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AUG 18 2006

AR-06-1720

U.S. Nuclear Regulatory Commission.
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Southern Nuclear Operating Company
Project Number: 00737
Vogtle Early Site Permit Application Environmental Reference Information

Ladies and Gentlemen:

By letter AR-06-1579, dated August 14, 2006, Southern Nuclear Operating Company (SNC) submitted an Early Site Permit (ESP) application to the U.S. Nuclear Regulatory Commission (NRC), in accordance with Part 52, Subpart A of Title 10 of the Code of Federal Regulations. The application requests an ESP for the addition of new Units 3 and 4 at the Vogtle Electric Generating Plant (VEGP) site near Waynesboro, Georgia. This correspondence provides copies of relevant reference material used by SNC in preparation of the Environmental Report (ER) included in the ESP application. The reference material contains both full text and excerpts of material from the full text copy. In addition, for previously docketed references or references that are readily available to the NRC Staff from public sources, only a copy of the document title page is provided. Copyrighted material is not provided.

The ER reference material includes the following documents and is provided in enclosures to this letter:

- Enclosure 1 - ER Calculation Package Executive Summaries;
- Enclosure 2 - Threatened and Endangered Species Survey Final Report;
- Enclosure 3 - Cultural Resources Report; and
- Enclosure 4 - Compilation of References Utilized to Prepare the ER.

In addition, the internet link to the public disclosure version of Georgia Power Company's Integrated Resource Plan is included to provide access to this multi-volume reference due to its size. The internet link is www.psc.state.ga.us (Refer to docket 17687.).

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At the request of the NRC, SNC is providing this package of reference material utilized to prepare the ER to expedite the NRC review process in support of the NRC's accelerated schedule for ESP applications.

If you have any questions regarding this letter or require additional information, please contact Mr. T. C. Moorer at (205) 992-5807.

Sincerely,

Joseph A. "Buzz" Miller

JAM/BJS/dmw

Enclosures

cc: U. S. Nuclear Regulatory Commission
Mr. J. E. Dyer, Director of Office of Nuclear Regulation (w/o enclosures)
Mr. D. B. Matthews, Director of New Reactors (w/o enclosures)
Mr. C. J. Araguas, Project Manager of New Reactors (w/o enclosures)
Mr. W. D. Travers, Region II Administrator (w/o enclosures)
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Southern Nuclear Operating Company

AR-06-1720

Enclosure 1

Vogtle ESP Application Environmental Reference Information

ER Calculation Package Executive Summaries

Executive Summary

Calculation Packages for Population Projections

- **SSAR Section 2.1.3 Population Distribution and ER Section 2.5.1 Demography (AR01-ER-XNC-4006)**
- **ER Sections 7.2 Severe Accidents and Severe Accident Mitigation Alternatives (AR01-ER-XNC-4003)**

This summary supports population projections included in Section 2.1.3 of the Supplemental Safety Analysis Report and Sections 2.5.1, 7.2, and 7.3 of the Environmental Report.

The population surrounding the ESP site, up to a 50-mile radius, was estimated based on the most recent United States Census Bureau decennial census data (NRC 2003). For SSAR Section 2.1.3 and ER Section 2.5.1, the population distribution was estimated in 10 concentric bands at 0 to 1 mile, 1 to 2 miles, 2 to 3 miles, 3 to 4 miles, 4 to 5 miles, 5 to 10 miles, 10 to 20 miles, 20 to 30 miles, 30 to 40 miles, and 40 to 50 miles from the proposed new reactor locations, and 16 directional sectors, each direction consisting of 22.5 degrees. For ER Sections 7.2 and 7.3, the population distribution was estimated in 9 concentric bands at 0-2 kilometers (1.2 miles), 2 to 4 kilometers (2.5 miles), 4 to 6 kilometers (3.7 miles), 6 to 8 kilometers (5.0 miles), 8 to 10 kilometers (6.2 miles), 10 to 16 kilometers (10 miles), 16 to 40 kilometers (24.9 miles), 40 to 60 kilometers (37.3 miles), and 60 to 80 kilometers (50 miles) from the proposed new reactor locations, and 16 directional sectors, each direction consisting of 22.5 degrees.

The population distributions for years 2010, 2020, 2030, 2040, 2050, 2060, 2065, 2070, 2080, and 2090 were projected using an annualized geometric multiplier calculated using 1980 and 2000 census data (by county) as the base (USCB, 1990, 2000). Growth was estimated using the following formula:

$$P_2 = P_1 \times (1+r)^n$$

Where: P_2 = Projected Population

P_1 = 2000 Population

r = geometric multiplier (annualized growth rate)

n = Future year - 2000

The population distribution within 50 miles of the site was computed by overlaying the 2000 census block points data (the smallest unit of census data) on the applicable wind rose (miles or kilometers). SECPOP 2000, a code developed for the NRC by Sandia National Laboratories to calculate population by emergency planning zone sectors (NRC 2003), was used to determine the 2000 resident population by sector. In addition to the resident population, the transient population for 0-10 miles (0-16 kilometers) from the VEGP Emergency Plan (SNC 2004) was added to 2000 population for use in the projections. However, the construction workforce and existing staff at VEGP (5,200 people in Sector 13, 0-1 mile west) were not included because the on-site employees at VEGP are residents of the area. The VEGP Emergency Plan provided transient population for 0 to 10 miles, in one mile concentric bands, and 22.5 degree directional sectors. The resident and transient populations were then added for each sector.

Once the 2000 population (resident and transient) was determined for each of the 160 sectors, projections were made for years 2010, 2020, 2030, 2040, 2050, 2060, 2065, 2070, 2080, and 2090. ArcView® 3.1 was used to determine the percentage of each sector occupied by a particular county. The sectors were divided into fractions by county, and projections for each

fraction were calculated based on the county growth rate. The population projections for the years in question were then totaled by sector, and rounded to the nearest whole number to obtain the final result. Section 2.1.3 includes a figure (Figure 2.1.3-15) showing the cumulative population plotted by distance from the proposed ESP site for years 2000, 2040, and 2070, compared with the curves created by theoretical populations of 500 and 1000 people per square mile.

References:

(NRC 2003) *SECPOP 2000: Sector Population, Land Fraction, and Economic Estimation Program*, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, D.C., August 2003.

(SNC 2004) *Vogtle Electric Generating Plant Emergency Plan, Revision 29*, Southern Nuclear Operating Company, 2004.

(USCB 2000) *Census 2000 PHC-T-4. Ranking Tables for Counties; 1990 and 2000,* U.S. Census Bureau, Available online at http://www.census.gov, Accessed June 2, 2005.

(USCB 1990) CPH-2-1. 1990 Census of Population and Housing, Population and Housing Unit Counts, United States, Table 30: Population and Housing Units: 1940 to 1990, 1990, U.S. Census Bureau, Available online at http://www.census.gov/population/www/censusdata/hiscendata.html, Accessed June 1, 2005.

Executive Summary

Calculation Package for Land Use along Plant Vogtle Transmission Lines

- **ER Section 2.2.2 Transmission Corridors and Off-Site Areas and Section 2.4.1 Terrestrial Ecology (AR01-ER-XNC-4001)**

This summary describes the method used to calculate land use percentages along Vogtle transmission corridors. This information is included in Table 2.2-2, Land use along transmission corridors, which lists the area crossed by VEGP by land use (agricultural, forest, industrial, and residential). This information is also included in Section 2.4.1, Terrestrial Ecology.

Land use in the area of VEGP was obtained from 1:250,000 Scale Quadrangles of Land Use/Land Cover GIRAS Spatial Date in the Conterminous U.S. obtained from EPA (EPA 1994). Land use was mapped and coded using the Anderson classification system which is a hierarchical system of general (level 1) to more specific (level 2) characterization. ArcView® 3.1 Geographic Information System (GIS) was used to overlay transmission lines onto the land use layer. A geoprocessing function was then used to intersect the transmission line layer with the land use layer, resulting in the transmission lines being divided into segments and each segment coded with the Anderson land use code.

The Anderson land use codes were included in the metadata for the Land Use/Land Cover (LULC) spatial data. For Table 2.2-2, the following land use codes were used

Residential	11
Industrial	12 and 13
Agricultural	21 and 22
Forest	41, 42, and 43

Other land uses along Vogtle transmission line corridors include:

Transportation, communication, utilities	14
Water	51, 52, and 53
Wetlands	61 and 62
Barren Land	73 and 76

Because all land uses are not listed in Table 2.2-2, the percentages listed for each transmission line corridor do not add up to 100 percent.

The widths of the transmission line corridors were obtained from Table 8.2.1-1 of the Final Safety Analysis Report (FSAR) (SNC 2005). For transmission lines with multiple widths, a weighted average was used. To determine the area of each land use type in each transmission line corridor, the lengths of the transmission line segments were totaled by land use code. To determine the area, the widths of the transmission corridors were multiplied by the lengths of the segments. For the VEGP-South Augusta line, the areas for the Goshen and Augusta Newsprint South lines were totaled.

Section 2.2.2 also includes a discussion of special land uses along the transmission line corridors. The Scherer line crosses a portion of Oconee National Forest. A geoprocessing function was used to intersect the Scherer line layer with Oconee National Forest. The length of this segment was calculated using a script in ArcView® 3.1 GIS.

In addition to the land uses crossed by each corridor, Section 2.4.1 includes land use percentages for the four counties that would be crossed by new corridor from VEGP to the Thomson Substation. These counties include Burke, Jefferson, McDuffie, and Warren Counties in Georgia. ArcView® 3.1 Geographic Information System (GIS) was used to overlay counties onto the land use layer. A geoprocessing function was then used to intersect the county layer with the land use layer, resulting in the land use areas being designated by county. The area of each land use polygon was then calculated, and the areas were totaled by land use code for each county.

References:

(EPA 1994) "1:250,000 Scale Quadrangles of Land Use/Land Cover GIRAS Spatial Data in the Conterminous U.S.," Office of Information Resources Management, available at www.epa.gov/ngispgm3/spdata/EPAGIRAS/egiras/, accessed July 6, 2005.

(SNC 2005) VEGP Updated Final Safety Analysis Report, Revision 13, January.

Executive Summary for Groundwater Drawdown Calculations included in Votgle ESP ER Sections 4.2.2 and 5.2.2 Groundwater Use Impacts During Construction and Operation

In order to determine potential offsite impacts of groundwater drawdown, cumulative well yield was used to calculate drawdown as though it had been pumped from a single onsite well. The well MU-2A location was used, due to its close proximity to the VEGP property boundary (5,700 feet) and because the well has been one of the site's primary production wells.

Data used to input to an analytical distance-drawdown model was taken from VEGP's updated Final Safety Analysis Report (SNC 2005). A Transmissivity value of 158,000 gpd/ft was used. The Storativity value (3.1×10^{-4}) is an average of the values listed in Table 2.4.12-8 of the SNC 2005 FSAR calculated for the deeper production wells. Total groundwater use reported to the Georgia Department of Natural Resources by VEGP from 2001 through 2004 averaged 730 gpm. (SNC 2000a,b, 2001a,b, 2002a,b,c, 2003a,b, 2004a,b) This value is considered the total groundwater use value for the existing units. A maximum construction pumping rate of 420 gpm was used (FSAR 2005). The total groundwater use rate for the proposed units is 752 gpm (ESP ER Table 3.3-1).

Therefore, the pumping rate used in the analysis for most of the construction phase is 1,150 gpm (730 + 420 = 1150 gpm). There will be a period, after completion of the first unit but before completion of the second unit, when the pumping rate will include the 730 gpm for the existing units, a construction rate for Unit 4, and an operational rate for Unit 3. For this construction/operational overlap period, the groundwater pumping rate will include the existing rate of 730 gpm, one-half the construction rate or 210 gpm, and one-half the proposed operational rate or 376 gpm. The total for this period will be 1,316 gpm. The pumping rate during the normal operation of all four units will be 1,482 gpm (730 gpm + 752 gpm).

A nonleaky aquifer scenario was used using the Theis equation to simulate site conditions. The equation assumes that the aquifer is homogeneous, isotopic, with negligible recharge and gradient, and that boundary impacts do not occur. The equation was run for each pumping rate scenario described above. The first simulation assessed the the initial pumping rate for Units 1 and 2 plus construction water usage; the second included pumping for Units 1 and 2, the initial startup of one unit, plus construction; and the third assumed the total use for all four units. The drawdown values calculated are very conservative because the pumping times for each of the simulations was initiated as being the start of Unit 1 operations and not adjusted to accommodate when actual changes in pumping rates would occur. Therefore the drawdowns at the property boundary modeled here are the result of a much longer pumping period for each scenario

than will actually occur. The result is a larger drawdown value than would actually be observed, resulting in a very conservative analysis.

Off-normal operations (Table 2.9-1) for the existing units would require approximately 2,300 gpm of groundwater for both units and off-normal operations for both the proposed units would use approximately 3,140 gpm. Off-normal usage for all four units would be 5,540 gpm. However, off-normal operations would likely affect only one unit, therefore SNC believes that groundwater needs for any off-normal operations plus normal operations of the other units can be accomplished within the existing groundwater permit issued by the State of Georgia. Since off-normal operations would be short lived, this scenario has not been modeled. SNC believes that a scenario where all four operating units would be under off-normal operations would be extremely unlikely. Therefore, this scenario has not been modeled although it would greatly exceed the maximum groundwater pumping rates [6 million gallons per day monthly average (MGD) [4,167 gpm] and average 5.5 MGD annually (3,819 gpm)] established under SNC's existing permit.

Executive Summary

Calculation Packages for Population Density and Environmental Justice

- **ER Sections 2.5.1 Demography, 2.5.4 Environmental Justice, and 7.2 Severe Accidents (AR01-ER-XNC-4002)**
- **ER Section 9.3.3.1.8 Environmental Justice for Farley Alternative Site Analysis –Low Income Households (AR01-ER-XNC-4007)**
- **ER Section 9.3.3.2.8 Environmental Justice for Hatch Alternative Site Analysis (AR01-ER-XNC-4008)**
- **ER Section 9.3.3.3.8 Environmental Justice for Barton Alternative Site Analysis (AR01-ER-XNC-4010)**

Population Density

This summary describes the methods used to determine population densities for the 20- and 50-mile radii surrounding the ESP, Hatch, and Barton sites. To determine "sparseness" and "proximity", it was necessary to calculate the population densities within 20 and 50 miles of the ESP site. Census block group spatial data for the appropriate states were downloaded in ESRI shapefile format from the U.S. Census Bureau (USCB) website http://www.census.gov/geo/www/cob/bg2000.html (USCB 2000a). Population data for the states was obtained from USCB Summary File 1 (downloaded from http://www.census.gov/Press-Release/www/2001/sumfile1.html) (USCB 2000b).

ArcView® 3.1 and/or ArcGIS® 9.1 Geographic Information System (GIS) was used to query block groups within 20 and 50 miles of the ESP site. The total area of each block group was then calculated. If a block group was not contained completely within the 20 or 50-mile radius, the block group was then "clipped". New areas were calculated for the "clipped" block groups, and new populations were calculated based on the ratio between the total area of the block group and the "clipped" area. To obtain population densities, the populations for the "clipped" block groups were totaled, and divided by the total area of the "clipped" block groups. In the case of the ESP site, because the Savannah River Site has no residents, this area was subtracted from the total area before calculating the population density.

Minority and Low-Income Populations

This summary describes the identification of minority and low income populations within 50 miles of the ESP and alternative sites. Appendix D of the "Procedural Guidance for Preparing Environmental Assessments and Considering Environmental Issues" released by the U.S. Nuclear Regulatory Commission (NRC), Office of Nuclear Reactor Regulation, May 24, 2004, is the current regulatory guide for identifying minority and low-income populations for an Environmental Justice review. TtNUS used this guidance in identifying minority and low-income populations in the ESP Environmental Report.

Typically, the potential area impacted by environmental issues is within a 50-mile radius of the site (NRC 2004). TtNUS decided to determine the minority populations and low-income populations for all census block groups within 50-miles of the ESP and alternative sites. Block groups are used because the block group geographic area is small enough so as to not dilute potential minority or low-income populations within the larger general population (NRC 2004). U.S. Census Bureau Summary File 1 containing race data (USCB 2000b) and Summary File 3 containing low-income household poverty data (USCB 2000c) (downloaded from http://www.census.gov/Press-Release/www/2002/sumfile3.html) were obtained for all block groups in the applicable states. For minority (Black or African American, American Indian and

Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, Other Race, and Two or More Races) and low-income categories, the percentage of the total population was calculated for each block group. The minority demographic data and low-income data were then attributed to the block group spatial data (USCB 2000a) in ArcView® or ArcGIS® to become an ArcView shapefile layer containing demographic and low-income data for every block group. This allowed the demographic and low-income data to be queried spatially and by attribute.

In order to identify whether a minority or low-income population exists, an area larger and that encompasses the entire area of potential impact must be identified for comparative analysis (NRC 2004). This area is called a geographic area. TtNUS defines the geographic area to be the state in which the block group falls.

A minority population is considered to be present if: 1) the minority population in the census block group exceeds 50 percent or 2) the minority population percentage of the block group is significantly greater (typically at least 20 percentage points) than the minority population percentage in the geographic area (NRC 2004). A low-income population is considered to be present if: 1) the low-income population in the census block group exceeds 50 percent or 2) the percentage of households below the poverty level in an environmental impact area is significantly greater (typically at least 20 percentage points) than the low-income population percentage in the geographic area (NRC 2004). State percentages for race and low income were obtained from the USCB. Queries were performed on the block groups within 50 miles of the ESP and alternative sites. Any block group falling wholly or partially within the 50-mile radius was identified if that block group contained a minority or low-income population.

County Fractions

This summary describes the method used to determine counties that fall within 50 miles of the ESP site (with fractions of each county). ArcView® 3.1 GIS was used to query counties within 50 miles of the ESP site. The total area of each county was then calculated. If a county was not contained completely within the 50-mile radius, the county was then "clipped" using the circular area. New areas were calculated for the "clipped" counties, and the percentage of each county falling in the 50-mile radius reported.

References:

(NRC 2004) *Procedural Guidance for Preparing Environmental Assessments and Considering Environmental Issues.* NRR Office, Instruction No. LIC-203, Revision 1, May 24.

(USCB 2000a) *Census 2000 Block Groups in ArcView Shapefile (.shp) format.* Available at http://www.census.gov/geo/www/cob/bg2000.html.

(USCB 2000b) *Summary File 1: Census 2000.* Available at http://www.census.gov/Press-Release/www/2001/sumfile1.html.

(USCB 2000c) *Summary File 3: Census 2000.* Available at http://www.census.gov/Press-Release/www/2002/sumfile3.html.

Executive Summary

Cooling Water Blowdown Thermal Discharge Analysis for Plant Vogtle Early Site Permit Facility

July 17, 2006

Prepared for:

Southern Nuclear Operating Company

Prepared by:

Alan Toblin
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Alexandria, Virginia

A calculation package was prepared to document the data sources and calculations necessary to support the predicted effects of the proposed blowdown discharge to the Savannah River on the temperature distribution in the river. Data and associated intermediate calculations were presented for meteorological conditions, cooling tower blowdown characteristics as a function of meteorology, and ambient river characteristics. This information was assimilated into inputs to the CORMIX-GI V4.3 model and results based on that model's output presented in the environmental report. All of the data and calculations described below are included in the calculation package.

Hourly onsite meteorological psychrometry data (dry bulb and dew point temperatures) for the 5-years from 1998-2002 were converted to wet bulb temperature and relative humidity. The conversions were checked against readily available psychrometric charts. These data were applied to cooling tower design curves (cold water and evaporation vs. relative humidity and wet bulb) supplied by the proposed tower manufacturers, SPX Cooling Towers. Hourly blowdown temperatures (cold water) and blowdown discharge rates [blowdown discharge rate = evaporation rate / (cycles of concentration – 1)] were simulated for each hour of the 5-year data period.

River temperatures were measured approximately monthly near to Vogtle by the Georgia DNR until August 1996. 129 measurements for the period from 1/85-8/96 were correlated with day of the year; the functional relationship was taken from an earlier successful correlation study by Dyar and Alhadeff. (January 1985 was immediately after the completion of the Richard B. Russell dam, the third and final project damming the upper reaches of the Savannah River.) The river temperature correlation was applied to the 5-year meteorological data period and, with the tower discharge behavior, four specific conditions were chosen for detailed thermal distribution analysis: maximum delta-t (corresponding to maximum heat discharge), minimum delta-t, maximum discharge temperature, and 5-year average conditions.

The USGS places a flow gage in the Savannah River at VEGP in 2005. However, long-term USGS river flow rates above (Augusta) and below (Millhaven) the Vogtle site were used to simulate a 20-year record (1985-2005; 2004 data were unavailable) of flows at the VEGP site by correlating these long-term flow records with the complete flow record (1/22/05-9/30/05) available for the VEGP gage. A seven-day ten-year low flow (7Q10) at the site was defined based on this simulation. The 7Q10 flow was 1 cfs greater than the 20-year record minimum and was applied to each of the extreme temperature discharge conditions defined in the previous paragraph; the 20-year average flow was applied to the average discharge conditions. The river stage for the chosen flow conditions was taken from the USGS stage-discharge relationship for the site and from river bathymetry data measured by Georgia Power Company in 2005 at a number of locations upstream and downstream from both the proposed and existing discharges. The cross-sections are nearly rectangular.

The use of post-1984 river data (i.e., temperatures, flows) assures that the present physical state of the river (i.e., with the three upstream dams and reservoirs) is reflected in all analyses.

CORMIX-GI V4.3 was used with the foregoing tower discharge and river conditions in order to simulate downstream temperatures from both the existing and proposed discharges. The centerline temperature at the proposed discharge location due to the existing discharge was added to the ambient river temperature at the proposed discharge location for the purpose of calculating river temperatures downstream from the proposed discharge that accounted for temperature increases as a result of both discharge locations. These river temperatures were compared with the ambient river temperature (i.e., without the existing discharge component) to assess compliance with the Georgia mixing zone allowance (5°F temperature rise above ambient). The thermal characteristics (extent, area, volume) associated with the mixing zone temperatures are reported in the ER and supporting documents.

The calculation package contains all of the data and intermediate calculations described above. It also includes a detailed description of the series of calculations which define the maximum delta-t river thermal distribution which was the restrictive discharge case. In the calculation package, this example serves to illustrate all of the simulation steps while also demonstrating the validity of the calculations.

Executive Summary

Calculation Package

for Radioactive Materials Transportation

Radioactive materials transportation impacts are presented in Sections 5.11 and 7.4 of this Environmental Report. Microsoft Excel spreadsheets were used to perform the calculations for the transportation impacts analysis. Input parameters were obtained from the reactor vendor (Westinghouse), reactor information compiled by SNC for the ESP application, and NEPA evaluations including the NRC's Environmental Impact Statements (EISs) for other proposed ESP sites (NUREGs 1811, 1815 and 1817) and the U.S. Department of Energy's EIS for the proposed Yucca Mountain repository (DOE/EIS-0250).

The fueling requirements and waste generation were converted to annual values. The annual values were normalized based on electrical output for comparison to the projected impacts for the reference reactor. The normalized shipment values and RADTRAN results (person-rem/shipment) were used to estimate incident-free fuel transportation impacts. The fueling requirements (MTU) and RADTRAN results for population dose from accidents (person-rem/MTU) were used to estimate the impacts of spent fuel transportation accidents.

(DOE 2002) Final Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada, DOE/EIS-0250, Office of Civilian Radioactive Waste Management, U.S. Department of Energy, Washington, DC, February, 2002.

(INEEL 2003) Early Site Permit Environmental Report Sections and Supporting Documentation, Engineering Design File Number 3747, Idaho National Engineering and Environmental Laboratory, Idaho Falls, Idaho, 2003.

(NRC 2004) Draft Environmental Impact Statement for an Early Site Permit (ESP) at the North Anna ESP Site, NUREG-1811, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC, November 2004.

(NRC 2005) Draft Environmental Impact Statement for an Early Site Permit (ESP) at the Exelon ESP Site, NUREG-1815, Office or Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC, February 2005.

(NRC 2006) Environmental Impact Statement for an Early Site Permit (ESP) at the Grand Gulf ESP Site, NUREG-1817, Office or Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC, April 2006.

(SNC 2005) Vogtle ER Chapter 5 Transportation Impacts, RFI AR-01-ADR-12-W, August 1, 2005.

(Westinghouse 2005b) Personal communication between Kathryn Demetri, Westinghouse and Lisa Matis, Tetra Tech NUS, August 11, 2005.

Southern Nuclear Operating Company

AR-06-1720

Enclosure 2

Vogtle ESP Application Environmental Reference Information

Threatened and Endangered Species Survey Final Report