 2.3.3.19-2

LRA Section 2.3.3.19 discusses requirements for the fire water supply system but does not mention trash racks and traveling screens for the fire pump suction water supply. Trash racks and traveling screens are located upstream of the fire pump suctions to remove any major debris from the fresh or raw water. Trash racks and traveling screens are necessary to remove debris from and prevent clogging of the fire protection water supply system. Trash racks and traveling screens are typically considered to be passive, long-lived components. Both trash racks and traveling screens are located in a fresh or raw water/air environment and are typically constructed of carbon steel. Carbon steel in a fresh or raw water environment or water/air environment is subject to loss of material, pitting, crevice formation, and microbiologically influenced corrosion, and fouling. The staff requests that the applicant explain the apparent

exclusion of the trash racks and traveling screens that are located upstream of the fire pump suctions from the scope of license renewal in accordance with 10 CFR 54.4(a) and subject to an AMR in accordance with 10 CFR 54.21(a)(1).

RAI 2.3.3.19-3

LRA Table 2.3.3-19 excludes several types of fire protection components that appear in the NUREG-1137 and its supplements and/or the UFSAR, and which also appear in the LRA drawings colored in red. These components are listed below.

- Hose racks
- Yard hose houses
- Interior fire hose stations
- Pipe fittings
- Pipe supports and hangers
- Couplings
- Threaded connections
- Restricting orifices
- Interface flanges
- Dikes for oil spill confinement
- Floor drains and curbs for fire-fighting water
- Filter housing
- Heater housing
- Chamber housing
- Actuator housing
- Halon storage tanks/bottles
- Buried outside diesel fuel storage tanks
- Buried fire protection piping and underground fire main loop
- Heat exchanger (bonnet)
- Heat exchanger (shell)
- Heat exchanger (tube)
- Post-indicator sectional control valves
- Turbocharger
- Tank heater
- Thermowells
- Expansion joints
- Gear box housing
- Lubricating oil collecting system components (reactor coolant pump)
- Engine intake and exhaust silencers/muffler (diesel driven fire pump)
- Backflow prevention devices
- Flame retardant coating for cables
- Fire retardant coating for structural steel supporting walls and ceilings
- Fire barrier penetration seals
- Fire barrier walls, ceilings, floor, and slabs
- Fire doors
- Fire rated enclosures

The staff requests that the applicant verify whether the components listed above should be included in LRA Table 2.3.3.19. If they are excluded from the scope of license renewal and not subject to an AMR, the staff requests that the applicant provide justification for the exclusion.

RAI 2.3.3.19-4

NUREG-1137 and its supplements listed various types of fire suppression systems provided in the plant areas for fire suppression activities. The fire suppression systems in various areas are:

- Total flooding Halon 1301 systems for two shutdown panel rooms, computer room, and five nonsafety-related areas in the control building
- Dry standpipe for the control building, containment building, and auxiliary building
- Deluge systems for charcoal filter assemblies
- Dry pre-action sprinkler systems below the reactor coolant pumps and in areas of high cable tray concentrations
- Cable spreading room automatic pre-action sprinkler system
- Wet standpipe and hose system throughout the plant

The staff requests that the applicant verify whether the above fire suppression systems installed in various areas of the plant are in the scope of license renewal in accordance 10 CFR 54.21(a) and subject to an AMR in accordance with 10 CFR 54.21(a)(1). If they are excluded from the scope of license renewal and not subject to an AMR, the staff requests that the applicant provide justification for the exclusion.

RAI 2.3.3.20-1

License renewal drawings 1X4LD170-1, 1X4LD170-2, 2X4LD170-1, and 2X4LD170-2 (G-7) indicate jacket water standpipes that are within the scope for license renewal based on criterion 10 CFR 54.4(a)(1). Provide additional information explaining why the standpipes are not listed in LRA Table 2.3.3.20 as a component subject to an AMR.

RAI 2.3.3.20-2

License renewal drawings 1X4LD170-1, 1X4LD170-2, 2X4LD170-1, 2X4LD170-2 (E-6), and as described in the FSAR Section 9.5.8.2.3, indicate that the housings for the turbocharger and aftercooler form a pressure boundary for intake air going to the engine intake manifolds and should be in scope for license renewal based on criterion 10 CFR 54.4(a)(1). Provide additional information explaining why the turbocharger/aftercooler housings with their pressure boundary and heat exchange functions are not listed in LRA Table 2.3.3.20 for components subject to an AMR.

RAI 2.3.3.20-3

License renewal drawings 1X4LD170-1, 1X4LD170-2, 2X4LD170-1, and 2X4LD170-2 (E-3) and (B-3) indicate respectively that manhole covers which provide a pressure boundary for the diesel fuel oil day and storage tanks are within the scope of license renewal based on criterion 10 CFR 54.4(a)(1). Provide additional information explaining why the manhole covers are not listed in LRA Table 2.3.3.20 for components subject to an AMR.

RAI 2.3.3.20-4

In license renewal drawings 1X4LD170-1, 1X4LD170-2, 2X4LD170-1, and 2X4LD170-2, locations (H-7), (C-8), (D-2), (C-2), and (E-3) indicate tank vents that are within the scope of license renewal. The LRA Table 2.3.3.20 lists tank vent screens as a component that provides debris protection for a vent, but none of the vents show a debris screen. Provide additional information explaining which tank vents on the LRA drawings do or do not have the tank vent screen component that is listed as item 36 in LRA Table 2.3.3.20.

RAI 2.3.3.20-5

License renewal drawings 1X4LD170-1, 1X4LD170-2, and 2X4LD170-1 (D-4) indicate that the concrete vault roof has a vent that is within the scope of license renewal based on criterion 10 CFR 54.4(a)(1). Those drawings cover the diesel generator trains A and B for plant unit #1 and train A for plant unit #2. However, the LRA drawing 2X4LD170-2 for train B of plant unit #2 does not show a vent for the concrete vault roof. Provide additional information explaining why the concrete vault roof vent is missing on LRA drawing 2X4LD170-2 for diesel generator plant unit #2 train B.

RAI 2.3.3.20-6

License renewal drawing 2X4LD170-2 (F/G-6) indicates the 343-3/4" pipeline and associated drain are within the scope of license renewal based on criterion 10 CFR 54.4(a)(1). However, LRA drawings 1X4LD170-1, 1X4LD170-2, and 2X4LD170-1 for the same location indicates that the similar 343-3/4" and 339-3/4" pipelines are within the scope of license renewal based on criterion 10 CFR 54.4(a)(2), rather than 10 CFR 54.4(a)(1), and the drain is not within the scope of license renewal. Provide additional information to define the correct criterion to use for all four of these LRA drawings for the 343-3/4" and 339-3/4" drain pipelines and their respective drains.

RAI 2.3.3.20-7

License renewal drawing 2X4LD170-1 (C/D-8) indicates a lube oil press fill pipeline located outside the engine piping boundary and connected to a three-inch pipeline within the engine piping boundary that is entirely within the scope of license renewal based on criterion 10 CFR 54.4(a)(1). However, LRA drawings 1X4LD170-1, 1X4LD170-2, and 2X4LD170-2, for the same general location and pipeline characteristics, indicate the lube oil press fill piping is not within the scope of license renewal. Provide additional information to define the correct criterion to be applied to the lube oil press fill pipeline outside the engine piping boundary on all four LRA drawings referenced above.

RAI 2.3.3.20-8

License renewal drawing 2X4LD170-1 (E-8) shows sections of 037-10" and 035-10" piping within the scope of license renewal based on criterion 10 CFR 54.4(a)(2) with a continuation to LRA drawing 2X4LD135-1 (G-6). The continuation location G-6 on LRA drawing 2X4LD135-1 indicates the 037-10" and 035-10" piping are within the scope of license renewal based on criterion 10 CFR 54.4(a)(1). It appears that the sections of 037-10" and 035-10" piping shown on LRA drawing 2X4LD170-1 between the engine piping boundary and the continuation marker to LRA drawing 2X4LD135-1 should also be in-scope based on criterion 10 CFR 54.4(a)(1) as

are the other emergency diesel generators shown in LR drawings 2X4LD170-2, 1X4LD170-1, and 1X4LD170-2. Provide additional information clarifying why the subject piping on LRA drawing 2X4LD170-1 (E-8) meets the requirements of criterion 10 CFR 54.4(a)(2), rather than 10 CFR 54.4(a)(1).

RAI 2.3.3.21-1

License renewal drawing AX4LD190-2 (E-3) shows pipe section 172-1" in-scope for 10 CFR 54.4(a)(2). The continuation to AX4LD123-2 (A-6) is not shown as in-scope for license renewal. Provide additional information detailing the license renewal boundary for pipe section 172-1" on drawing AX4LD123-2 (A-6).

RAI 2.3.3.23-1

License renewal drawing 2X4LD144-1, location A-4, shows pipe section 286-3" within the scope of license renewal based on criterion 10 CFR 54.4(a)(2) with a continuation to LRA drawing 2X4LD145-1 (E-2). The continuation LRA drawing 2X4LD145-1 (E-2) could not be located. The correct drawing continuation appears to be LRA drawing 2X4LD146-1 (E-2). Provide additional information for the correct continuation LRA drawing number and location.

RAI 2.3.3.23-2

License renewal drawings 1X4LD145-6 and 2X4LD145-6 (B-2) show pipe 256-4" as not within the scope of license renewal. License renewal drawings 1X4LD145-5 and 2X4LD145-5 (D-4) show pipe 256-4" within the scope of license renewal based on criterion 10 CFR 54.4(a)(2). Provide additional information clarifying why pipe 256-4" on drawings 1X4LD145-6 and 2X4LD145-6 (B-2) is not within the scope of license renewal.

RAI 2.3.3.23-3

License renewal drawings 1X4LD179-2 and 2X4LD179-2 (D-7) show pipeline 097-2" within the scope of license renewal based on criterion 10 CFR 54.4(a)(2) continuing to LRA drawings 1X4LD124-2 (F-4) and 2X4LD124-2 (G-4). Drawings 1X4LD124-2 and 2X4LD124-2 could not be located in the LRA boundary drawing package. Provide additional information to verify that the continuation from LRA drawings 1X4LD179-2 and 2X4LD179-2 has been made to the correct drawings and locations and provide the drawings.

RAI 2.3.3.25-1

License renewal drawings 1X4LD133-1, 1X4LD133-2, 2X4LD133-1, and 2X4LD133-2 (H-3), and drawings 1X4LD136 and 2X4LD136 (A-3) and (E-3) show radiation monitors that are within the scope of license renewal based on criterion 10 CFR 54.4(a)(2) between sections of pipe categorized within the scope of license renewal based on criterion 10 CFR 54.4(a)(1). Also note that for similar equipment on drawings 1X4LD213-2 and 2X4LD213-2 (D-1) radiation monitors are within the scope of license renewal based on criterion 10 CFR 54.4(a)(2) but have equivalent anchors on each end. Provide additional information explaining why the radiation monitors on LRA drawings 1X4LD133-1, 1X4LD133-2, 1X4LD136, 2X4LD133-1, 2X4LD136, and 2X4LD133-2 are not within the scope of license renewal based on criterion 10 CFR 54.4(a)(1) as are the connecting pipe sections.

RAI 2.3.3.26-1

License renewal drawing 1X4LD184 (A-8) shows a drawing continuation of pipe section 170-1" within the scope of license renewal based on criterion 10 CFR 54.4(a)(2) to drawing 1X4LD125 (B-3). The continuation at 1X4LD125 (B-3) could not be located. The drawing continuation appears to be 1X4LD125 (D-7). Provide additional information to clarify the correct drawing 1X4LD125 location for the continuation of pipe section 170-1" to drawing 1X4LD125.

RAI 2.3.3.26-2

License renewal drawing 1X4LD184 (C-8) shows a drawing continuation of 163-1" piping, within the scope of license renewal based on criterion 10 CFR 54.4(a)(2), to drawing 1X4LD129 (G-6). Part of the 163-1" piping on 1X4LD129 (G-6) to In-Scope Boundary Endpoint Clarification Symbol A11 is shown as not in scope for license renewal. Provide additional information justifying the boundary locations with respect to the applicable requirements of 10 CFR 54.4(a).

RAI 2.3.3.26-3

License renewal drawing 1X4LD129 (H-2) shows pipe section 172-1" splits and connects to a 172-3/4" line and a 172-1" line. The drawing also shows that part of the 172-1" line before the split, as well as the 172-3/4" line, as nonsafety-related and within the scope of license renewal for spatial effects. Yet no portion of the continuing 172-1" line that is connected to the catalytic hydrogen re-combiner is within the scope of license renewal. Please provide additional information to clarify why this line is not included in the scope of license renewal as per requirements of 10 CFR 54.4(a) (2).

RAI 2.3.3.27-1

The function of the Turbine Plant Sampling System is to collect, cool, analyze, control, alarm, and record water quality from various sampling points in the secondary plant systems. Certain nonsafety-related piping associated with this system has the potential for spatial interaction with safety-related components; therefore, this system meets the 10 CFR 54.4(a)(2) criterion. In license renewal drawing 2X4LD171-8 (E-5), turbine plant sampling system, pipe section 139-1½" downstream of valve 094 is shown as not within the scope of license renewal for criterion 10 CFR 54.4(a)(2). License renewal drawing 1X4LD171-8 (E-5), Turbine Plant Sampling System, shows this piping within the scope of license renewal. Provide additional information to justify the omission of the 2X4LD171-8 pipe section 139-1½" from the applicable requirements of 10 CFR 54.4(a)(2) and provide the license renewal boundary for 139-1½".

RAI 2.3.3.27-2

The function of the Turbine Plant Sampling System is to collect, cool, analyze, control, alarm, and record water quality from various sampling points in the secondary plant systems. Certain nonsafety-related piping associated with this system has the potential for spatial interaction with safety-related components. License renewal drawings 1X4LD171-8 and 2X4LD171-8 have 16 transitions identified for 3/8" piping downstream of the steam generator main steam sample coolers that meets the 10 CFR 54.4(a)(2) criterion. There is not enough information provided to identify the transition location. Provide additional information to identify these LR boundaries

and to justify the boundary locations with respect to the applicable requirements of 10 CFR 54.4(a)(2) for the following locations on both drawings:

- Location D-3, downstream of valve 008
- Location E-3, downstream of valve 007
- Location F-3, downstream of valve 006
- Location G-3, downstream of valve 005
- Location D-6, downstream of valve 010
- Location E-6, downstream of valve 011
- Location F-7, downstream of valve 012
- Location G-8, downstream of valve 009

RAI 2.3.3.27-3

The Post-Accident Sampling System (PASS) provides the capability to take and return a post-accident containment atmosphere sample via PASS piping and skid-mounted equipment. The original design of the PASS included the capability to obtain fluid samples from the Reactor Coolant System and the containment sumps. That capability has been eliminated. Certain lines and valves associated with this system are relied upon for containment isolation and integrity. License renewal drawings 1X4LD110 and 2X4LD110 (F-8), Post Accident Sampling System, show the associated piping with penetration 86C as not within the scope of license renewal based on criterion 10 CFR 54.4(a). Provide additional information to justify the omission of this piping from the applicable requirements of 10 CFR 54.4(a).

RAI 2.3.3.29-1

License renewal drawings 1X4LD233, 2X4LD233, 1X4LD234, and 2X4LD234 show numerous essential chilled water cooling coils that are within the scope of license renewal based on criterion 10 CFR 54.4(a)(1). Also, license renewal drawings AX4LD231 and AX4LD232 show numerous normal chilled water cooling coils that are within the scope of license renewal based on criterion 10 CFR 54.4(a)(2). Provide additional information explaining why the cooling coil component type was omitted from LRA Table 2.3.3.29 for components subject to an AMR.

RAI 2.3.3.29-2

The license renewal AMR Table 2.3.3.29 did not include some of the typical components that are listed in AMR tables of other plant LRAs, including the housings for the chiller compressor/motor, compressor oil cooler, oil filter, oil pump, and the refrigerant dryer filter. Provide additional information to explain why these components are not included in LRA Table 2.3.3.29 as components subject to an AMR.

RAI 2.3.3.30-1

License renewal drawing 1X4LD111 (H-7) shows pipe section 314-2” as within the scope of license renewal based on criterion 10 CFR 54.4(a)(2) with the license renewal boundary identified by note A2 and the continuation portion not within the scope of license renewal. However, the continuation of pipe 314-2” on 1X4LD127 (A-8) is also identified as within the scope of license renewal. Provide additional information detailing the license renewal boundary for pipe section 314-2” on drawings 1X4LD111 (H-8) and 1X4LD127 (A-8).

RAI 2.3.3.30-2

License renewal drawings 1X4LD111 (H-3) and 1X4LD127 (F-7) show pipe sections 376-1/2" not within the scope of license renewal. This line connects to 255-3/4" inside the 10 CFR 54.4(a)(2) boundary identified on 1X4LD127. Additionally, 376-1/2" connects to 048-3" valve 025 on drawing 1X4LD111 which is identified within the scope of license renewal based on criterion 10 CFR 54.4(a)(1). Provide additional information detailing the license renewal boundary for pipe sections 376-1/2" on drawings 1X4LD111 (H-3) and 1X4LD127 (F-7).

RAI 2.3.3.30-3

License renewal drawing 1X4LD114 (G-3) shows pipe section 369-1/2" within the scope of license renewal based on criterion for 10 CFR 54.4(a)(2). However, the continuation of pipe section 369-1/2" on license renewal drawing 1X4LD127 (G-7) shows it is not within the scope of license renewal. Provide additional information detailing the license renewal boundary for pipe sections 369-1/2" on drawings 1X4LD114 (G-3) and 1X4LD127 (G-7).

RAI 2.3.3.30-4

License renewal drawing 1X4LD114, (G-3) and (F-3), show pipe sections 369-1/2" within the scope of license renewal based on criterion 10 CFR 54.4(a)(2) and 428-1/2" within the scope of license renewal based on criterion 10 CFR 54.4(a)(1). The following pipe sections which also continue to the reactor coolant drain tanks are not within the scope of license renewal:

- 1X4LD114 and 2X4LD114 (F-5) 364-1/2"
- 1X4LD114 and 2X4LD114 (G-5) 363-1/2"
- 1X4LD114 and 2X4LD114 (G-5) 365-1/2"
- 1X4LD114 and 2X4LD114 (F-5) 366-1/2"
- 1X4LD114 and 2X4LD114 (G-6) 362-1/2"
- 1X4LD114 and 2X4LD114 (G-7) 370-1/2"
- 1X4LD114 and 2X4LD114 (G-7) 375-1/2"
- 1X4LD114 (G-8) 370-1/2"
- 1X4LD114 and 2X4LD114 (E-3) 371-1/2"
- 2X4LD114 (F-4) 428-1/2", Note 428-1/2" is in scope for 10 CFR 54.4(a)(1) on 1X4LD114 (F-4).
- 2X4LD114 (G-3) 369-1/2", Note 369-1/2" is in scope for 10 CFR 54.4(a)(2) on 1X4LD114 (G-3).
- 2X4LD114 (G-4) 382-1/2", Note 382-1/2" is in scope for 10 CFR 54.4(a)(2) on 1X4LD114 (G-4).

Provide additional information detailing the license renewal boundaries for the above pipe sections and explain the apparent difference in scoping methodologies.

RAI 2.3.3.30-5

License renewal drawing 2X4LD124 (A-5) shows the license renewal boundary for pipe section 045-2" from the Boron Recycle System (BRS) recycle evaporator as within the scope of license renewal based on criterion 10 CFR 54.4(a)(2). This in-scope line is continued from license renewal drawing AX4LD123-1. However, the same section of pipe on Unit 1 is identified as not within the scope of license renewal in drawing 1X4LD124 (A-5). Provide additional information explaining the apparent difference in scoping methodologies for pipe section 045-2" on drawings 1X4LD124 (A-5) and 2X4LD124 (A-5).

RAI 2.3.4.4-1

In license renewal drawings 1X4LD161-1 and 2X4LD161-1 (E-7) the piping downstream of valve HV5089 is shown as within the scope of license renewal based on criterion 10 CFR 54.4(a)(2), up to an equivalent anchor (A1/A4), whereas, there is no annotation if there is an equivalent anchor for the 153-10" line at HV5103. Provide additional information justifying the boundary locations with respect to the applicable requirements of 10 CFR 54.4(a).

Ltr to T. Tynan From D. Ashley Dated January 28, 2008

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cc:

Mr. N. J. Stringfellow
Manager, Licensing
Southern Nuclear Operating Company, Inc.
P.O. Box 1295
Birmingham, AL 35201-1295

Mr. Jeffrey T. Gasser
Executive Vice President
Southern Nuclear Operating Company, Inc.
P.O. Box 1295
Birmingham, AL 35201-1295

Mr. Steven M. Jackson
Senior Engineer - Power Supply
Municipal Electric Authority of Georgia
1470 Riveredge Parkway, NW
Atlanta, GA 30328-4684

Mr. Reece McAlister
Executive Secretary
Georgia Public Service Commission
244 Washington Street, SW
Atlanta, GA 30334

Mr. Harold Reheis, Director
Department of Natural Resources
205 Butler Street, SE, Suite 1252
Atlanta, GA 30334

Attorney General
Law Department
132 Judicial Building
Atlanta, GA 30334

Mr. Laurence Bergen
Oglethorpe Power Corporation
2100 East Exchange Place
P.O. Box 1349
Tucker, GA 30085-1349

Arthur H. Domby, Esquire
Troutman Sanders
Nations Bank Plaza
600 Peachtree Street, NE
Suite 5200
Atlanta, GA 30308-2216

Resident Inspector
Vogtle Plant
8805 River Road
Waynesboro, GA 30830

Office of the County Commissioner
Burke County Commission
Waynesboro, GA 30830

Mr. Stanford M. Blanton, Esq.
Balch & Bingham, LLP
P.O. Box 306
Birmingham, AL 35201

Ms. Moanica M. Caston
Vice President and General Counsel
Southern Nuclear Operating Company, Inc.
40 Inverness Center Parkway
P.O. Box 1295
Birmingham, AL 35201-1295

Chalmer R. Myer
Southern Nuclear Operating Company, Inc.
40 Inverness Center Parkway
P.O. Box 1295
Birmingham, AL 35201-1295