

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of

DUKE ENERGY CAROLINAS, LLC

(William States Lee III Nuclear Station, Units 1 and 2)

Docket Nos. 52-018-COL
52-019-COL

ORDER

(Transmitting Pre-Hearing Questions)

On August 10, 2016, the Commission issued a notice that it would convene an evidentiary hearing at its Rockville, Maryland headquarters on October 5, 2016, pursuant to section 189a. of the Atomic Energy Act of 1954, as amended, to receive testimony and exhibits in the uncontested portion of the captioned proceeding.¹ In connection with that hearing, pursuant to my authority under 10 C.F.R. § 2.346(a) and (j), Duke Energy Carolinas, LLC (DEC) and the NRC Staff should file written responses to the questions provided in the table below. Responses should be filed by **September 14, 2016**.²

¹ Duke Energy Carolinas, LLC; William States Lee III Nuclear Station, Units 1 and 2, 81 Fed. Reg. 54,622 (Aug. 16, 2016).

² Today I am also issuing a separate order with additional questions for DEC and the Staff. This order is being filed on the non-public docket for this proceeding because it contains sensitive unclassified non-safeguards information (SUNSI).

No.	Category	Subject	Directed to	Question
1	Safety	FSER § 2.4.4; FSAR § 2.4	Staff and Applicant	The analysis and evaluation of downstream dam failure (Final Safety Evaluation Report (FSER) at 2-139) is focused on impacts to safety-related equipment. Please describe the impacts to other structures, systems, and components (SSCs) that are important to safety but not specifically safety-related. Would downstream dam failure impact other systems that could supplement safety-related equipment, such as regulatory treatment of non-safety systems (RTNSS) structures, systems and components? If so, how is the loss of availability of this equipment due to downstream dam failure accounted for in the application, analysis by DEC, and the Staff's evaluation?
2	Safety	FSER § 19.59.4	Staff and Applicant	The Staff concluded "that the quality and completeness of the AP1000 [probabilistic risk assessment (PRA)] are adequate and satisfy the regulatory requirements" (FSER at 19-24). Please describe what measures are in place to ensure that any changes in the as-built configuration of the William States Lee III Nuclear Station (WLS) Units 1 and 2 will be reflected in the final probabilistic risk assessments for events such as internal and external fires, floods and nearby facility accidents.
3	Safety/ Emergency Preparedness	FSER § 13.3	Staff	NSIR/DPR-ISG-01, "Interim Staff Guidance – Emergency Planning for Nuclear Power Plants" (ML113010523) (ISG), "supplements and/or replaces previous guidance given in various documents and generic communications, including several NUREGs, bulletins, information notices (INs), and regulatory issue summaries (RISs), as indicated in the sections that discuss each of the guidance topics" (ISG at 1). Although the ISG is referenced throughout section 13.3 of the FSER, the conclusion statements for some subsections do not document the Staff's review using the ISG. For example, the Staff's interpretation of Planning Standard 10 C.F.R. § 50.47(b)(14), as reflected in NUREG-0654 section II.N, was revised extensively in the ISG (ISG at 27-28). Section 13.3.4.14 of the FSER, however, does not mention the ISG, and in the conclusion for this subsection, the Staff stated "that the information provided in the [combined license application] is consistent with

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4	Safety/ Emergency Preparedness	FSER § 13.3.2	Staff and Applicant	<p>the guidelines in NUREG-0654, Planning Standard N. Therefore, the staff finds the information acceptable and meets the relevant requirements of 10 CFR 50.47(b)(14) and 10 CFR Part 50, Appendix E, Section IV.F, insofar as the information describes the essential elements of advanced planning and the provisions made to cope with emergency situations” (FSER at 13-93). Please explain how NSIR/DPR-ISG-01 was used with respect to the Staff’s review for this planning standard.</p> <p>DEC requested approval to have the WLS Emergency Operations Facility (EOF) located in the Charlotte General Office, where the current EOF for DEC’s McGuire, Catawba, and Oconee Nuclear Stations resides. NRC approval is required in accordance with 10 C.F.R. Part 50, Appendix E, IV.E.8.b, because the location of the Charlotte EOF is greater than 25 miles from the Lee site. DEC proposed what is now License Condition 13-7 to demonstrate the integrated capability and functionality of the EOF.</p> <ol style="list-style-type: none"> a. Did the Staff consider the possibility that additional sites could be impacted by a common event? b. Please explain whether Emergency Response Organization (ERO) training would be required to address events at multiple facilities with possibly different reactor designs. c. What changes, if any, will be required to the EOF to meet any AP1000-specific requirements for the Lee Nuclear Station?
5	Safety	FSER §§ 13.3.4.2, 13.3.4.8	Staff and Applicant	<p>DEC filed a request to have the WLS EOF located in the DEC Charlotte General Office, which is greater than 25 miles from the affected reactor sites. The Staff notes in the FSER that DEC corporate staff provides management and technical support to the ERO and EOF. Currently the EOF is used for DEC’s McGuire Nuclear Station, Catawba Nuclear Station, and Oconee Nuclear Station, and DEC and Duke Energy Progress have submitted a license amendment request to the NRC seeking approval to integrate four additional reactors. The reactor technologies for the existing and proposed</p>

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				<p>nuclear plants for the DEC EOF are well known and understood by a large number of DEC corporate and site staff because those reactor technologies have been in operation for many years.</p> <p>a. Will the WLS EOF be staffed by ERO members from both the corporate and site staff?</p> <p>b. Will the corporate EOF staff supporting WLS require additional technical knowledge or training on the AP1000-specific reactor design? If so, what, if any additional reactor technology training is required for corporate EOF support staff?</p>
6	Safety/ Emergency Preparedness	FSER § 13.3.4.2	Staff and Applicant	<p>Please explain the basis for the determination that the Unit Supervisor would be qualified and available during an accident to act as the Emergency Coordinator when the Shift Manager is unable to fill that role (FSER at 13-29). How would the role and duties of the Unit Supervisor in the control room be fulfilled during an accident if he/she is an Emergency Coordinator?</p>
7	Safety/ Emergency Preparedness	FSER § 13.3.4.2	Staff and Applicant	<p>Based on DEC's response to RAI 25, Question 13.03-55(A), the FSER states that public information (coordination and dissemination) is handled by the EOF (FSER at 13-30). The Emergency Plan, Section G (Emergency Plan at II-36), however, indicates that this role is the responsibility of the Joint Information Center (JIC). Please clarify whether the EOF or the JIC would handle the coordination and dissemination of public information during an emergency.</p>
8	Safety/ Emergency Preparedness	FSER § 13.3.4.2	Staff and Applicant	<p>Based on the Emergency Plan and DEC's responses to RAI 25, Questions 13.3-55(M), (P), (P.2), and (Q), the Staff found that there will be "on-shift capability to perform dose assessment in the determination of emergency classification, onsite protective action, and offsite protective action recommendations" (FSER at 13-30), although it does not appear that there is a designated individual to perform dose assessment functions. Given that</p>

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				Section E.IV.A.4 of 10 C.F.R. Part 50, Appendix E requires "Identification, by position and function to be performed, of persons within the licensee organization who will be responsible for making offsite dose projections," please explain the basis for the Staff's finding.
9	Safety/ Emergency Preparedness	FSER § 13.3.4.4	Staff and Applicant	Please explain whether all relevant Emergency Action Levels (EALs) are in place to support the installed spent fuel pool instrumentation required under Commission Order EA-12-051 and discussed in FSER Chapter 20. Specifically, how will the Staff and DEC assure that EALS addressing the spent fuel pool (AA2.3, AS2, and AG2) specified in NEI 99-01, Revision 6, are implemented?
10	Safety/ Emergency Preparedness	FSER § 13.3.4.6, 13.3.4.8	Staff and Applicant	DEC describes the use of a satellite phone as a communication method during an emergency. Please discuss whether DEC will install a repeater system that would allow for satellite phone use inside a building.
11	Safety/ Emergency Preparedness	FSER § 13.3.4.9	Staff and Applicant	In RAI 25, Question 13.03-62(D)(2), the Staff asked DEC to identify the person responsible for making source term estimates at various stages of the event. DEC responded that "Dose Assessors in the EOF, under the direction of the Radiological Assessment Manager, are responsible for evaluating source terms until the event is terminated" (FSER at 13-72). Who does this work before the EOF is activated (first 75 minutes of the event, assuming a radiological release is in progress)?
12	Safety/Seismic Design	FSER § 3.7	Staff and Applicant	With regard to the seismic design of the Lee Nuclear Station, WLS DEP 2.0-1 discusses a departure from the AP1000 certified design which is necessary because the WLS site-specific horizontal and vertical spectra exceed the Certified Seismic Design Response Spectra and the hard rock high frequency spectra for the AP1000. DEC used Appendix 3I of the AP1000 Design Control Document to identify WLS-specific equipment for which high frequency amplification was important. The Staff's review concluded that DEC adequately demonstrated that the test response spectra for

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13	Safety	License Condition 2.D.(12)(d)12 FSER Chapter 2	Staff and Applicant	<p>representative high frequency sensitive equipment bound the site-specific required response spectra (RRS).</p> <p>In SECY-16-0094, the Staff noted that DEC also committed to ensure that the future qualification testing for high frequency sensitive equipment identified in WLS Units 1 and 2 COLA Appendix 31 will envelope the WLS site-specific RRS. Where is this commitment discussed in the Staff's FSER or DEC's Final Safety Analysis Report (FSAR)? Did DEC or the Staff consider whether this activity should result in a license condition since the WLS site-specific conditions for higher frequencies exceed the AP1000 certified design?</p> <p>As discussed in the FSER Chapter 2, several legacy structures from the Cherokee project require removal. Draft License Condition 2.D.(12)(d)12 would require confirmation that a single legacy Cherokee project stormwater drain line and any associated bedding material representing a potential preferential groundwater pathway have been removed and that the excavation has been backfilled with compacted native soil.</p> <ul style="list-style-type: none"> a. Please describe why addressing this stormwater drain line resulted in a license condition. b. Are other conditions or commitments required for additional legacy Cherokee project structures? If not, why not?
14	Safety	FSER § 2.4	Staff	<p>In its environmental review, the Staff found that DEC's initial water balance calculations did not include data from the 2002-2007 drought years. DEC subsequently revised its water balance calculations to incorporate the 2002-2007 drought years and this led to the proposal to add Make-Up Pond C, which significantly expanded the environmental review of the project. How did this error in the initial water balance calculations affect the Staff's review of the safety aspects of the WLS Units 1 and 2 combined license application?</p>

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15	Environmental	FEIS General	Staff	Please describe the issues that the Staff considered in its review of new and potentially significant information since publication of the Final Environmental Impact Statement (FEIS) in 2013.
16	Environmental	FEIS Chapters 1 and 7	Staff and Applicant	Please describe the site-selection process for Make-Up Pond C, including the consideration of possible alternate locations. To what extent were environmental impacts a factor in the location selection process for Make-Up Pond C?
17	Environmental	FEIS Chapters 4 and 9	Staff and Applicant	Did the decision to add Make-Up Pond C affect the alternative site analysis? For DEC: a. If so, please describe how that analysis changed. For the Staff: b. If so, please describe how the change impacted the Staff's review of alternative sites.
18	Environmental	FEIS Chapter 4; SECY-16-0094, at 23-24	Staff	DEC's decision to include an additional offsite reservoir, Make-Up Pond C, as supplemental storage to Make-Up Ponds A and B required extensive consideration by the Staff as well as the U.S. Army Corps of Engineers (USACE) and the State of South Carolina. The Staff noted that the creation of Make-Up Pond C would "inundate most of the London Creek stream network and forested valley," and would impact "12.46 miles of streams, 3.55 acres of wetlands, and 17.58 acres of open water." In addition, the proposed disturbance of approximately 1100 acres needed to build the reservoir and buffer around Make-Up Pond C would result in "terrestrial impacts of habitat loss and wildlife mortality disturbance and displacement" that "would be substantial and mostly permanent in nature. Creation of Make-Up Pond C would also alter the functionality of the London Creek corridor as a wildlife travel corridor." The Staff noted that impounding the London Creek stream network and building Make-Up Pond C would replace an existing creek

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				<p>system with a deep water lake habitat and that, in time, “the aquatic habitat of the new reservoir would be valuable for other reasons, but it would not mitigate the loss of adjacent terrestrial habitat within the region.” Considering all of these facts, the Staff determined that the construction of Make-Up Pond C would have MODERATE aquatic and terrestrial impacts.</p> <p>a. The Staff noted that the impacts of Make-Up Pond C would “noticeably alter these resources, but the important aspects of these attributes would not be destabilized as habitat and wildlife resources found in the London Creek watershed are also found in other areas in the upstate Piedmont region.” What are the “important attributes” of the subject resources?</p> <p>b. The Staff noted that “though the stream ecosystem in the watershed will be impacted by the construction of Make-Up Pond C, it will be transformed into a deep water ecosystem which would have aquatic ecological value.” To what extent did the “crediting” of the creation of a new deep water ecosystem offset potential impacts from the construction of Make-Up Pond C? Would the impacts have been LARGE if such “credit” was not given?</p>
19	Environmental	FEIS Chapter 4; SECY-16- 0094, at 24	Staff	<p>The Staff noted that building Make-Up Pond C would “noticeably alter [aquatic and terrestrial] resources, but the important aspects of these attributes would not be destabilized as habitat and wildlife resources found in the London Creek watershed are also found in other areas of the upstate Piedmont region.” In section 4.3.1.2 of the FEIS, the Staff observes that “[v]irtually all” of the “high-quality” mixed hardwood and mixed hardwood-pine cover habitats in the London Creek lowlands would be lost (FEIS at 4-33). The affected forest habitat consists primarily of the bluff hardwood forest and lowland hardwood forest subtypes, and “[d]rastic declines of critical lowland hardwood habitats have occurred statewide over the years, but particularly in the upstate, and development of Make-Up Pond C would destroy more of this valuable habitat type and the transitional areas adjacent to it” (FEIS at 4-34).</p>

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				<p>The FEIS also notes the habitat diversity and relatively high environmental integrity of the London Creek site, and the importance of such habitats to the conservation of certain migratory birds. Further, the FEIS states that “[t]he abundance of lowland hardwood forest habitat of this quality elsewhere in the upstate Piedmont is unclear” (FEIS at 4-34). The FEIS also states that “[a]lthough the aquatic resources found in London Creek are not unique to the region, the habitat type is becoming increasingly rare as development in the region increases” (FEIS at 4-78).</p> <ol style="list-style-type: none"> a. How did the Staff reach the conclusions that (1) the “important attributes” of the London Creek watershed are found in other areas of the upstate Piedmont region, and (2) the abundance of such high-quality lowland hardwood forest habitat in other areas of the upstate Piedmont region is unclear? b. What is the relative quality and stability of the habitat and wildlife resources found in the London Creek watershed compared to similar habitats and wildlife resources in the upstate Piedmont region?
20	Environmental	FEIS § 4.3.2.4	Staff	<p>The FEIS states that the habitat type in the London Creek “is becoming increasingly rare” and that the aquatic habitat of Make-Up Pond C “would be valuable for other reasons, but it does not mitigate the loss of riparian habitat within the Piedmont watershed.” Explain how the Staff reached the conclusion that the deep water ecosystem of Make-Up Pond C would have aquatic ecological value. How did the Staff compare the ecological value of this ecosystem to the ecosystem that would be lost with the inundation of London Creek?</p>
21	Environmental	FEIS § 4.3.1.7	Staff	<p>DEC developed a compensatory mitigation plan to comply with USACE mitigation requirements. The two compensatory mitigation sites are Turkey Creek Tract and Woods Ferry Tract, in the Lower Broad River watershed in the Sumter National Forest.</p> <ol style="list-style-type: none"> a. Are the habitat and wildlife resources found in the Turkey Creek Tract

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22	Environmental	SECY-16-0094, at 25	Staff and Applicant	<p>and Woods Ferry Tract similar to those of the London Creek site? If so, are the diversity and environmental integrity of those sites comparable to the London Creek site?</p> <p>b. Did the Staff provide input to the U.S. Forest Service on its EIS in which it assessed the impacts of issuance of the Special Use Permit to DEC for the mitigation projects at the Turkey Creek and Woods Ferry Tracts?</p>
23	Environmental	FEIS Chapter 4; Appendix E	Staff and Applicant	<p>Please summarize the impacts the U.S. Forest Service found in the EIS for the Special Use Permit to complete compensatory mitigation work in the national forest. Were those impacts mostly beneficial or did they include some negative impacts too? If so, how were those negative impacts mitigated?</p> <p>In its comments on the Draft Environmental Impact Statement (DEIS) (Letter from Jay B. Herrington, U.S. FWS, to NRC (March 5, 2012) (ML12083A064)), the U.S. Fish and Wildlife Service (FWS) stated that “additional information is required to provide a complete analysis of the effects of the proposed project on fish and wildlife resources” and provided three recommendations to complete the analysis:</p> <ol style="list-style-type: none"> 1. A survey for snails should be conducted in London Creek and its tributaries, and downstream of the Ninety-Nine Island Dam in the Broad River. 2. A comprehensive survey for the yellow lance below the dam in the Broad River, and downstream areas affected by the discharge from the hydroelectric project, should be conducted because the mussel is currently under a 90-Day Petition Finding for listing under the Endangered Species Act. 3. The applicant should develop and implement a plan to collect the South Carolina State Conservation High and Moderate priority fish

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				<p>species in London Creek and relocate to nearby suitable streams prior to construction of Pond C.</p> <p>For the Staff:</p> <ul style="list-style-type: none"> a. Did the Staff implement either recommendation 1 or 2? b. What was the outcome of the 90-Day Petition Finding? Is the yellow lance still under review for potential listing? <p>For DEC:</p> <ul style="list-style-type: none"> c. Did DEC implement recommendation 3?
24	Environmental	FEIS §§ 4.1.2, 4.5	Staff and Applicant	<p>DEC has removed approximately 86 privately owned housing units from the Make-Up Pond C site since it acquired the land. The Staff concluded that the potential environmental justice impacts of the construction and preconstruction activities would be SMALL.</p> <ul style="list-style-type: none"> a. Did DEC determine whether the residents of the housing units were members of a minority group or of low income? b. Did the Staff assess the environmental justice impacts, if any, on the owners and tenants of the 86 housing units removed from the site? If so, what were those impacts specifically?
25	Environmental	FEIS § 2.12	Staff	<p>The proposed intake and discharge structures for the Lee plant will be constructed in the Ninety-Nine Islands Reservoir, which is under the jurisdiction of the Federal Energy Regulatory Commission (FERC). According to the FEIS, Duke planned to submit an application to FERC in the summer of 2013 to cover the construction of the intake and discharge structures and the withdrawal and discharge of water to and from the reservoir. At the time the FEIS was issued, DEC had initiated early consultation with FERC on the project. Please provide an update on the current status of the project. Would the Staff need to account for any conditions of the FERC permit, if it is issued?</p>

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26	Environmental	FEIS § 2.7.4	Staff	The FEIS states that the USACE entered into a Memorandum of Agreement (MOA) with DEC, the South Carolina State Historic Preservation Officer, and the Catawba Indian Nation as part of its development of a cultural resources management plan for the WLS site. Why isn't the NRC a signatory to the MOA?
27	Environmental	FEIS § 3.4	Staff	In its comments on the DEIS, the U.S. Environmental Protection Agency (EPA) requested that the Staff note in the FEIS that "the operational conditions in the applicant's water-management plan are less stringent" than the requirements in the EPA's Cooling-Water Intake Structure rule for new facilities: 40 C.F.R. § 125.84(a)-(e) (FEIS at 3-44). The EPA conditioned its approval of a National Pollutant Discharge Elimination System (NPDES) permit upon a demonstration that DEC's plan comply with the alternative requirements in 40 C.F.R. § 125.85. According to the FEIS, the South Carolina Department of Health and Environmental Control has since issued an NPDES permit that requires compliance with 40 C.F.R. §§ 125.80-125.89 and Section 316(b) of the Clean Water Act. Since the issuance of the NPDES permit, has the EPA provided any additional comments on DEC's water-management plan, the FEIS discussion, or the Staff's response to its comment in the FEIS?
28	Environmental	FEIS Chapter 7	Staff	Chapter 7 includes a discussion of cumulative impacts from future urbanization in the region surrounding the Lee Nuclear Station site. How did the Staff quantify, or define, this anticipated increased urbanization and its contribution to the cumulative impacts of the project?
29	Environmental	FEIS § 7.6.2	Staff	In CLI-09-21, 70 NRC 927, 930-31 (2009), we stated our expectation that environmental reviews for major licensing actions include a discussion of greenhouse gas (GHG) and carbon footprint impacts. Similar to the FEIS for the proposed Levy Nuclear Plant, the Staff referenced the U.S. Global Change Research Program's 2009 "Global Climate Change Impacts in the

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30	Environmental	FEIS §§ 4.7.1, 5.7.2.2, 6.1.3	Staff	<p>United States” in its discussion of GHG emissions. The U.S. Global Change Research Program issued an updated report in 2014. Did the Staff consider the impacts, if any, of the 2014 report on the findings in the FEIS?</p> <p>With respect to the impacts of GHG emissions, in section 4.7.1 of the FEIS the Staff concluded that “[b]ased on its assessment of the relatively small construction equipment carbon footprint as compared to the United States annual CO2 emissions, the review team concludes that the atmospheric impacts of GHGs from construction and preconstruction activities would not be noticeable and additional mitigation would not be warranted.” The Staff also reached similar conclusions regarding impacts of GHG emissions in sections 5.7.2.2 and 6.1.3 of the FEIS.</p> <p>On August 1, 2016, the Council on Environmental Quality released its “Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews.” In its final guidance, CEQ advised that:</p> <p>Climate change results from the incremental addition of GHG emissions from millions of individual sources, which collectively have a large impact on a global scale. CEQ recognizes that the totality of climate change impacts is not attributable to any single action, but are exacerbated by a series of actions including actions taken pursuant to decisions of the Federal Government. Therefore, a statement that emissions from a proposed Federal action represent only a small fraction of global emissions is essentially a statement about the nature of the climate change challenge, and is not an appropriate basis for deciding whether or to what extent to consider climate change impacts under NEPA. Moreover, these comparisons are also not an appropriate method for characterizing the potential impacts associated with a proposed action and its alternatives and mitigations because this approach does not reveal anything beyond the nature of the climate change challenge itself: the fact that diverse individual</p>

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				<p>sources of emissions each make a relatively small addition to global atmospheric GHG concentrations that collectively have a large impact. When considering GHG emissions and their significance, agencies should use appropriate tools and methodologies for quantifying GHG emissions and comparing GHG quantities across alternative scenarios. Agencies should not limit themselves to calculating a proposed action's emissions as a percentage of sector, nationwide, or global emissions in deciding whether or to what extent to consider climate change impacts under NEPA.</p> <p>a. Has the Staff considered whether CEQ's recently released guidance on NEPA analyses of the impacts on GHG emissions and the effects of climate change constitutes new and potentially significant information?</p> <p>b. Would following this guidance alter the Staff's analyses and conclusions on the impacts of GHG emissions?</p>
31	Environmental	FEIS Appendix H	Staff	Please provide any updates or changes to the Staff's list of authorizations, permits, and certifications since the publication of the FEIS.
32	Environmental	FEIS Chapter 6	Staff and Applicant	How do the impacts of an accident with a radionuclide release during transportation compare to the impacts of a severe accident for the facility (FEIS at 6-36)?
33	Environmental	FEIS Chapter 8	Staff and Applicant	North Carolina requires an Integrated Resource Plan that will yield a "least cost mix of generation and demand reduction activities," while South Carolina requires a program that is "economic and reliable" (FEIS at 8-7). Are the North Carolina and South Carolina regulations governing the development of an Integrated Resource Plan consistent with each other? If there are tensions between the two sets of requirements, how did DEC and the Staff address them for a project like Lee that services both states? Does Table 8-1 reflect the North Carolina process, the South Carolina process, or

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				both processes?
34	Environmental	FEIS Chapter 9	Staff and Applicant	For the Combination Alternative, the text suggests that "Make-Up Pond C may not be required" but Table 9-3 indicates, "Land would be required for even a smaller version of Make-Up Pond C" (FEIS at 9-35). Would this alternative require Make-Up Pond C? If not, would the impacts on historic and archeological resources still be SMALL?
35	Environmental	FEIS Chapter 9	Staff and Applicant	The Environmental Justice analysis for each alternate site notes, "The review team did not identify any Native American communities or other minority communities with the potential for a disproportionately high and adverse impact due to their unique characteristics or practices" (FEIS at 9-84; see also FEIS at 9-140, and 9-191). Does this determination include a consideration of subsistence hunting, fishing, or gathering?
36	Environmental	FEIS, Chapter 9		Please explain why the "[i]mpacts on aquatic resources from the transmission lines and rail-road spur installation [for the Keowee site] would be similar to those described for the proposed Lee Nuclear Station site in Section 4.3.2" (FEIS at 9-130) when the WLS site would require 31 miles of additional transmission lines (FEIS at 4-73) while the Keowee site would require just 1.3 miles of transmission lines (FEIS at 9-106).
37	Environmental	FEIS Chapter 9	Staff and Applicant	Please account for the variation in size of the proposed cooling reservoirs for the WLS site (1100 acres (FEIS at 7-12)) and the alternative sites at Middleton Shoals (3700 acres (FEIS at 9-162)), Keowee (1300 acres (FEIS at 9-106)), and Perkins (1500 acres (FEIS at 9-54)).
38	Environmental	FEIS Chapter 9	Staff and Applicant	For water supply alternatives, was an expansion of Make-Up Pond A considered (in addition to the discussed expansion of Make-Up Pond B (FEIS at 9-215))? If so, what were the results of that consideration; if not, why was that alternative not explored further?

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39	Environmental	FEIS §§ 2.7, 4.6, Appendix F	Staff	<p>A general license for an independent spent fuel storage installation (ISFSI) is issued under 10 C.F.R. § 72.210 to all combined license holders.</p> <ol style="list-style-type: none"> Did the Staff explicitly consult with the South Carolina State Historic Preservation Officer (SHPO) and Tribes on the issuance of a general license to DEC for an ISFSI at WLS? If the Staff did not inform the SHPO and Tribes about the general license for an ISFSI during consultation, did the Staff inform them after consultation? If so, what was their response? If the Staff did not inform the SHPO and Tribes of the general license for an ISFSI during consultation, explain why the Staff's NHPA consultation was adequate. What requirements or procedures would ensure that historic and cultural resources are adequately protected if DEC constructs an ISFSI?
40	Environmental	FEIS §§ 2.7.3.2, 4.6.2	Staff	<p>The possible grave site identified in the direct, physical Area of Potential Effects of transmission line Route O is protected by several South Carolina statutes. Further, the requirements of the Native American Graves Protection and Repatriation Act (NAGPRA) may apply if the remains are Native American.</p> <ol style="list-style-type: none"> Have any further investigations revealed whether the remains in this grave site are Native American? Briefly describe the NAGPRA requirements that would apply if the remains are Native American. What NAGPRA requirements would specifically apply to the NRC, if any?

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IT IS SO ORDERED.

For the Commission

NRC SEAL

/RA/

Annette L. Vietti-Cook
Secretary of the Commission

Dated at Rockville, Maryland,
this 1st day of September, 2016.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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)
(Mandatory Hearing))

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing **ORDER (Transmitting Pre-Hearing Questions)** have been served upon the following persons by Electronic Information Exchange.

Office of Commission Appellate
Adjudication
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

E-mail: ocaamail@nrc.gov

U.S. Nuclear Regulatory Commission
Office of the Secretary of the Commission
Mail Stop O-16C1
Washington, DC 20555-0001

E-mail: hearingdocket@nrc.gov

U.S. Nuclear Regulatory Commission
Office of the General Counsel
Mail Stop - O-15 D21
Washington, DC 20555-0001
Megan Wright, Esq.
Anita Ghosh, Esq.
Marcia Carpentier, Esq.
Ian Irvin, Esq.
Garrett Henderson, Esq.
Patrick Moulding, Esq.

E-mail: megan.wright@nrc.gov
anita.ghosh@nrc.gov
marcia.carpentier@nrc.gov
ian.irvin@nrc.gov
garrett.henderson@nrc.gov
patrick.moulding@nrc.gov

Duke Energy Corporation
526 South Church Street – EC07H
Charlotte, NC 28202
Kate Barber Nolan, Assistant General Counsel
E-mail: kbnolan@duke-energy.com

Pillsbury Winthrop Shaw Pittman, LLP
1200 Seventeenth Street NW
Washington, DC 20036
David R. Lewis, Esq.
E-mail: david.lewis@pillsburylaw.com;

[Original signed by Herald M. Speiser]
Office of the Secretary of the Commission

Dated at Rockville, Maryland
this 1st day of September, 2016