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To: "Christian Araguas" <CJA2@nrc.gov>,"William Burton" <WFB@nrc.gov>
Date: 12/26/2007 8:30:30 PM
Subject: SNC Letter AR-07-2216 transmitting VEGP ESP Comments on Draft Environmental Impact Statement
cc: "Chuck R. Pierce" <CRPIERCE@SOUTHERNCO.COM>,"James T. Davis" <JTDAVIS@SOUTHERNCO.COM>,"Matthew Thomas Montz" <MTMONTZ@SOUTHERNCO.COM>,"Tom C. Moorer" <TCMOORER@SOUTHERNCO.COM>,"Brian J. Sweeney" <X2SWEENE@SOUTHERNCO.COM>

An electronic copy of Southern Nuclear's letter, AR-07-2216, dated December 26, 2007 is attached. In addition, a hard copy has been transmitted to the NRC Document Control desk via FedEx.

<<AR-07-2216_DEIS_Final.pdf>>

Thank you,

Dana Williams
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Nuclear Development
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Hearing Identifier: Vogtle_Public
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Subject: SNC Letter AR-07-2216 transmitting VEGP ESP Comments on Draft Environmental Impact Statement
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None

Concealed Subject: No
Security: Standard

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DEC 26 2007

Docket No.: 52-011

AR-07-2216

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

Southern Nuclear Operating Company
Vogle Early Site Permit Application
Comments on Draft Environmental Impact Statement

Ladies and Gentlemen:

In September 2007, the NRC issued the draft Environmental Impact Statement (DEIS) for the Vogtle Early Site Permit (ESP) application and requested comments be provided by November 28, 2007. Due to a problem with the original NRC posting of the DEIS for public review and comment, NRC extended this date until December 28, 2007. Southern Nuclear Operating Company (SNC) contacted NRC shortly after the DEIS was released to discuss issues related to the DEIS, specifically the process for managing new or updated information identified since the DEIS was published. Based on these discussions, NRC recommended that SNC provide this information to NRC during the comment period for the DEIS. The SNC process used to develop the information consists of an extensive review of the DEIS, supporting documentation, and contact with Federal, state, and local agencies, ER contractors, peer groups, and academia to identify potential new information. A line-by-line review of the DEIS was conducted by designated Subject Matter Experts (SMEs) to identify key inputs that potentially could affect the conclusions noted in the DEIS. These key inputs were subsequently analyzed to determine if the information constituted new information. This process also was used to identify areas of the DEIS where comments were appropriate including correction of discrepancies and editorial errors.

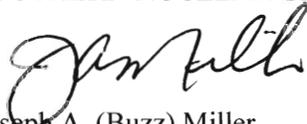
SNC has completed review of the DEIS and provides in Enclosure 1, a detailed list of new information and substantive comments noted on the DEIS. In addition, SNC provides in Enclosure 2, a tabular list of discrepancies and errata noted during the review. SNC recognizes that NRC developed the DEIS from review of the SNC ER, as well as their own independent analysis of the relevant subject material. As such, SNC acknowledges that some of the discrepancies identified between the DEIS and the ER may be the result of use of sources other than the ER in their independent analysis and thus are not relevant. Documentation of the review process has been retained by SNC and will be available for NRC review during the COL onsite environmental audit.

In developing the above information, SNC identified certain discrepancies between the NRC DEIS and information contained in the SNC Environmental Report (ER), responses to NRC Requests for Additional Information (RAIs), the Westinghouse DCD, or other documentation. This information is identified in the enclosures. Additionally, information to clarify SNC comments is provided where appropriate. The staff is encouraged to contact SNC for additional clarification or explanation if necessary.

Please address questions or comments to T.C. Moorer – SNC Environmental Project Manager at (205) 992-5807.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY



Joseph A. (Buzz) Miller

Sworn to and subscribed before me this 26th day of December, 2007

Dana M. Williams
Notary Public

My commission expires: 12/29/2010

JAM/TCM/dmw

Enclosure 1: New Information and Substantive Comments
Enclosure 2: Discrepancy Table for the Draft Environmental Impact Statement for the VEGP ESP Application



cc: Southern Nuclear Operating Company

Mr. J. B. Beasley, Jr., President and CEO
Mr. J. T. Gasser, Executive Vice President, Nuclear Operations
Mr. T. E. Tynan, Vice President - Vogtle
Mr. D. M. Lloyd, Vogtle Deployment Director
Mr. C. R. Pierce, Vogtle Development Licensing Manager
Mr. T. C. Moorer, Environmental Project Manager
Document Services RTYPE: AR01
File AR.01.01.06

Nuclear Regulatory Commission

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Ms. K. K. Patterson, Project Manager

Southern Nuclear Operating Company

AR-07-2216

Enclosure 1

**New Information and Substantive Comments on the
Draft Environmental Impact Statement for the Vogtle ESP Application**

Note: This enclosure consists of a nine (9) page table

Enclosure 1 - New Information and Substantive Comments

	Existing Information	New information	Comments and Discussions of Significance																																																
1.	<p>3.2 Plant Description</p> <p>Each tower ... would be able to reject about 7.55E9 BTU/hr [per unit] of waste heat to the atmosphere</p>	<p>The estimated waste heat has increased to 7.63E9 BTU/hr per unit.</p> <p>The cooling tower cooling water flow rate has increased from 600,000 gpm to 631,000 gpm.</p>	<p>The current estimated waste heat (based on very conservative meteorology) has increased by approximately 1 percent and the cooling tower water flow rate has increased by approximately 5 percent. The corresponding increase in evaporation and drift associated with the change is small (1200 gpm and 1 gpm, respectively). The corresponding increase in makeup is estimated at 1600 gpm. However, this information is theoretical and represents a maximum increase. The actual increase will likely be smaller. The specific cooling tower design that will be constructed at Vogtle has not been determined, and therefore, the flow rates specific to those towers have not been determined. SNC is conducting a cooling tower optimization study, exploring different cooling tower designs to ensure that the minimum flow rate and maximum efficiency are achieved.</p>																																																
2.	<p>3.2 Plant Description</p> <p>Fuel with uranium enrichment of 4.51 weight percent uranium-235 of core reloads.</p>	<p>The fuel U-235 weight percent has been revised to 4.54%.</p>	<p>This small increase in fuel enrichment is reflected in the most recent Westinghouse Design Control Document (DCD). No substantive impact to radiological effluents or radioactive waste should result from this change. The DEIS defines the fuel enrichment as "about 4.5 weight percent U-235" (Ref. Section 6.2, pp. 6-16). This statement remains correct for the new enrichment value.</p>																																																
3.	<p>3.2.2.1 Circulating Water System</p> <p>Maximum makeup water flow rate: 57,784 gpm Maximum consumptive water use (evaporation and drift): 28,904 gpm Maximum blowdown rate: 28,880 gpm</p>	<p>The Circulating Water System water balance has been revised and is as follows:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th colspan="3">Normal Ops (gpm)</th> <th colspan="3">Maximum Ops (gpm)</th> </tr> <tr> <th>ESP</th> <th>ER</th> <th>Change</th> <th>ESP</th> <th>ER</th> <th>Change</th> </tr> </thead> <tbody> <tr> <td>CT Flow Rate</td> <td>600,000</td> <td>631,000</td> <td>+5%</td> <td></td> <td></td> <td></td> </tr> <tr> <td>CT evaporation</td> <td>27,900</td> <td>29,100</td> <td>+4%</td> <td>28,880</td> <td>30,560</td> <td>+6%</td> </tr> <tr> <td>CT Drift (0.002%)</td> <td>24</td> <td>25</td> <td></td> <td>24</td> <td>25</td> <td></td> </tr> <tr> <td>CT Blowdown</td> <td>9,300</td> <td>9,700</td> <td>+4%</td> <td>28,880</td> <td>30,560</td> <td>+6%</td> </tr> <tr> <td>Total make-up</td> <td>37,224</td> <td>38,825</td> <td>+4%</td> <td>57,784</td> <td>61,145</td> <td>+6%</td> </tr> </tbody> </table> <p><u>Discussion of Significance</u> For the following reasons, SNC does not consider this new information to be significant:</p>		Normal Ops (gpm)			Maximum Ops (gpm)			ESP	ER	Change	ESP	ER	Change	CT Flow Rate	600,000	631,000	+5%				CT evaporation	27,900	29,100	+4%	28,880	30,560	+6%	CT Drift (0.002%)	24	25		24	25		CT Blowdown	9,300	9,700	+4%	28,880	30,560	+6%	Total make-up	37,224	38,825	+4%	57,784	61,145	+6%	
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Enclosure 1 - New Information and Substantive Comments

		The increases in makeup, blowdown, evaporation and drift (consumptive use) are not expected to exceed 4 % and are likely to be substantially less. In addition, the specific cooling tower that will be constructed at Vogtle has not been determined, and therefore, the flow rates specific to those towers could and likely will change. SNC is conducting a cooling tower optimization study, exploring different cooling tower designs to ensure that the minimum flow rate and maximum efficiency is achieved. These values are also based on very conservative meteorology.	
4.	<p>3.2.2.1 Service Water System</p> <p>Maximum makeup flow from groundwater: 2,353 gpm Maximum consumptive water use rate (evaporation and drift): 1,177 gpm Maximum blowdown rate: 1,176 gpm Groundwater for Power Plant Makeup/Use: SNC ER – 787 gpm</p>	<p>Maximum makeup flow from groundwater: 1,600 gpm Maximum blowdown rate: 500 gpm Groundwater for Power Plant Makeup/Use: 1,197 gpm</p>	<p>The maximum makeup flow from groundwater and maximum blowdown rate has decreased. Groundwater requirements for Power Plant makeup/use has gone up to 1,197 gpm (due primarily to increase in demineralized water system from 600 to 1,080 gpm) The DEIS evaluated the maximum groundwater use and determined that withdrawals would not significantly adversely affect the wells of any offsite users and the impact was considered SMALL. This reduction further increases the margin to ensure that the aquifer drawdown is less than evaluated in the DEIS.</p>
5.	<p>3.2.2.2 Discharge System</p> <p>Final effluent discharge to river, maximum case: 30,761 gpm</p>	<p>Final effluent discharge to river, maximum case: 30,015 gpm</p>	<p>The estimated final effluent discharged to the river has been reduced by several hundred gpm, thus reducing associated impacts. The reduction provides additional margin and will not alter NRC's original conclusions.</p>
6.	<p>3.2.3 Radioactive Waste-Management System</p> <p>Southern did not identify specific radioactive waste management systems for the</p>	<p>Comment</p>	<p>Section 3.5 of the ER provides A detailed description of the solid, liquid, and gaseous radwaste processing systems and clearly identifies that the descriptions are consistent with information provided in the Westinghouse DCD revision 15. In addition, source terms also obtained from the DCD are evaluated in Section 5.4 of the ER using NRC endorsed LADTAP and GASPAP models for liquid and gaseous</p>

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	new units on the VEGP site, thus deferring analysis of the radioactive waste management system to the CP or OL stage		<p>waste, respectively. NRC should consider re-examination of the information contained in ER Sections 3.5 and 5.4 and the DCD and revise appropriate sections (3.2.3 and 5.9) accordingly. SNC has confirmed that no significant changes occur from revision 15 to revision 16 of the DCD. SNC does not plan to provide additional descriptions or analysis of radwaste system at the COL stage.</p> <p>The information provided in the referenced sections provides the necessary information to support NRC conclusions that radiological impacts to members of the public and biota are SMALL.</p>
7.	<p>3.2.3.3 Solid Radioactive Waste-Management System</p> <p>4.9 Radiological Health Impacts</p>	The LLW storage facility will be constructed east of the existing cooling towers, distant from Units 1 and 2, and more distant from Units 3 and 4.	Dose to construction workers from this facility would be negligible due to the location of the storage facility near the Unit 1 cooling towers behind intervening structures and a long distance from the Units 3 and 4 construction site. The radwaste facility will be evaluated under 10 CFR 50.59 for the existing units prior to construction. The design of the facility will limit dose at the facility fence to less than regulatory requirements. Due to the distance from the new units, no significant dose impacts to Units 3 and 4 are anticipated.
8.	<p>3.2.4.3 Other Effluents</p> <p>Auxiliary boiler emissions would include particulates, etc.</p>	The auxiliary boiler will be electric, per Rev 16 of the DCD (previous information was that it would burn No. 2 fuel oil)	This change would result in a decrease in air emissions at the site. NRC has already determined that impacts from air emissions would be small.
9.	<p>4.1.1 The Site and Vicinity</p> <p>Approximately 310 acres of land will be dedicated permanently to the new units and their supporting facilities (Table 4.1-1). Temporary</p>	Permanent facilities would occupy approximately 320 acres and temporary facilities will occupy approximately 200 acres	The additional 10 acres now planned for permanent facilities represents only 3% of the original acreage planned for permanent facilities and less than 1% of the total VEGP property. Because the projected total acreage (520 acres for permanent and temporary facilities) remains small relative to the VEGP property, this small increase would not alter the NRC's conclusions relative to land use. Land use will be SMALL.

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	facilities and spoil storage will affect an additional 190 acres.		
10.	<p>4.1.1 The Site and Vicinity</p> <p>Borrow material would be taken from the excavation for the powerblock and switchyard for the proposed VEGP Units 3 and 4.</p>	<p>Areas for borrow pits, if needed have been identified on the northern part of the VEGP site. The borrow pits, if needed, will consume approximately 31 acres.</p>	<p>The acreage for the borrow pit in the northern portion of the site is approximately 31 acres, or about 1% of the VEGP site. Most of the 31 acre area consists of previously disturbed area that has been planted in pine. No impact will occur unless original borrow estimates prove to be low. If partial or full use of these borrow pits is required, the resulting land use impacts will continue to be SMALL. No threatened and endangered species are known to utilize these areas.</p>
11.	<p>4.4.2.1 Impacts of Construction on the Aquatic Ecosystem in the Savannah River</p>	<p>Comment</p>	<p>The description of the barge slip in this section differs from the description provided in RAls related to Section 3.9 of the ER (RAI 3.9.5 submitted by letter AR-07-0061). The barge unloading facility used for Unit 1 and 2 construction consisted of a series of dolphins installed along the West bank of the Savannah River downstream of the intake structure. Barges were moored parallel to the bank and unloaded with a crane. For Units 3 and 4, SNC plans to construct a barge slip on the downstream side of the intake structure. Response to RAI 3.9.5 in SNC letter AR-07-0061 provides a detailed description of the barge slip design and construction. NRC is requested to revise the DEIS to correct the information on the barge slip in Sections 4.4.2.-14; 16; 17; 18 and in any other areas where barge slip is discussed.</p>
12.	<p>4.4.2.4 Impacts to State-Listed Species</p>	<p>Comment</p>	<p>DEIS provides a discussion of seven mussels identified as South Carolina Species of Concern and indicates that construction activities at Vogtle could disturb these mussels. Although the NRC concludes that any impact to the mussels from construction would be temporary and minor, SNC requests NRC to revisit the reference and confirm if the mussels are known to be present near the proposed construction areas at Vogtle. SNC is not aware of any mussel species, beyond common river mussels, known to be present in the mainstem of the Savannah River adjacent to the Vogtle site.</p>

Enclosure 1 - New Information and Substantive Comments

13.	<p>4.5.1.1 Workers and the Local Public</p> <p>No significant industrial or commercial facilities other than the VEGP nuclear units exist or are planned for the vicinity.</p>	<p>An 800-cow commercial dairy is being constructed within 10 miles of VEGP (personal communication between TetraTech NUS and the Burke county director of planning and zoning)</p>	<p>The dairy farm would have two permanent residences (assume two families) and non-resident employees. Other changes to the permanent residents within 10 miles of VEGP are likely to occur during the construction period but are currently unknown. The approximate number of permanent residents within 10 miles of VEGP, which is currently 3,500, would remain essentially unchanged. The dairy farm is not the closest residence to the VEGP site. The dairy farm may minimally increase the number of transients in the vicinity, but very slightly. (See S4.5-4).</p> <p>The dairy cows will be included in the existing REMP after construction is complete. Since a four unit REMP is proposed for Units 3 and 4, no significant change to the REMP is anticipated.</p>
14.	<p>4.5.2 Demography</p> <p>A peak construction workforce of 4,400.</p>	<p>A peak construction workforce of 3,500</p>	<p>A revised construction workforce estimate prepared by the construction engineering company anticipates a 20% smaller workforce than analyzed in the EIS (response to RFI AR-01-ADR-100). This information was provided in response to an RAI but was evidently not included in the DEIS. The approximately 900 person reduction occurs at the peak and most of the impacts associated with this change are positive in nature and do not significantly impact the NRC conclusions on socioeconomics and other areas. This estimate does not include SNC and NRC staff that will be assigned to the project and remain in the area for the duration. Therefore the construction engineering company estimate does not affect SNC's original estimate of total workforce, or its socioeconomic impacts, which NRC concludes would be small and temporary.</p>
15.	<p>4.5.3.1 Economy</p> <p>The commercial operation of Unit 3 would commence in 2015 and the commercial operation of Unit 4 in 2016.</p>	<p>SNC has revised its planning to allow for delay of starts of operations to as late as 2016 for Unit 3 and 2017 for Unit 4 to allow for uncertainties associated with first-of-a-kind projects of such</p>	<p>SNC has revised the planning horizon for Vogtle 3 and 4 to support additional margin for NRC review and other activities with potential for delay. The proposed 7 month addition to the schedule does not warrant revising EIS analyses based on the possibility of construction delays. In addition, a shift in the schedule timing of 7 months should not have significant impact of the socioeconomic or other potential</p>

Enclosure 1 - New Information and Substantive Comments

		<p>magnitude. SNC has not altered its construction schedule.</p>	<p>areas normally affected by the schedule length. The revised operating dates are believed to more accurately reflect the construction schedule duration as it is understood at this time. SNC continues to work with their contractors to optimize the construction schedule to minimize cost and maximize efficiency.</p>
<p>16.</p>	<p>4.7.3 Subsistence and Special Conditions</p>	<p>Comment</p>	<p>DEIS Section 4.7.3, p. 4-58 beginning on line 37 states, “the presence of a subsistence fishing population along the Savannah River adjacent to the proposed site has been well documented in the literature.” (Burger et. al, 1999)</p> <p>This statement is incorrect. The cited study does not use the phrase “subsistence population” and the data that it presents can not be interpreted as identifying a subsistence population.</p> <p>NRC’s environmental justice analyses are in response to Executive Order 12898, Section 4-401 of which indicates that Federal agencies, whenever practicable and appropriate, shall collect, maintain, and analyze information on the consumption patterns of populations who principally rely on fish and/or wildlife for subsistence. As indicated by the use of the term “principally,” the executive order is focusing on populations that rely on fish and/or wildlife for more than 50 percent of their diet.</p> <p>Burger states that the South Carolina Department of Environmental Health uses 50 kg/year (110 lb/yr) as a subsistence consumption level. This value is consistent with data from the U.S. Department of Agriculture, which indicate that the per capita meat consumption in the U. S. is approximately 220 pounds and is comparable to the 21 kg/yr (46 lb/yr) fish consumption value that NRC assumes in calculating dose from nuclear plants . Burger indicates that, in a survey of 90 km (56 miles) of the Savannah River, approximately 20 individuals were interviewed who stated that they consume more than 50 kg of fish per year . The study indicates that its data demonstrate different patterns of consumption but it does not conclude that these 20 individuals constitute or represent a subsistence population.</p>

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			<p>It is difficult to imagine how one could extrapolate from the study's data to a conclusion that there is a subsistence population. The data indicate that approximately 180 interviewees stated that they consume less than 50 kg of fish per year, for a survey mean of 17.6 kg/yr (39 lb/yr). This value indicates that fish constitute approximately 18 percent of the surveyed population's diet, assuming consumption consistent with the U.S. average. This is considerably less than the 50 percent that would be needed to constitute a subsistence population.</p> <p>Burger does state that subsistence fishing is an important aspect of rural culture and tradition. It is clear that, in this context, Burger is using "subsistence" to mean a source of food, a meaning that is borne out by the study results. This is not, however, the meaning in Executive Order 12898 and should not be the meaning that NRC uses in its EIS. Southern is aware of no documentation that identifies a subsistence population, that is, a population that relies on fish and/or wildlife for more than 50 percent of their diet, located within the VEGP region. NRC should delete the sentence, together with the companion discussion of river metals, and replace it with a statement indicating there is no documented subsistence population.</p>
17.	5.2.2 Air-Quality Impacts	Three additional diesel generators (2 on the fire protection system and 1 on the CSC) have been added to the plant design.	The additional generators are relatively small. The two fire protection diesels are Caterpillar I-6 4 stroke diesels rated at 225 bhp (168 kW). The Security diesel is also manufactured by Caterpillar and rated at 2155 bhp (1500 kW). -. The small size of these additional generators and their infrequent use continues to support the Staff's conclusions that environmental impacts of pollutants from diesel generators would be small.
18.	5.5.2 Demography The operations workforce would be 660.	The original estimate of 660 full time workers to support the Vogtle units contained in the ER is believed by SNC to be low. At this time, SNC estimates for training and other purposes that	The increase in full time personnel of 212 workers represents an approximately 32 percent increase in the full time plant staff. However, based on the socioeconomic data contained in the DEIS, this increase represents a very small increase in the populations of the counties that will provide permanent homes, education, and services to these employees. There would be a positive benefit

Enclosure 1 - New Information and Substantive Comments

		the number of full time workers will be 812. This number will continue to be refined up until the time the units are actually operational.	associated with tax revenue from the additional employees. The socioeconomic impacts will be enveloped by the analyses for the construction workforce. In addition, the growth rate projections in the relevant counties are large throughout and following the construction period such that any socioeconomic impacts associated with this increase would not alter the original NRC impact conclusions.
19.	5.10.2 Severe Accidents	Comment	DEIS Section 5.10.2, pages 5-77 and 5-78, NRC states that the SNC ER does not address consequences from external events, but indicates that the Westinghouse DCD does include discussion of three external events; seismic, fire, and internal flooding. The DEIS indicates that an updated internal fires and internal flooding PRA should be provided at the COL stage and references COL Action items 19.1.5.2.1-1 and 19.1.5.3-1, respectively to document this commitment. The commitments referenced in the NRC discussion relate to SSAR commitments. Since Westinghouse and the NRC reached conclusions relative to these issues in the ER, SNC does not plan to provide additional discussion in the COL ER of this material. There is no information in the ER or the Environmental Assessment (EA) for the DCD that indicates that any additional adverse environmental impacts will result from internal fires or flooding events.
20.	5.10.1 Design Basis Accidents Table 5-13 lists X/Q values pertinent to the environmental review of design basis accidents for the VEGP site.	DCD Rev 16 decreased the release height from the containment. Therefore, the X/Qs calculated for the site and reported in Table 5-13 increased. Westinghouse reduced the source terms to maintain the accident doses at approximately the same magnitude.	Due to changes in the AP-1000 design that reduced the release height for gaseous releases, Westinghouse made changes to the source terms to compensate for the height reduction. The source terms were reduced to maintain the "cause and effect" relationship between the release height and source terms. The decreased release height and reduced source terms would change some total effective dose equivalents (TEDE) estimates very slightly, but the revised TEDE estimates would remain less than the TEDE estimates used a safety evaluation criteria. The revised estimates would remain bounded by the original source term information contained in the ER.
21.	6.2 Transportation Impacts Expected irradiation level of about 48,700 MWd/MTU.	The expected fuel irradiation level has been revised to 50,533 MWd/MTU.	This small increase in fuel irradiation is not expected to significantly impact radiological effluents or radioactive waste. No impact to the transportation analysis is expected.

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22.	<p>7.8 Radiological Impacts of Normal Operations</p> <p>DEIS states in Section 7.8, page 7-19, that Starmet CMI, inc. is a facility that used to process uranium contaminated metals...</p>	<p>The Starmet, CMI facility is now closed and cleanup is in progress.</p>	<p>Since the STARMET facility is now closed and cleanup is in progress, the impact to normal operations would be positive. The language on page 7-19 should be revised, as appropriate to reflect current status of this facility.</p>
23.	<p>11.6.2.1 Construction Costs</p> <p>Overnight capital costs of \$1500 to \$2000 per kW</p>	<p>SNC has revised its most representative estimate of overnight capital costs for construction to \$2000 to \$4000 per kW.</p>	<p>Section 11.6.2.1 provided an estimate of overnight capital costs for construction as a range from \$100 per kW to \$2300 per kW. The most recent estimates now place the overnight capital costs at a range of \$2000 per kW to \$4000 per kW. SNC used \$2000 per kW in the ER analyses. This value is within the new range, but is at the low end of the range.</p>
24.	<p>Various - see Section 11.0 as example.</p>	<p>Comment</p>	<p>The recent NRC LWA rule change removes the requirement for LWA-1 and, accordingly, SNC has withdrawn its request for an LWA-1 and revised its site redress plan to remove redress for LWA-1 activities. A word search of the draft environmental impact statement (DEIS) for the Vogtle early site permit shows 57 uses of "redress," referring to redress of limited work authorization 1 (LWA-1; non-safety related) and LWA-2 (safety related) activities. In general, NRC relies on the SNC site redress plan in concluding that various impacts would be small and could be mitigated (redressed). NRC should determine whether it needs to revise the DEIS wording to limit reliance on redress to only impacts associated with LWA-2 activities. SNC will implement necessary controls to minimize environmental impacts for all activities conducted as pre-construction activities under the new LWA rule. The Site Redress Plan will remain in force under the new rule with essentially the same objectives as the original Site Redress Plan.</p>

Southern Nuclear Operating Company

AR-07-2216

Enclosure 2

**Discrepancy Table for the
Draft Environmental Impact Statement for the VEGP ESP Application**

Note: This enclosure consists of a twenty-three (23) page table on 11x17 paper

**Enclosure 2 - VEGP 3 & 4 Early Site Permit
DEIS Discrepancy Table**

DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
1		No discrepancies/comments were noted in Chapter 1.				
2.3.1.1 p.2-9	Wind	During winter ... prevailing wind from west-southwest.	2.7.4.2 p.2.7-21	Average direction and wind Speed Conditions	... the relative frequency of west-northwest winds.	SNC ER states that greatest winter wind frequency is west-northwest.
2.3.1.4 p.2-10	Atmospheric Moisture	The 5-year period (1998 through 2002) used in the analysis provided in the ER was an abnormally dry period in the southeast (Southern 2007a)				The statement was not found in the ESP ER as referenced. However, a reference to drought of 1999-2002 was referred to in the Vogtle ER for License Renewal on p. 4.1-2, Section 4.1
2.4 p.2-14	Geologyelevation from less than 24 m (80 ft) above MSL to nearly 85 m (280 ft) above MSL in the immediate vicinity of the VEGP site (Southern 2007a).	2.6.1 p.2.6-1	Geologic Setting		ER provides the elevation as 90 to 300 ft msl.
2.6.1.2 p.2-29	Groundwater Hydrology	Southern presents ... (Southern 2003b) for the Barnwell sands, silts, and clays ranging from 1.3×10^{-6} to 2.6×10^{-6} m/s (130 to 267 ft/yr) for well tests...	2.3.1.2.4 p.2.3.1-29	Hydrogeologic Properties and Groundwater Travel Time	In situ hydraulic conductivity values for the Barnwell Group sands, silts, and clays ...rage between 200 and 267 ft/yr.	The reference provided in the EIS is from the VEGP Units 1 and 2 FSAR, however the values for the hydraulic conductivity values provided in the ER are different.
2.6.1.2 p.2-30	Groundwater Hydrology	Thus, groundwater flow could be downward into the tertiary aquifer at this point.				Statement contradicts DEIS 2.6.3.2 p.2-43 Line 1 "This ensures the continued existence of an upward hydraulic head gradient over most of the site between the deep aquifers and overlying aquifers that may be contaminated. This management effort preserves the natural barrier to downward migration of contaminants, and maintains the water quality of the deep aquifer." SNC ER indicates that recharge to the Water Table aquifer is from local rainfall events; recharge to the deeper aquifers through outcroppings located 20-30 miles north of VEGP site.
2.6.1.2 p.2-31 Line 33	Groundwater Hydrology	Recharge to the aquifers underlying the VEGP site is from recharge.				SNC suggests revising, sentence meaning is unclear.
2.7.1.2 p.2-64 Line 22	Threatened and Endangered Terrestrial Species	The closest known wood stork colonies to the VEGP site are located in Jenkins and Screvin Counties, Georgia.				Typo – 'Screvin' should be spelled 'Screven'.

**Enclosure 2 - VEGP 3 & 4 Early Site Permit
DEIS Discrepancy Table**

DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
2.7.1.3 p. 2-70	Terrestrial Ecology Monitoring	The wood stork is known to occur within 3.2 km (2 mi) of the VEGP site in the Savannah River Swamp on the DOE Savannah River Site. Surveys were conducted for the wood stork throughout the period from 2002 to 2005 in areas harvested for timber and on 675 ha (1669 ac) of the site (TRC 2006; Southern 2007e).				Neither reference cited in this DEIS statement discusses wood stork surveys conducted in areas harvested for timber or on the VEGP site.
2.7.2.1 p.2-73 Line 36	Aquatic Communities of the VEGP Site	Starting in 1997, sampling at the stations for the VEGP site was limited to diatom surveys only (ANSP 2003).				DEIS text states that starting in 1997, sampling at the Academy of Natural Sciences stations at the VEGP site was limited to diatoms only. There are two stations in the vicinity of VEGP; Station 2A at river mile 151.2 and Station 2B at river mile 149.8. While sampling was limited to diatoms at Station 2A after 1997 (though a mussel survey was conducted at that site in 1998), the full sampling program (diatoms, non-insect invertebrates, aquatic insects and fish continued to be performed at Station 2B through 2001.
2.7.2.1 p.2-80 Line 29	Aquatic Communities of the VEGP Site	The decline in harvest likely reflects a decline in the population of American Shad.				DEIS contradicts previously cited reference, Bailey et al. (2004) that American Shad populations in the Savannah River increased from 2000 to 2001. A decline in the harvest could be due to any number of factors unrelated to population size including decreased consumer demand, decreased market price or, as is the case of the American Shad, restrictions on commercial harvesting.
2.7.2.1 p. 2-84	Aquatic Communities of the VEGP Site	No invasive aquatic plant species have been noted in the aquatic environments at the VEGP site (Southern 2007a).				Invasive plant species are not addressed in the VEGP ER (Southern 2007a). However, the information can be found on page 28 of Southern 2006d (ML063520382) as follows: "No invasive species have been noted in the terrestrial or aquatic environments at Vogtle".
2.8.1.1 p.2-93 Line 31	Resident Population	On this map, the powerblock for the center of the proposed site is the circle on the map is the proposed site, with concentric circles...				SNC suggests revising, sentence meaning is unclear.

**Enclosure 2 - VEGP 3 & 4 Early Site Permit
DEIS Discrepancy Table**

DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
2.8.1.1 p. 2-96	Resident Population	Augusta, Georgia, is the largest metropolitan area within an 80-km (50-mi) radius of the VEGP site, and most of the current 862 VEGP employees live in Augusta, its suburban communities, or in unincorporated sections of Columbia and Richmond Counties.	2.5.2.1 p. 2.5-7	Economy	With 888 (Table 2.9-1) employees, VEGP is one of the largest employers in Burke County.	DEIS used 862 employees ER uses 888 employees See addition information provided in Enclosure 1.
2.8.2.3 p. 2-105 Line 7	Transportation	The VEGP site is equipped with a barge slip downstream of the VEGP Units 1 and 2 intake structure, to support unloading of major equipment.				VEGP does not have a barge slip. See addition information provided in Enclosure 1.
2.8.2.5 p.2-106 Line 13	Housing	Several new residential areas are currently being developed in Waynesboro in anticipation of new full-time employees at the proposed site (PNNL 2006)				The reference cited in the DEIS does not include information regarding new residential areas being developed in Waynesboro. It is unclear where basis for this statement originates.
2.8.2.6 Table 2-20	Public Services	Columbia County Reported Monthly Average water withdrawal,(MGD) 6.71-17.8	2.5.2.7 Table 2.5.2-12 p. 2.5-54	Community Infrastructure and Public Services	Columbia County – Permit # 036-0109-04 0.82 – 2.69 MGD Columbia County – Permit # 036-0110-01 7.53 – 15.09 MGD	DEIS totaled low side of range values incorrectly by subtracting minimum permit values. Values should be added and range for Columbia county should be 8.35 – 17.78 MGD.
2.8.2.6 Table 2-21	Public Services	Sardis WWTS average Daily Wastewater Processed MGD is 0.0043	2.5.2.7 Table 2.5.2-13 p. 2.5-55	Community Infrastructure and Public Services	Sardis WWTS -Average Daily Waste Water Processed (MGD) column is 0.043	Value provided in DEIS is off by one decimal place (0.0043 MGD for DEIS and 0.043 MGD for ER). Error affects the percent capacity available as calculated by NRC.
2.10.1 p.2-116 Line 20	Analysis	Seventy-two census block groups within an 80-km (50 mi) radius of the proposed site exceed the state average for low-population households by 20 percent or more.				Typo - "Low-population" should be low-income population.
2.12	References	Southern Nuclear Operating Company, Inc. (Southern), 2006c. "Wildlife Habitat Council 2006 Recertification Application for Vogtle Electric Generating Plant." <i>Found in Southern Nuclear Operating Company, Vogtle Early Site Permit Application, Response to Requests for Additional Information on the Environmental Report.</i> Letter report from Southern Nuclear Operating Company (Birmingham, Alabama) to the U.S. Nuclear Regulatory Commission (Washington, D.C.). Southern Company, Birmingham, Alabama. Accession number ML0760460323.				Accession number provided in DEIS does not match document listed in ADAMS.

**Enclosure 2 - VEGP 3 & 4 Early Site Permit
DEIS Discrepancy Table**

DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
2.12	References	Southern Nuclear Operating Company, Inc. (Southern). 2007b. <i>Southern Nuclear Operating Company, Vogtle Early Site Permit Application, Response to Requests for Additional Information on the Environmental Report</i> , Southern Company, Birmingham, Alabama. Accession No. ML0760460323.				Accession number provided in DEIS does not match document listed in ADAMS.
2.12	References	Southern Nuclear Operating Company, Inc. (Southern). 2007c. July 24, 2007 e-mail concerning intake water pipe route. Southern Company, Birmingham, Alabama. Accession No. ML072050360.				Accession number provided in DEIS does not match document listed in ADAMS.
3.3, pg 3-14	Power Transmission System	No changes to the existing system would occur	3.7.2	Transmission System	Construction of the new units will require relocation of an existing overhead 500-kV line which currently runs through the proposed new plant footprint.	Statement in DEIS is inaccurate, there is a planned change to the existing onsite transmission system planned.
3.2.3	Radioactive Waste-Management System	Southern did not identify specific radioactive waste-management systems for the new units on the VEGP site, thus deferring analysis of the radioactive waste-management system to the CP or COL stage.			NA	See addition discussion provided in Enclosure 1.
3.2.3	Radioactive Waste-Management System	Bounding liquid and gaseous effluent releases are not provided by Southern.			NA	See addition discussion provided in Enclosure 1.
3.2.1.2	Plant Water Treatment	"Groundwater supplying the fire protection system would be filtered via a system of strainers to prevent system fouling."	3.3.2	Water Treatment	"Treatment of the well water for fire system use consists of filtration through strainers as needed to prevent system fouling."	ER states filtration will be as needed. DEIS implies a system of strainers. As of now we do not anticipate any straining of well water supplied to the fire water system will be required based on Unit 1 and 2 system design. Note that some straining of well water is performed via the gravel bed and mesh at the suction of the well water pump, but there is no specific system of strainers.
3.2.2	Cooling System	"Water from the blowdown sump would be retained for a period of time to allow suspended solids to settle before the water is discharged to the Savannah River (Southern 2007a)."	3.4.1.1.1	Circulating Water System/Turbine Plant Cooling Water Systems	"Blowdown from the cooling towers will discharge to a common blowdown sump to provide retention time for settling of suspended solids and to be treated."	No discrepancy between ER and DEIS, however, the conceptual blowdown sump is modeled after the existing Unit 1 and 2 sump and does not provide any settling capacity, only enough holdup for dechlorination (a few seconds with a relatively fast, turbulent flow). Based on the proposed 4 cycles of concentrations, no significant TSS impact from blowdown is expected.

**Enclosure 2 - VEGP 3 & 4 Early Site Permit
DEIS Discrepancy Table**

DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
3.2.2.2	Component Descriptions	Under subheading "Cooling Water Treatment System" DEIS states "Biocides would be injected at the intake structure, and other chemicals may be added to the cooling water basins."	3.3.2 3.4.1.3.4	Water Treatment Anti-Fouling Treatment	"Biocides will be injected at the intake structure to control biofouling in the circulating water system and associated piping." "An additional option for treating bio-fouling in the make-up water obtained from the Savannah River, to replenish the evaporative, blowdown, and drift losses, will be provided at the intake to ensure there is no biological fouling of the intake structure or the make-up water pipeline to the plant.	There is no discrepancy between the ER and the DEIS with regard to ER 3.3.2 and DEIS 3.2.2.2. However ER 3.4.1.3.4 is a more accurate depiction of the conceptual design. No biocide injection is expected to be performed at the intake, only at the CWS cooling tower basin. The option to inject at the intake is there (mainly by providing sufficient space to install an injection system). This is something of a discrepancy between ER 3.3.2 and ER 3.4.1.3.4.
4.3.1	Water-Related Impacts, Hydrological Alterations	Southern has proposed construction of a 73-m (240-ft) long and 52-m (170-ft)-wide intake structure	3.4.2	Component Descriptions, River Intake Structure	The intake canal will be an approximately 240-ft-long, 170-ft-wide structure The new intake structure, located at the end of the intake canal, will be an approximately 90-ft long, 125-ft-wide concrete structure.	The DEIS applies the dimensions of the intake canal to the intake structure.
4.3.2	Water Related Impacts, Water Use Impacts	The applicant stated that Mallard Pond continued to flow throughout the dewatering activity for VEGP Units 1 and 2, which lasted from mid-1976 until mid-1983 (Southern 2007a).	NA			Response to RAI E.4.2-1(b), dated 5.10.2007 alludes to the fact that dewatering during Units 1 and 2 construction did not affect Mallard Pond, but the exact discussion presented in DEIS is not in SNC ER or RAIs.
4.3.3	Water Related Impacts, Water Use Impacts	During construction, the temporary office and warehouse facilities would use the existing waste treatment facility. Portable toilets would be employed on the construction area (Southern 2007a).	3.6.2	Non-radioactive Waste Systems, Sanitary System Effluents	If there is a need during peak construction (or outage support) activities for additional sanitary waste provisions, approved supplemental means will be employed.	The ER does not specify which construction structures would be connected to the existing wastewater system and does not specify the use of portable toilets as the only supplemental sanitary wastewater provisions.
4.4.	Ecological Impacts	Excavation is expected to take place over a 6-month period, and operation of the dewatering system-would occur over an 18-month period (Southern 2007b, 2007c).	NA	NA	NA	DEIS statement does not appear in the sources referenced (Southern 2007b, 2007c).
4.4.1.1 p.4-48 Line 6	Wildlife Habitat	Assuming the actual routing iss similar to the...				Typo, iss should be is.
4.5.2	Socioeconomic Impacts, Demography	Of these, 2700 jobs would last two or more years and the remainder would be for less than two years (Southern 2006a).				The DEIS citation provided is inaccurate and should be Southern 2007a.
4.5.3.2	Socioeconomic Impacts, Taxes	During construction the new units would be assessed at some negotiated valuation that would likely range from \$1.2 to \$2.6 million, based on net electrical output of 1117 MW(e) (Southern 2007a).	4.4.2.2.2	Socioeconomic Impacts, Taxes	During construction the new units will be assessed at some negotiated valuation that will likely be greater than \$0 and less than actual cost. It is likely that this negotiated value will be no more than 50 percent of the invested capital each year.	The DEIS provides a dollar range of assessed value for taxing purposes different from that provided in SNC ER. The ER gives the range as greater than 0 to less than 100 percent.

**Enclosure 2 - VEGP 3 & 4 Early Site Permit
DEIS Discrepancy Table**

DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
4.5.4.1	Socioeconomic Impacts, Transportation	Four construction shifts...made up of two shifts working 10-hour days Monday through Thursday (day shift and swing shift), and two additional crews working 12-hour days Friday through Sunday (day shift and graveyard shift).	4.4.2.2.4	Socioeconomic Impacts, Transportation	For purposes of analysis SNC assumed that 100 percent of the 2,554 vehicles were attributable to the current VEGP workforce (60 percent day shift; 30 percent night shift; 10 percent graveyard shift).	The assumptions regarding numbers of workers per shift do not match those provided in SNC ER.
4.5.4.1	Socioeconomic Impacts, Transportation	The traffic management plan should include such mitigating measures as installing turn lanes at the construction entrance, establishing a centralized parking area away from the site and shuttling construction workers to the site in buses or vans, using incentive programs to encourage carpools, and staggering construction shifts so they don't coincide with operational shifts.	4.4.2.2.4	Socioeconomic Impacts, Transportation	Potential mitigation measures could include installing turn lanes at the construction entrance, establishing a centralized parking area away from the site and shuttling construction workers to the site in buses or vans, encouraging carpools, and staggering construction shifts so they don't coincide with operational shifts.	SNC ER lists potential traffic mitigation measures available to mitigate traffic concerns. SNC has not yet identified specific mitigation measures to implement during construction of VEGP Units 3 and 4.
4.5.4.5 p.4-53 Line 21	Socioeconomic Impacts, Education	In addition, the Burke County School District plans on expanding school facilities to accommodate any possible construction-related influx of students (PNNL 2006).				The reference cited in the DEIS does not include information regarding expanding school facilities in Burke County.
4.7.3	Subsistence and Special Conditions	The presence of a subsistence population along the Savannah River adjacent to the proposed site has been well documented in the literature (Burger et al. 1999)				See addition discussion provided in Enclosure 1.
4.9.1 p.4-65 Line 33	Direct Radiation Exposure	All these TLDs are read quarterly and measure the contribution...				All environmental TLDs are read quarterly, all fence-line TLD are read semi-annually (once every six months).
4.10 Table 4-6 p.4-69 Line 6	Measures and Controls to Limit Adverse Impacts During Site-Preparation Activities and Construction	SNC will "Conduct cultural resource surveys, including subsurface sampling prior to initiating ground-disturbing activities to identify buried historical or cultural or paleontological resources.				SNC conducted onsite cultural resource surveys in support of ER preparation. Additional surveys will be performed as directed by the Georgia SHPO and on a site specific basis if evidence suggests cultural resources are present.
5.2.2 p.5-3 Line 41	Air-Quality impacts	Table S-3 in 10 CFR 51.51 indicates that the oxides of nitrogen emitted in the fuel cycle are approximately 5 percent of the oxides of nitrogen emitted by a coal-fired plant.	5.7	Uranium Fuel Cycle Impacts		Neither Table S-3 nor its footnotes contain these values. SNC cannot determine how this inference might have been made using the information provided.
5.3.2.1 p.5-7 Line 36	Surface Water	Table 5-1 states that the maximum water withdrawals during average conditions as a percent of the is 1.4%				The correct value as stated in the SNC ER and in DEIS Table 7-2, p.7-4 is 1.5%.
5.3.2.2 p.5-8 Line 23	Groundwater	Records for 2005 (Southern 2007a) indicate that only 0.30 L/s (4gpm) was withdrawn from the Tertiary aquifer...	2.3.2	Water Use	Table 2.3.2-12 contains the data for calculating this statement.	SNC ER calculation result is 0.2452 L/s rather than 0.30 L/s as provided in the DEIS.

**Enclosure 2 - VEGP 3 & 4 Early Site Permit
DEIS Discrepancy Table**

DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
5.3.2.2 p.5-10 Line 25	Groundwater	...The storativity value of 3.1...	FSAR 2.4.12	Groundwater	Table 2.4.12-8 average value of storage coefficients does not calculate to 3.1×10^{-4}	SNC ER calculates storativity value for the average of the five test well values is 3.9×10^{-4} . If including the one additional value for the makeup wells, the average is 3.4×10^{-4} .
5.3.2.2 p.5-12 Line 15	Groundwater	The Water Table aquifer appears to be hydraulically isolated from the underlying confined Tertiary aquifer by the Blue Bluff Marl.				Statement conflicts with previous statement in DEIS regarding isolation of Water Table aquifer. See Section 2.6.1.2 p.2-30 line 24.
5.3.2.2 p.5-12 Line 17	Groundwater	...from 50.3 to 43 m (165 to 140 ft) above MSL...	2.3.1.2.3	Observation Well Data	Groundwater elevations for this 18-month monitoring period range from about 133 to 165 ft msl. (page 2.3.1-27)	SNC ER lists values at 133 to 165ft.
5.3.2.2 p.5-12 Line 18	Groundwater	...from 38.1 to 32 m (125 to 105 ft) above MSL...	2.3.1.2.3	Observation Well Data	Groundwater elevations for this 18-month monitoring period range from about 82 to 128 ft msl. (page 2.3.1-28)	SNC ER lists values at 82 to 128ft.
5.3.2.2 p.5-12 Line 36	Groundwater	...all changes appear to be less than 0.9 m (3 ft) in magnitude...	2.3.1.2.3	Observation Well Data	Figure 2.3.1-30 shows that for the period 1979 to 1984, groundwater level elevations in the Water Table aquifer were affected (lowered) by construction dewatering of the power block excavation for VEGP Units 1 and 2 that was in effect from June 1976 to March 1983. Groundwater levels for subsequent years exhibit variability in response to meteorological conditions. The magnitude of the variability can be estimated using data from the wells having the longest period of record, which include wells 802A, 805A, 808, LT-7A, LT-12, and LT-13. Table 2.3.1-29 summarizes the minimum and maximum water levels recorded at each of these wells. These results indicate a 5-to-8-ft range in water levels over the 17-year period of record for these wells.	SNC ER lists value at 5 to 8 feet (1.5 to 2.5m).
5.3.3.1 p.5-19 Line 12	Savannah River	The local water depth near the outfall, which is located near the deepest point in the cross-section, is 3.05 m (10.0 ft)."	5.2.3.5	Bathymetry	As depicted in Figure 5.2-1, the river has a maximum depth of approximately 11.5 feet in the immediate area of the proposed discharge under low river flow (7Q10) conditions	SNC ER lists the maximum depth at 11.5 ft.
5.3.3.1 p.5-14 Line 35	Savannah River	...staff made an assumption that all waste issuing from the outfall was at the cooling water system maximum blowdown temperature of 32.8 C (91F).	5.2.3.2	Thermal Impacts	Based on the 5-year hourly simulation, the maximum blowdown temperature is expected to be 91.5°F, in July (Table 5.2-2)	SNC ER lists the maximum expected blowdown temperature at 91.5°F.
5.3.3.1 p.5-16 Line 22	Savannah River	Southern assumed that the outfall pipe for the proposed VEGP Units 3 and 4 was located 123m (404 ft) upstream of the existing VEGP Units 1 and 2 outfall pipe...				The DEIS incorrectly states that the Unit 3 and 4 discharge pipe is located upstream of existing discharge. The proposed Units 3 and 4 discharge pipe is located 123m downstream of existing discharge pipe.

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DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
5.4.2.1 p.5-23 Line 14	Aquatic Impacts Onsite Streams and Ponds	...Plan to reflect the addition of new paved areas and facilities and changes in drainage patters (Southern 2007a).				Typo, 'patters' should be 'patterns'.
5.5.1.2 p.5-34 Line 26	Physical Impacts Buildings	...or residential structures would be affected by the operation of Vegp Units 3 and 4.				Typo, 'VEGP' should be in all caps.
5.10.2 p.5-79 Line 10	Severe Accidents	Table 5-13 gives a total core damage frequency...				The table referenced in the DEIS should be Table 5-15.
5.10.3 p.5-79 Lines 39 & 40	Severe Accident Mitigation Alternative	The effectiveness...in Tables 5-14 and 5-15...				The tables referenced in the DEIS should be Tables 5-15 and 5-16.
6.1	Fuel Cycle Impacts and Solid Waste Management	In the following review and evaluation of the environmental impacts of the fuel cycle, the staff considered the capacity factor of 95 percent with a total net electric output of 2,185 MW(e) for the proposed two new units at the VEGP site (Southern 2007); this is about three times (i.e., 218/5 MW(e) divided by 800 MW(e) yields 2.73) the impact values in Table S-3 (see Table 6-1).	5.7	Uranium Fuel Cycle Impacts	In the following evaluation of the environmental impacts of the fuel cycle, SNC conservatively assumed a gross electrical output of 1,150 MWe (Westinghouse 2003) and a capacity factor of 93 percent for a total gross electric output of approximately 1,070 MWe for the AP1000, the AP1000 output is approximately one and one third times the output used to estimate impact values in Table S-3 (reproduced here as the first column of Table 5.7-1) for the reference reactor.	SNC ER uses 93 percent capacity factor with a gross electric output of 1070 MW(e).
6.1.8	Transportation	For comparative purposes, the estimated collective dose from natural background radiation to the population within 80 km (50 mi) of the VEGP site is 2300 person-Sv/yr (230,000 person-rem/yr)	5.4	Radiological Impacts from Normal Operations	Table 5.4-9 Collective Total Body Doses within 50 Miles Natural Background 2.43E5 person-rem / yr	SNC ER uses 243,000 person-rem / yr, based on 360 mrem/person/yr and a population of 674,101
6.2.1	Transportation of Unirradiated Fuel	Table 6.3 VEGP Westinghouse AP1000 # of shipments per reactor Shipments (initial core) 23 Annual reload 5.4 Total 233 MW(e)1117 Capacity factor 0.93 Normalized shipments 198	5.11	Transportation of Radioactive Material	Table 5.11-2 VEGP Westinghouse AP1000 # of shipments per reactor Shipments (initial core) 23 Annual reload 5.3 Total 231 MW(e)1115 Capacity factor 0.93 Normalized shipments 196	SNC values in Table 5.11-2 differ slightly from those listed in DEIS Table 6.3. Differences between table values due to differences noted in previous comment regarding gross electric output.
7		No discrepancies/comments were noted in Chapter 7.				

**Enclosure 2 - VEGP 3 & 4 Early Site Permit
DEIS Discrepancy Table**

DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
8.1 p. 8-2	Description of Power System	The MEAG is an electric generation and transmission public corporation, which provides wholesale power to 49 communities in the State of Georgia and other wholesale customers outside the State of Georgia. These communities, in turn, supply electricity to more than 675,000 retail customers, representing approximately 10 percent of Georgia's population, in their respective service areas across the State.	8.4.1 p. 8.4-3	Co-Owner Planning	MEAG owns about 1,600 megawatts of capacity from several facilities that provide energy to its members of approximately 600,000 retail customers;	SNC ER indicates MEAG provides energy to 600,000 retail customers.
9.1 p.9-2 Line 11	No-Action Alternative	...construction activities that could be allowed pursuant to 10 CFR 52.17 © and ...				Typo – '10 CFR 52.17 ©' should be '10 CFR 52.17 (c)'.
9.2.2.1	Coal-Fired Power Generation/Other Impacts	DEIS page 9-10: "Socioeconomic impacts would result from the approximately 200 workers needed to operate the coal-fired facility, demands on housing and public services during construction, and the loss of jobs after construction. Overall, the staff concludes that these impacts would be SMALL to MODERATE, resulting from the mitigating influence of the site's proximity to the surrounding population area and the relatively small number of workers needed to operate the plant...Considering the population and economic condition of the county, the staff concludes that the taxes would have a LARGE beneficial impact on the county."	Section 9.2.3.13	Other Impacts	"Socioeconomic impacts would result from approximately 200 people to operate the coal-fired facility. SNC believes that these impacts would be SMALL due to the mitigating influence of the site's proximate to the surrounding population area. Cultural resource impacts would be unlikely due to the previously disturbed nature of the site, and could be, if needed minimized by survey and recovery techniques." (ER 9.2-21)	Conclusions stated in the DEIS differ from those stated in SNC ER.
9.2.2.1	Table 9-1 Summary of Environmental Impacts of Coal-Fired Power Generation	DEIS page 9-12: Land Use = MODERATE impact; DEIS page 9-12 Ecology = MODERATE impact; DEIS page 9-12 Socioeconomics = MODERATE impact (adverse); DEIS page 9-12 Historic and cultural resources = MODERATE impact; DEIS page 9-12 Environmental Justice = SMALL to MODERATE impact;	Section 9.2.4	Conclusion (Table 9.2- Comparison of Environmental Impacts of Alternative Energy Sources to a New Nuclear Unit) Page 9.2-26	Land Use = SMALL Ecology = SMALL Socioeconomics = SMALL (adverse) Historic and Cultural Resources = SMALL Environmental Justice = SMALL	Conclusions stated in the DEIS differ from those stated in SNC ER.

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DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
9.2.2.2	Natural Gas Fired Power Generation/Air Quality	"The impacts of emissions from a natural-gas-fired power generation plant would be clearly noticeable, but would not be sufficient to destabilize air resources. Overall, the staff concludes that air-quality impacts resulting from construction and operation of new natural-gas-fired power generation at the VEGP site would be SMALL to MODERATE." DEIS pg. 9-14	9.2.3.2.1	Air Quality	"SNC concludes that emissions from a gas-fired alternative would be detectable, but they would not noticeably alter local air quality. Air quality impacts would therefore be SMALL, but substantially larger than those of nuclear generation." (ER pg. 9.2-22)	Conclusions stated in the DEIS differ from those stated in SNC ER.
9.2.2.2	Natural Gas Fired Powered Generation/Table 9-2: Summary of Environmental Impacts of Natural-Gas-Fired Power Generation	DEIS pg. 9-17 Land Use = MODERATE DEIS pg. 9-17 Air Quality = SMALL to MODERATE DEIS pg. 9-17 Ecology = SMALL to MODERATE DEIS pg. 9-17 Socioeconomics = MODERATE (beneficial) to MODERATE (Adverse) DEIS pg. 9-17 Historic and cultural resources = MODERATE	Section 9.2.4	Conclusion (Table 9.2- Comparison of Environmental Impacts of Alternative Energy Sources to a New Nuclear Unit) Page 9.2-26	Land Use = SMALL Air Quality = SMALL Ecology = SMALL Socioeconomics = SMALL (adverse) to LARGE (Beneficial) Historical and Cultural Resources = SMALL	Conclusions stated in the DEIS differ from those stated in SNC ER.
9.2.3.3	Solar Power	"For the preceding reasons, the staff concludes that a solar energy facility at or in the vicinity of the VEGP site would not currently be a reasonable alternative to construction of a 2234-MW(e) nuclear power generation facility that would be operated as a base load plant." (DEIS pg 9-19)	9.2.2.3	Solar Power	"SNC has concluded that, due to the high cost, low capacity factors, lack of sufficient incident solar radiation, and the substantial amount of land needed to produce the desired output, solar energy is not practical as a utility-scale power generation option." (ER pg. 9.2-8)	SNC ER notes that high cost and lack of sufficient incident solar radiation are additional bases for concluding that solar energy is not a reasonable alternative to VEGP Unit 3 and 4. The DEIS does not discuss either of these. SNC suggests revising DEIS to incorporate additional bases.
9.2.3.7	Municipal Solid Waste	"Given the small size of the plants, staff concludes that generating electricity from municipal solid waste would not be a reasonable alternative to a 2234-MW(e) nuclear power generation facility operated as a base load plant." (DEIS pg 9-21)	9.2.2.7	Municipal Solid Waste	"SNC has concluded that, due to the high costs and lack of obvious environmental advantages, other than reducing landfill volume, burning municipal solid waste to generate electricity is not a reasonable alternative for baseload power."	SNC ER notes high costs and lack of environmental advantages as bases for concluding that burning municipal solid waste to generate electricity is not a reasonable alternative for baseload power. The DEIS does not discuss either of these.
9.2.4	Combination of Alternatives, Table 9-4	Table 9-4 Land Use = MODERATE Table 9-4 Ecology = SMALL to MODERATE Table 9-4 Socioeconomics = MODERATE (Adverse) Table 9-4 Historic and Cultural Resources = MODERATE	9.2.3	Table 9-2.3 – comparison of Environmental Impacts of Alternative Energy Sources to a New Nuclear Unit	Land Use = SMALL Ecology = SMALL Socioeconomics = SMALL (Adverse) Historic and Cultural Resources = SMALL	Conclusions stated in the DEIS differ from those stated in SNC ER.

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DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
9.5.1.2	Water Use and Quality	"For the calendar years 1971 through 2006, the average annual-mean discharge at the gauge was 319.56 m ³ /s (11,285 cfs) and the minimum annual mean discharge was 106.5 m ³ /s (3,762 cfs)...." DEIS pg 9.32	9.3.3.2.3	Hydrology, Water Use, and Water Quality	"For water years 1949 – 2004, the annual mean and lowest annual mean flows for the Altamaha River near Baxley, Georgia (Station 02225000) were 11,320 cfs and 3,762 cfs, respectively." ER pg 9.3-22	SNC ER and DEIS utilized different water years to calculate minimum annual mean discharge yet both values are identical. Please verify accuracy of DEIS calculation.
9.5.1.2	Water Use and Quality	"Based on the requirements of the NPDES permit and the above analysis, the staff concludes that the water-use and water-quality impacts of two additional units at Plant Hatch would be SMALL." DEIS pg 9-32	9.3.3.2.3	Hydrology, Water Use, and Water Quality	"An additional groundwater withdrawal of 88 gpm would have little effect on the Floridian aquifer, therefore impacts as a result of operation would be SMALL. However, because groundwater availability is an issue in coastal Georgia, siting additional units at HNP may cause public concern with respect to groundwater availability."	SNC ER notes groundwater withdrawal and the groundwater availability as bases for concluding that impacts as a result of operation would be SMALL. The DEIS does not discuss either of these.
9.5.1.3	Terrestrial Resources Including Endangered Species/Construction Impacts	"Because of uncertainty concerning the possible routing of the transmission line right-of-way, the staff concludes that the threatened and endangered species impacts associated with construction and operation of the new transmission lines at the Plant hatch site could be SMALL to MODERATE." DEIS pg. 9.35 "Because of uncertainty concerning the possible routing of the transmission line right-of-way, the staff concludes that the terrestrial resource impacts associated with construction of the new transmission line at the Plant Hatch Site could be SMALL to MODERATE." DEIS pg. 9-34	9.3.3.2.4	Terrestrial Resources Including Protected Species	"With this in mind, and because the proposed project and any new transmission line would not require extensive land clearing, impacts to terrestrial resources, including endangered and threatened species, from construction and operation of the proposed project at the HNP site would be SMALL." ER pg. 9.3-24	Conclusions stated in the DEIS differ from those stated in SNC ER.
9.5.1.5	Demography	"Based on the analysis of the construction impacts presented in Section 4.5.2 of this EIS, construction of new nuclear units at Plant Hatch would increase the population in the 80-km (50-mi) region during the construction phase by approximately 6700 people. (Southern 2007a)" DEIS 9-40	9.3.3.2.6.2	Demography	"Based on the analysis in Section 4.4.2.1, SNC assumes that construction of the proposed project would increase the population in the 50-mile region by 7,200 people." ER 9.3-27	The ER estimates the proposed project would increase the population in the 50-mile region by 7,200 people.
9.5.1.4	Demography	"Of the total population increase, 2010 people (30 % of 6,700) would settle in Appling County and 2,747 people would settle in Toombs County	9.3.3.2.6.2	Demography	"Of the total population increase, 2,160 people (30 % of 7200) would settle in Appling County and 2952 people would settle in Toombs County." ER pg. 9.3-27	This discrepancy is a result of the difference in estimated population change.

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DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
9.5.1.5	Social and Economic Impacts / Economy	"During construction of the new units, up to 4400 construction workers would be required to build the plant (at the peak construction phase) and most of these would need to in-migrate to the region. The peak construction workforce would represent more than 5 % of the current workforce in the region and NRC staff concludes that the impacts of construction on the economy of the region would be MODERATE and beneficial, but temporary." DEIS 9-41	9.3.3.2.6.3	Economy	"Economic Impacts would be spread across the 50-mile region, but would be greatest in Appling and Toombs Counties. Impacts are small if plant-related employment is less than 5 % of the study area's total employment and moderate if employment is between 5 and 10 %. SNC concludes that the impacts of construction on the economy of the region would be beneficial and temporary, and would therefore be SMALL." ER 9.3-28	Conclusions stated in the DEIS differ from those stated in SNC ER.
9.5.1.5	Social and Economic Impacts / Economy	"Based on information provided by Southern and NRC's own independent review, the staff concludes that a significant number of construction laborers would need to in-migrate to the area and the number of jobs added to the region during the construction phase would have MODERATE impacts on the local economy. Once the new units are operational, 660 jobs would be added to the local economy; however, this would only constitute a small growth rate in jobs relative to the total number of existing jobs in the region, and the economic impacts would be SMALL and beneficial." DEIS pg 9-41	9.3.3.2.6.3	Economy	"SNC concludes that the impacts of station operation on the economy would be beneficial and SMALL everywhere in the region except Appling and Toombs Counties where the impacts would be beneficial and MODERATE, and that mitigation would not be warranted." ER pg. 9.3-28	Conclusions stated in the DEIS differ from those stated in SNC ER.
9.5.1.5	Social and Economic Impacts/Taxes	"The NRC staff concludes that the potential beneficial impacts of taxes collected during construction would be MODERATE and beneficial and LARGE and beneficial during the operation in Appling County, and SMALL and beneficial in the remainder of the 50-mi region, assuming Georgia tax law remains unchanged." DEIS pg. 9-42	9.3.3.2.6.4	Taxes	"The benefits of taxes are large when new tax payments represent more than 20% of total revenues for local jurisdictions. Therefore, SNC concludes that the potential beneficial impacts of taxes collected during construction and operation of the proposed project would be LARGE in Appling County and SMALL in the remainder of the 50-mile region." ER pg. 9.3-29	Conclusions stated in the DEIS differ from those stated in SNC ER.
9.5.1.5	Infrastructure and Community Services/Transportation	"Impacts on the operations workforce would be SMALL once the 2 new units are operational." DEIS pg. 9-43	9.3.3.2.6.5	Transportation	"Impacts of operations workforce on transportation would be SMALL to MODERATE and mitigation would not be warranted." ER pg. 9.3-29	Conclusions stated in the DEIS differ from those stated in SNC ER.
9.5.1.5	Infrastructure and Community Services/Housing	"The impact of operating new units on housing is therefore likely to be SMALL." DEIS pg. 9-44	9.3.3.2.6.7	Housing	"SNC concludes that the potential impacts of operations on housing in Appling and Toombs Counties would be SMALL to MODERATE, and SMALL elsewhere in the 50-mile region." ER pg. 9.3-32	Conclusions stated in the DEIS differ from those stated in SNC ER.

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DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
9.5.1.5	Infrastructure and Community Services/Housing	"Based on the analysis in Section 4.5.3.7, new nuclear units at Plant Hatch would increase the school-aged population in a 50-mile region by 1500 during the peak of the construction phase." DEIS pg. 9-45 "There may potentially be MODERATE impacts on the local school system during the construction phase of the project." DEIS pg. 9-45	9.3.3.2.6.9	Education	"Based on the analysis in Section 4.4.28., SNC assumes that construction of the proposed project at HNP would increase the school-aged population in the 50-mile region by 1,900." ER pg. 9.3-32 "Therefore, the projected increases in the student populations of Appling and Toombs Counties would constitute a LARGE impact on the education systems and mitigation would be warranted." ER 9.3-32	SNC ER states that the school-aged population in the 50-mils region is 1900 students a HNP. Conclusions stated in the DEIS differ from those stated in SNC ER.
9.5.2.1	Land Use, Air Quality, and Transmission Line Rights of Way	"Based on the information it has available, the staff concludes that the transmission line right-of-way land-use impacts of constructing two new nuclear reactor units at Plant Farley site would be MODERATE." DEIS, pgs 9-47, 9-49	9.3.3.1.1	Land Use including Site and Transmission Rights of Way	"Widening this corridor by 200 feet would not be expected to permanently affect agricultural areas, but has the potential to permanently affect agricultural areas, but has the potential to affect residents along the right-of-way. For this reason, impacts to land use along the right of way would be SMALL to MODERATE." ER pg. 9.3-5	Conclusions stated in the DEIS differ from those stated in SNC ER.
9.5.2.2	Water Use and Quality	"For the calendar years 1976 through 2005, the average annual-mean discharge at the gage was 308.60 m ³ /s (10,898 cfs), and the minimum annual-mean discharge was 140.17 m ³ /s (4950 cfs)." DEIS pg 9-49	9.3.3.1.3	Hydrology, Water Use, and Water Quality	"For water years 1976-2004, the annual mean and lowest annual mean flows from the Chattahoochee River near Columbia, Alabama (Station 02343801) were 10,660 cfs and 4,950 cfs." ER pgs. 9.3-6, 9.3-7	SNC ER and DEIS utilized different water years to calculate minimum annual mean discharge yet both values are identical. Please verify accuracy of DEIS calculation.
9.5.2.2	Water Use and Quality	"The net consumptive water loss for the wet towers proposed at the VEGP site would be 1.76 m ³ /s (62 cfs)." DEIS pg. 9-49	9.3.3.1.3	Hydrology, Water Use, and Water Quality	"Assuming the cooling tower evaporation rate for the proposed project would be 28,880 gaps (~64 cfs), the cumulative net loss to the Chattahoochee River would be 90 cfs." ER pg. 9.3-6	SNC ER assumes cooling tower evaporation rate at 64 cfs.
9.5.2.3	Terrestrial Resources Including Endangered Species/ Construction Impacts	"Based on the lack of available information regarding the habitats that would be removed during construction onsite and for the new transmission line right-of-way, information provided by Southern, and NRC's own independent review, the staff concludes that the impacts on terrestrial resources from construction of two new nuclear units at the Plant Farley site would be MODERATE and construction associated with the new transmission line right-of-way could be SMALL to MODERATE." DEIS pg 9-52	9.3.3.1.4	Terrestrial Resources Including Protected Species	"Construction impacts on terrestrial resources (including threatened or endangered species) would be SMALL because mitigation would be performed. Impacts of operation of the proposed project would also be SMALL because sufficient habitat would remain at FNP to support existing wildlife." ER pg. 9.3-9	Conclusions stated in the DEIS differ from those stated in SNC ER.

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DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
9.5.2.3	Terrestrial Resources Including Endangered Species/ Construction Impacts	"Based on the lack of information regarding the actual habitats that would be removed during construction onsite and for the new transmission corridor, information provided by Southern and NRC's own independent review, the staff concludes that the impacts to threatened and endangered species from construction of two new nuclear units at the Plant Farley site and construction associated with the addition of a transmission line right-of-way could be SMALL to MODERATE." DEIS pg. 9-53				
9.5.2.4	Aquatic Resources Including Endangered Species/ Construction	"Based on the information provided by Southern and NRC's own independent review of additional information, the staff concludes that depending on the method of construction and any need for dredging, the impact on aquatic resources at Plant Farley could be SMALL to MODERATE." DEIS pg 9-55	9.3.3.1.4	Terrestrial Resources Including Protected Species	"Any impacts of construction on aquatic resources, including Federally-listed threatened and endangered species would be SMALL." ER pg. 9.3-11	Conclusions stated in the DEIS differ from those stated in SNC ER. SNC requests NRC revise DEIS to achieve conclusions consistent with ER or provide basis for deviation.
9.5.2.4	Aquatic Resources Including Endangered Species/ Construction	"However, assuming the use of BMP during construction, the staff concludes that the impacts would be SMALL to MODERATE depending on the specific routing of the right-of way." DEIS pg. 9-55				
9.5.2.5	Socioeconomics/ Demographics	"Based on the analysis construction impacts presented in Section 4.5.2 of this EIS, new nuclear units at Plant Farley would increase the population in the 50-mile region during the construction phase by approximately 6700 people (Southern 2007a)." DEIS pg. 9-60	9.3.3.1.6.2	Demography	"Based on the analysis of Section 4.4.2.1, SNC assumes that construction of the proposed project at FNP would increase the population in the 50-mile region of the 7,200 people." ER pg 9.3-13	The ER estimates the population increase in the 50-mile regions would increase by 7,200 people. SNC requests NRC revise DEIS to achieve value consistent with ER or provide basis for deviation.
		"Assuming the residential distribution of the construction workforce would resemble the residential distribution of the currently Plant Farley workforce, approximately 5160 people (77 percent of 6700) or 6 percent of the 2000 population would settle in Houston County." DEIS pg 9-60			"Therefore, the SNC anticipates that 5,544 people (77 percent of 7,200) or 6.2 per cent of the 2000 population would settle in Houston County." ER pg. 9.3-13	This discrepancy is a result of the difference in estimated population change.

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DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
		"Overall the population increase from immigration of the construction workers would constitute 1.7 percent of the 2000 population of the 50-mile region." DEIS pg 9-60			"Overall the population increase from immigration of construction workers constitutes 1.8 percent of the 2000 population in the 50-mile region." ER pg. 9.3-13	This discrepancy is a result of the difference in estimated population change.
9.5.2.5	Socioeconomics/Economy	Once the new units are operation, 660 jobs would be added to the local economy; however this would only constitute a small growth rate in jobs relative to the total number of existing jobs in the region, and the economic impacts would be SMALL and beneficial." DEIS pg 9-61	9.3.3.1.6.3	Economy	"SNC concludes that the impacts of station operation on the economy would be beneficial and SMALL everywhere in the region, except Henry County, where the impacts would be MODERATE and beneficial, and that mitigation would not be warranted." ER pg. 9.3-14	Conclusions stated in the DEIS differ from those stated in SNC ER.
9.5.2.5	Socioeconomics/Taxes	"Assuming a 40-year operation life, property taxes to Houston County could average between \$20 million and \$29 million annually during the first decade of operation and between \$3.5 million and \$5 million during the last decade of operation, based on the changing value of the plant (Southern 2007a)." DEIS pg 9-62	9.3.3.1.6.4	Taxes	"Assuming a 40-year operation life, property taxes to Houston County are estimated to be between \$15 million and \$21.5 million annually for the first decade of operations and between \$3 million and \$4 million in the last decade of operations." ER pg. 9.3-15	The ER assumes between \$15M and \$21.5M for the first decade and between \$3M and \$4M for the last decade. The estimate is based on the current tax rate in Alabama, which is different than Georgia's.
9.5.2.5	Socioeconomics/Taxes	"The NRC staff concludes that the potential beneficial impacts of taxes collected during construction would be MODERATE and beneficial. During operation the impacts would be LARGE and beneficial in Houston County and SMALL in the remainder of the 50-mile region, assuming Alabama tax law remains unchanged." DEIS pg 9-62	9.3.3.1.6.4	Taxes	"Therefore SNC concludes that the potential beneficial impacts of taxes collected during construction and operation of the proposed project would be LARGE in Houston County and SMALL in the remainder of the 50-mile region." ER pg 9.3-15	Conclusions stated in the DEIS differ from those stated in SNC ER.
9.5.2.5	Infrastructure and Community Services/Public Services	"However, it is likely, considering the currently system capacity constraints, that a major influx of construction workers could temporarily strain the systems and impacts could be MODERATE." DEIS 9-64	9.3.3.1.6.8	Public Services	"Therefore, impacts of construction and operation of the proposed project on public services would be SMALL and mitigation would not be warranted." ER pg 9.3-18	Conclusions stated in the DEIS differ from those stated in SNC ER.
9.5.2.5	Infrastructure and Community Services/Education	"Based on the analysis in Section 4.5.3.7, new nuclear units at Plant Farley would increase the school-aged population in the 50-mile region by 1500 during the peak of the construction..." DEIS pg 9-64	9.3.3.1.6.9	Education	"Based on the analysis in Section 4.4.2.8, SNC assumes that construction of the proposed project at FNP would increase the school-aged population in the 50-mile region by 1900 people." ER pg 9.3-18	SNC assumes that construction of the proposed project at FNP would increase the school-aged population in the 50-mile region by 1900 people.
9.5.3.1	Land Use, Air Quality, and Transmission Line Rights of Way	"Based on the information provided by Southern and NRC's own independent review, the staff concludes that the land-use impacts of constructing 2 new nuclear units at Barton site would be MODERATE." DEIS pg 9-68	9.3.3.3.1	Land Use including site and transmission line rights of way	"Land-use impacts associated with site-preparation, construction, and operation of the proposed project at the Barton Site would be LARGE." ER pg 9.3-35	Conclusions stated in the DEIS differ from those stated in SNC ER.

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DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
9.5.3.2	Water Use and Quality	"For the calendar years 1975 through 2005, the average annual mean discharge at the gage was 464.68 m3/s (16,410 cfs), and the minimum annual mean discharge was 152.97 m3/s (5402 cfs)." DEIS pg 9-69	9.3.3.3.3	Hydrology, Water Use, and Water Quality	"For water years 1913 – 2004, the annual mean and lowest annual mean flows for the Coosa River at Jordan Dam near Wetumpka Alabama (Station 0241100) were 16,230 cfs and 5,402 cfs, respectively." ER pg. 9.3-37	SNC ER and DEIS utilized different water years to calculate minimum annual mean discharge yet both values are identical. Please verify accuracy of DEIS calculation.
9.5.3.3	Terrestrial Resources Including Endangered Species/Construction Impacts	"Based on the information provided by Southern and NRC's own independent review, the staff concludes that the impacts to terrestrial resources from construction of two new nuclear units at the Barton site would be MODERATE and the construction associated with the creation of a new transmission line right-of-way impacts could be MODERATE." DEIS pg 9-70	9.3.3.3.4	Terrestrial Resources Including Protected Species	"With this in mind, impacts to terrestrial resources including endangered and threatened species from construction and operation of the Barton plant would probably be SMALL. However, due to the uncertainty associated with route selection and clearing of the Barton Site and transmission corridors, impacts to terrestrial resources could be MODERATE." ER pg 9.3-39	Conclusions stated in the DEIS differ from those stated in SNC ER.
9.5.3.3	Terrestrial Resources Including Endangered Species/Threatened and Endangered Species	"Based on the information provided by Southern and NRC's own independent review, the staff concludes that the impacts to threatened and endangered species from construction of two new nuclear units at the Barton site and construction associated with addition of a new transmission line right-of-way could be SMALL to MODERATE." DEIS pg 9-71, 72				Conclusions stated in the DEIS differ from those stated in SNC ER.
9.5.3.4	Aquatic Resources including Endangered Species	"Based on this information and NRC's own independent review, the staff concludes that construction impacts to aquatic resources during transmission line construction would be SMALL to MODERATE, depending on the transmission right-of-way routing." DEIS pg 9-73	9.3.3.3.5	Aquatic Resources Including Endangered Species	"Because the EPA requires facilities to meet criteria designed to protect organisms from entrainment and impingement, the potential for environmental impacts to aquatic resources, including endangered and threatened species from operation of the Barton plant would probably be SMALL." ER pg 9.3-40	Conclusions stated in the DEIS differ from those stated in SNC ER. SNC requests NRC revise DEIS to achieve conclusions consistent with ER or provide basis for deviation.
9.5.3.5	Socioeconomics/ Demographics	"Therefore, the NRC staff concludes that the demographic impacts of constructing two new units at the Barton site would be SMALL." DEIS pg 9-78	9.3.3.3.6.2	Demography	"Therefore, the potential increases in population during construction would represent a SMALL to MODERATE increase in the total population for the most impacted counties." ER pg 9.3-41	Conclusions stated in the DEIS differ from those stated in SNC ER. SNC requests NRC revise DEIS to achieve conclusions consistent with ER or provide basis for deviation.
9.5.3.5	Socioeconomics/ Economy	"However, considering that the region is relatively economically diverse, with a plentiful job supply, these impacts would be SMALL and beneficial as a result of interacting with a relatively robust economic base in the region." DEIS pg. 9-78	9.3.3.3.6.3	Economy	"SNC concludes that the impacts of station operation on the economy would be beneficial and small everywhere in the region except Elmore and Chilton Counties, where the impacts would be beneficial MODERATE, and that mitigation would be warranted." DEIS pg 9.3-43	Conclusions stated in the DEIS differ from those stated in SNC ER. SNC requests NRC revise DEIS to achieve conclusions consistent with ER or provide basis for deviation.

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DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
9.5.3.5	Socioeconomics/ Taxes	"Therefore, the NRC staff concludes that the potential beneficial impacts of taxes collected during construction and operation of the proposed project at the Barton site would be MODERATE and beneficial in Chilton and Elmore Counties and SMALL and beneficial in the remainder of the 50-mile region." DEIS pg 9-79	9.3.3.3.6.4	Taxes	"Therefore, SNC concludes that the potential beneficial impacts of taxes collected during construction and operation of the proposed project would be MODERATE to LARGE in Chilton and Elmore Counties and SMALL in the remainder of the 50-mile region." ER pg 9.3-43	Conclusions stated in the DEIS differ from those stated in SNC ER. SNC requests NRC revise DEIS to achieve conclusions consistent with ER or provide basis for deviation.
9.7	Summary of Alternative Site Impacts	<p>Table 9.7.1 Summary of Alternative Site Construction Impacts</p> <p>Plant Farley: Land-Use Impacts; Transmission line rights-of way = MODERATE</p> <p>Plant Farley: Ecological Impacts; Terrestrial ecosystems; Site = MODERATE; Transmission Line right of Way = SMALL to MODERATE</p> <p>Plant Hatch: Ecological Impacts; Terrestrial ecosystems; Transmission Line right of Way = SMALL to MODERATE</p> <p>Plant Barton: Ecological Impacts; Terrestrial ecosystems; Transmission Line right of Way = MODERATE</p> <p>Plant Farley: Ecological Impacts; Aquatic ecosystems; Site = SMALL to MODERATE; Transmission Line right of Way = SMALL to MODERATE</p> <p>Plant Hatch: Ecological Impacts; Aquatic ecosystems; Transmission Line right of Way = SMALL to MODERATE</p> <p>Plant Barton: Ecological Impacts; Aquatic ecosystems; Transmission Line right of Way = SMALL to MODERATE</p> <p>Plant Hatch: Threatened and Endangered species = SMALL to MODERATE</p> <p>Plant Hatch: Aesthetics = SMALL to MODERATE</p> <p>Plant Farley: Aesthetics = SMALL to MODERATE</p> <p>Plant Hatch: Economy = MODERATE (beneficial)</p> <p>Plant Farley: Economy = MODERATE (beneficial)</p> <p>Plant Barton: Recreation = SMALL</p> <p>Plant Hatch: Taxes = SMALL to MODERATE (Beneficial)</p>	9.3	Summary	<p>Table 9.3-2 Characterization of Construction Impacts at the Vogtle and Alternative ESP Sites</p> <p>Plant Farley; Land Use Impacts; Transmission rights of way = SMALL to MODERATE</p> <p>Plant Farley: Ecological Impacts; Terrestrial Ecosystems = SMALL</p> <p>Plant Hatch: Ecological Impacts; Terrestrial Ecosystems = SMALL</p> <p>Plant Barton: Ecological Impacts; Terrestrial Ecosystems = SMALL to MODERATE</p> <p>Plant Farley: Ecological Impacts; Aquatic Ecosystems = SMALL</p> <p>Plant Hatch: Ecological Impacts; Aquatic Ecosystems = SMALL</p> <p>Plant Barton: Ecological Impacts; Aquatic Ecosystems = SMALL</p> <p>Plant Hatch: Threatened and Endangered species = SMALL</p> <p>Plant Hatch: Aesthetics = SMALL</p> <p>Plant Farley: Aesthetics = SMALL</p> <p>Plant Hatch: Economy = SMALL (beneficial)</p> <p>Plant Farley: Economy = SMALL (beneficial)</p> <p>Plant Barton: Recreation = MODERATE</p> <p>Plant Hatch: Taxes = SMALL to LARGE (Beneficial)</p>	Conclusions stated in the DEIS differ from those stated in SNC ER.

**Enclosure 2 - VEGP 3 & 4 Early Site Permit
DEIS Discrepancy Table**

DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
		Plant Farley: Taxes = MODERATE (Beneficial)			Plant Farley: Taxes = SMALL to LARGE (Beneficial)	
		Plant Barton: Taxes = SMALL to MODERATE (Beneficial)			Plant Barton: Taxes = SMALL to LARGE (Beneficial)	
		Plant Hatch: Housing = MODERATE			Plant Hatch: Housing = SMALL to MODERATE	
		Plant Farley: Housing = SMALL			Plant Farley: Housing = SMALL to MODERATE	
		Plant Farley: Public and social services and infrastructure = MODERATE			Plant Farley: Public and Social services = SMALL	
		Plant Hatch: Education = MODERATE			Plant Hatch: Education = SMALL to LARGE	
		Plant Farley: Education = MODERATE			Plant Farley: Education = SMALL to MODERATE	
9.7	Summary of Alternative Site Impacts	Table 9-8: Characterization of Operational Impacts at the Alternative ESP Sites	9.3	Summary	Table 9.3-3: Characterization of Operation Impacts at the Vogtle and Alternative ESP Sites	Conclusions stated in the DEIS differ from those stated in SNC ER.
		Plant Hatch: Aesthetics = SMALL to MODERATE			Plant Hatch: Aesthetics = SMALL	
		Plant Farley: Aesthetics = SMALL to MODERATE			Plant Farley: Aesthetics = SMALL	
		Plant Hatch: Demography = SMALL			Plant Hatch: Demography = SMALL to MODERATE	
		Plant Hatch: Economy = SMALL (beneficial)			Plant Hatch: Economy = SMALL to MODERATE (beneficial)	
		Plant Farley: Economy = SMALL (beneficial)			Plant Farley: Economy = SMALL to MODERATE (beneficial)	
		Plant Barton: Economy = SMALL (beneficial)			Plant Barton: Economy = SMALL to MODERATE (beneficial)	
		Plant Hatch: Taxes = SMALL to LARGE (beneficial)			Plant Hatch: Taxes = SMALL to MODERATE (beneficial)	
		Plant Farley: Taxes = SMALL to LARGE (beneficial)			Plant Farley: Taxes = SMALL to MODERATE (beneficial)	
		Plant Hatch: Transportation = SMALL			Plant Hatch: Transportation = SMALL to MODERATE	
		Plant Farley: Transportation = SMALL			Plant Farley: Transportation = SMALL to MODERATE	
		Plant Hatch: Education = SMALL			Plant Hatch: Education = SMALL to MODERATE	
		Plant Farley: Education = SMALL			Plant Farley: Education = SMALL to MODERATE	
10.1	Comparison of the Proposed Site with the Alternative Sites	Table 10-1: Comparison of Construction Impacts at the VEGP Site and Alternative Sites VEGP: Land-Use Impacts; Transmission Line Rights of Way = MODERATE	9.3	Summary	Table 9.3-2 Characterization of Construction Impacts at the Vogtle and Alternative ESP Sites VEGP: Land Use Impacts; Transmission Line Rights of Way = SMALL to MODERATE	Conclusions stated in the DEIS differ from those stated in SNC ER.

**Enclosure 2 - VEGP 3 & 4 Early Site Permit
DEIS Discrepancy Table**

DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
		Plant Farley: Land-Use Impacts; Transmission line rights-of way = MODERATE			Plant Farley: Land Use Impacts; Transmission rights of way = SMALL to MODERATE	
		Plant Farley: Ecological Impacts; Terrestrial ecosystems; Site = MODERATE; Transmission Line right of Way = SMALL to MODERATE			Plant Farley: Ecological Impacts; Terrestrial Ecosystems = SMALL	
		Plant Barton: Ecological Impacts; Terrestrial ecosystems; Site and Vicinity and Transmission Line right of Way = MODERATE			Plant Barton: Ecological Impacts; Terrestrial Ecosystems = SMALL to MODERATE	
		Plant Hatch: Ecological Impacts; Terrestrial ecosystems; Transmission Line right of Way = SMALL to MODERATE			Plant Hatch: Ecological Impacts; Terrestrial Ecosystems = SMALL	
		VEGP: Ecological Impacts; Terrestrial ecosystems; transmission line = SMALL to MODERATE			VEGP: Ecological Impacts; Terrestrial ecosystems = SMALL	
		Plant Farley: Ecological Impacts; Aquatic ecosystems; Site = SMALL to MODERATE; Transmission Line right of Way = SMALL to MODERATE			Plant Farley: Ecological Impacts; Aquatic Ecosystems = SMALL	
		Plant Hatch: Ecological Impacts; Aquatic ecosystems; Transmission Line right of Way = SMALL to MODERATE			Plant Hatch: Ecological Impacts; Aquatic Ecosystems = SMALL	
		Plant Barton: Ecological Impacts; Aquatic ecosystems; Transmission Line right of Way = SMALL to MODERATE			Plant Barton: Ecological Impacts; Aquatic Ecosystems = SMALL	
		Plant Hatch: Threatened and Endangered species; Transmission Line = SMALL to MODERATE			Plant Hatch: Threatened and Endangered species = SMALL	
		Plant Farley: Threatened and Endangered species; Transmission Line = SMALL to MODERATE			Plant Farley: Threatened and Endangered species = SMALL	
		Plant Barton: Threatened and Endangered species; Transmission Line = SMALL to MODERATE			Plant Barton: Threatened and Endangered species = SMALL	
		VEGP: Threatened and Endangered species; Transmission Line = SMALL to MODERATE			VEGP: Threatened and Endangered species = SMALL	
		Plant Hatch: Aesthetics = SMALL to MODERATE			Plant Hatch: Aesthetics = SMALL	
		Plant Farley: Aesthetics = SMALL to MODERATE			Plant Farley: Aesthetics = SMALL	
		VEGP: Aesthetics = SMALL to MODERATE			VEGP: Aesthetics = SMALL	
		VEGP: Demography = SMALL to MODERATE			VEGP: Demography = SMALL	
		Plant Hatch: Economy = MODERATE (beneficial)			Plant Hatch: Economy = SMALL (beneficial)	
		Plant Farley: Economy = MODERATE (beneficial)			Plant Farley: Economy = SMALL (beneficial)	

**Enclosure 2 - VEGP 3 & 4 Early Site Permit
DEIS Discrepancy Table**

DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
		VEGP: Economy = SMALL to MODERATE (beneficial)			VEGP: Economy = SMALL (beneficial)	
		Plant Hatch: Taxes = SMALL to MODERATE (Beneficial)			Plant Hatch: Taxes = SMALL to LARGE (Beneficial)	
		Plant Farley: Taxes = MODERATE (Beneficial)			Plant Farley: Taxes = SMALL to LARGE (Beneficial)	
		Plant Barton: Taxes = SMALL to MODERATE (Beneficial)			Plant Barton: Taxes = SMALL to LARGE (Beneficial)	
		VEGP: Taxes = SMALL to MODERATE			VEGP: Taxes = SMALL to LARGE	
		Plant Barton: Recreation = SMALL			Plant Barton: Recreation = SMALL to MODERATE	
		Plant Hatch: Housing = MODERATE			Plant Hatch: Housing = SMALL to MODERATE	
		Plant Farley: Housing = SMALL			Plant Farley: Housing = SMALL to MODERATE	
		VEGP: Housing = SMALL			VEGP: Housing = SMALL to MODERATE	
		Plant Farley: Public and social services and infrastructure = MODERATE			Plant Farley: Public and Social services = SMALL	
		Plant Hatch: Education = MODERATE			Plant Hatch: Education = SMALL to LARGE	
		Plant Farley: Education = MODERATE			Plant Farley: Education = SMALL to MODERATE	
		VEGP: Education = SMALL			VEGP: Education = SMALL to MODERATE	
		VEGP: Historic and Cultural Resources = MODERATE			VEGP: Historic and Cultural Resources = SMALL	
10.1	Comparison of the Proposed Site with the Alternative Sites	Table 10-2: Comparison of Operational impacts at the VEGP site and ALternative Sites	9.3	Table 9.3-3: Characterization of Operation Impacts at eh Vogtle and Alternative ESP sites		Conclusions stated in the DEIS differ from those stated in SNC ER.
		Plant Hatch: Aesthetics = SMALL to MODERATE		Plant Hatch: Aesthetics = SMALL		
		Plant Farley: Aesthetics = SMALL to MODERATE		Plant Farley: Aesthetics = SMALL		
		VEGP: Aesthetics = SMALL to MODERATE		VEGP: Aesthetics = SMALL		
		Plant Hatch: Demography = SMALL		Plant Hatch: Demography = SMALL to MODERATE		
		Plant Hatch: Economy = SMALL (beneficial)		Plant Hatch: Economy = SMALL to MODERATE (beneficial)		
		Plant Farley: Economy = SMALL (beneficial)		Plant Farley: Economy = SMALL to MODERATE (beneficial)		
		Plant Barton: Economy = SMALL (beneficial)		Plant Barton: Economy = SMALL to MODERATE (beneficial)		
		Plant Hatch: Taxes = SMALL to LARGE (beneficial)		Plant Hatch: Taxes = SMALL to MODERATE (beneficial)		
		Plant Farley: Taxes = SMALL to LARGE (beneficial)		Plant Farley: Taxes = SMALL to MODERATE (beneficial)		
		VEGP: Taxes = SMALL to LARGE (beneficial)		VEGP: Taxes =SMALL to MODERATE (beneficial)		

**Enclosure 2 - VEGP 3 & 4 Early Site Permit
DEIS Discrepancy Table**

DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
		Plant Hatch: Transportation = SMALL			Plant Hatch: Transportation = SMALL to MODERATE	
		Plant Farley: Transportation = SMALL			Plant Farley: Transportation = SMALL to MODERATE	
		VEGP: Transportation = SMALL			VEGP: Transportation = SMALL to MODERATE	
		Plant Hatch: Education = SMALL			Plant Hatch: Education = SMALL to MODERATE	
		Plant Farley: Education = SMALL			Plant Farley: Education = SMALL to MODERATE	
		VEGP: Education = SMALL			VEGP: Education = SMALL to MODERATE	
11.2.1	Unavoidable Adverse Impacts During Construction	<p>Table 11-1: Unavoidable Adverse Environmental Impacts from Construction of VEGP Units 3 & 4</p> <p>"Ecological (Terrestrial): Adverse impacts based on Southern's application = Yes;" DEIS 11-6</p> <p>"Ecological (Terrestrial): Actions to Mitigate Impacts -- Observed SMP. Obtain CWA Section 404 permit, if applicable, prior to site-preparation activities." DEIS 11-6</p> <p>"Ecological (Terrestrial): Unavoidable Adverse Impacts -- 9 ha (22.5 ac) of wetlands, 113 ha (279 ac) of upland and 1.6 ha (4 ac) of hardwood disturbed on a long-term basis on the VEGP site; new transmission line right-of-way would disturb additional terrestrial habitats." DEIS p. 11-6</p>	10.1.3	Summary of Adverse Environmental Impacts from Construction and Operations	<p>Table 10.1-1 (cont): Construction-Related Unavoidable Adverse Environmental Impacts</p> <p>Terrestrial Ecology: Adverse Impacts: Habitat loss will kill or displace animals; Clearing and grading will kill or displace animals; construction noises could startle or scare animals; birds may collide with tall construction equipment" ER pg 10.1-7</p> <p>Terrestrial Ecology: "Plant footprint...because impacts will be small." ER pg 10.1-7</p> <p>Terrestrial Ecology: "No unavoidable adverse impacts." ER pg. 10.1-7</p>	Conclusions stated in the DEIS differ from those stated in SNC ER
11.2.1	Unavoidable Adverse Impacts During Construction	<p>"Air Quality: Adverse impacts based on Southern's application = Yes;" p. DEIS 11-6</p> <p>"Air Quality: Actions to Mitigate Impacts: Implement actions to reduce fugitive dust." DEIS p. 11-6</p> <p>"Air Quality: Unavoidable Adverse Impacts -- Equipment emissions and fugitive dust from operation of earth-moving equipment are sources of air pollution." DEIS p. 11-6</p>	10.1.3	Summary of Adverse Environmental Impacts from Construction and Operations	<p>"Atmospheric and Meteorological: Adverse Impact: Construction will cause increased air emissions from traffic and construction equipment, and fugitive dust." ER pg. 10.1-9</p> <p>"Atmospheric and Meteorological: Mitigation Measures: Use dust control measures (such as watering, stabilizing disturbed areas, covering trucks); Ensure that construction equipment is well maintained." ER pg. 10.1-9</p> <p>"Air Quality: No unavoidable adverse impacts." ER pg 10.1-9</p>	<p>SNC ER describes the potential adverse impacts more specifically than the DEIS.</p> <p>SNC ER describes the potential mitigation measures more specifically than the DEIS.</p> <p>Conclusions stated in the DEIS differ from those stated in SNC ER.</p>

**Enclosure 2 - VEGP 3 & 4 Early Site Permit
DEIS Discrepancy Table**

DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy		
11.2.2	Unavoidable Adverse Operations during Operations	Table 11-2 Unavoidable Adverse Operations during Operations of VEGP Units 3 and 4. DEIS p. 11-8	10.1.3	Summary of Adverse Environmental Impacts from Construction and Operations	"Table 10.1-2. Operations-Related unavoidable Adverse Environmental Impacts." ER pg. 10.1-10			
		"Land Use: Actions to Mitigate Impacts— Local Land management plans." DEIS p. 11-8			"Land Use: Mitigation Measure – Practice waste minimization to minimize the volume of wastes." ER pg. 10.1-10	Mitigation measures discussed in SNC ER different than those of DEIS.		
		"Land Use: Unavoidable Adverse Impacts – Possible new housing and retail space added in vicinity because of potential growth." DEIS p. 11-8			"Land Use: Unavoidable adverse environmental impacts – Some land will be dedicated to permitted landfills or license disposal facilities and will not be available for other uses." ER pg 10.1-10	Conclusions stated in the DEIS differ from those stated in SNC ER.		
				"Socioeconomic – Adverse impacts based on Southern's Application = Yes" DEIS pg 11-8	10.1.3	Summary of Adverse Environmental Impacts from Construction and Operations	"Socioeconomic – No unavoidable adverse impacts." ER pg 10.1-12	Conclusions stated in the DEIS differ from those stated in SNC ER.
				"Socioeconomic: Actions to Mitigate – Increased tax revenues would offset impacts." DEIS pg 11-8			"Socioeconomic – Mitigation Measure - Population in the region may increase by 2,600 people. No mitigation required." ER pg 10.1-12	Mitigation measures discussed in SNC ER different than those of DEIS.
				"Socioeconomic: Unavoidable adverse impacts – Increased use of service." DEIS pg. 11-8			"Socioeconomic: Unavoidable adverse environmental impacts – The increase tax revenues from construction will support upgrades to additional infrastructure. Housing availability is adequate in the region." ER pg 10.1-12	Conclusions stated in the DEIS differ from those stated in SNC ER.
				"Radiological: Adverse impacts based on Southern's Application = Yes." DEIS pg. 11-8	10.1.3	Summary of Adverse Environmental Impacts from Construction and Operations	"Radiological – No unavoidable adverse impacts." ER pg. 10.1-2	Conclusions stated in the DEIS differ from those stated in SNC ER.
		"Radiological: Actions to Mitigate – Use of as low as reasonably achievable principles." DEIS pg. 11-8	"Radiological: No mitigation required." ER pg. 10.1-2	Conclusions stated in the DEIS differ from those stated in SNC ER.				
		"Radiological: Unavoidable Adverse Impacts – Dose to workers, the public, and biota." DEIS pg. 11-8	"Radiological: All releases will be well below regulatory limits." ER pg. 10.1-2	Conclusions stated in the DEIS differ from those stated in SNC ER.				
11.6.3	Summary of Benefits and Costs	Table 11-3. Summary of Benefits and Costs of the Proposed Action	10.4	Benefit-Cost Analysis	Table 10.4-2 Benefit-Cost Summary	Conclusions stated in the DEIS differ from those stated in SNC ER. SNC requests NRC revise DEIS to achieve conclusions consistent with ER or provide basis for deviation.		
11.5	Irreversible and Irretrievable Commitments of Resources	"13,000,000 ft of cable..." DEIS pg. 11-10	10.2.2	Irretrievable Commitments of Resources	"2,500,000 linear feet of cable for a reactor building and 6,500,000 linear feet of cable for a single unit..." ER pg 10.2-2	Values stated in the DEIS for linear feet of cable used per reactor differ from those stated in SNC ER.		
Appendix G		No discrepancies/comments were noted in Appendix G.						

**Enclosure 2 - VEGP 3 & 4 Early Site Permit
DEIS Discrepancy Table**

DEIS Section No.	DEIS Section Title	Statement Quoted from DEIS	ER Section No.	ER Section Title	Statement Quoted from ER	Summarize Discrepancy
Appendix I		No discrepancies/comments were noted in Appendix I.				
Appendix J	Table J-2	pJ-4, line 6. "Less than 50 acres of mixed and bottom land hardwoods will be lost."	4.1.1.1	The Site	Less than 25 acres of mixed and bottom land hardwoods will be lost.	Values stated in the DEIS differ from those stated in SNC ER.
Appendix J	Table J-2	pJ-12, line 5. "GPC has procedures for implementing this regulation, which involve data gathering on land uses, environmental issues, existing corridors, and cultural resources in the study area; consultation with USFWS, the GDNR, USACE and evaluation of environmental, cultural and land use issues."	4.1.2	Transmission Corridors and Offsite Areas	GPC has procedures for implementing this regulation, which involve data gathering on land uses, environmental issues, existing corridors, and cultural resources in the study area; consultation with the State Historic Preservation Officer, the U.S. Fish and Wildlife Service (USFWS), the Georgia Department of Natural Resources (GDNR), the U.S. Army Corps of Engineers (USACE); and evaluation of environmental, cultural, and land use issues.	The DEIS omits consultation with the SHPO.
Appendix J	Table J-2	pJ-29, line 4. "Most equipment will be located inside structures, reducing the outdoor no"	5.3.4.2	Noise Impacts	Most equipment will be located inside structures, reducing the outdoor noise level.	Typo, missing last word of sentence "ise level"