

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In The Matter Of

SOUTH CAROLINA ELECTRIC & GAS COMPANY
AND SOUTH CAROLINA PUBLIC SERVICE
AUTHORITY (ALSO REFERRED TO AS SANTEE
COOPER)

(Virgil C. Summer Nuclear Station, Units 2 and 3)

Docket Nos.
52-027-COL & 52-028-COL

ORDER

(Transmitting Pre-Hearing Questions)

On August 26, 2011, the Commission issued its notice that it would convene an evidentiary hearing at its Rockville, Maryland headquarters on October 12, 2011, pursuant to section 189(a) of the Atomic Energy Act, 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), South Carolina Electric and Gas Company and South Carolina Public Service Authority (Applicant) and the NRC Staff should file written responses to the questions presented in the table, below. Responses should be filed by **September 28, 2011.**

¹ See Notice of Hearing: South Carolina Public Service Authority (also referred to as Santee Cooper); Combined Licenses for Virgil C. Summer Nuclear Station, Units 2 and 3, 76 Fed. Reg. 53,492 (Aug. 26, 2011).

PRE-HEARING QUESTIONS²

<u>No.</u>	<u>Category</u>	<u>Reference</u>	<u>Directed To</u>	<u>Question</u>
1	Safety	General	Staff	<p>Near-Term Task Force Recommendations</p> <p>a) In SECY-11-0115, the Staff presents two options available to the Commission for implementing the Near-Term Task Force recommendations for the VCSNS, Units 2 and 3 combined licenses, but the Staff did not express a preference for either of the two options. Which of the two options would the Staff recommend be applied to the VCSNS, Units 2 and 3 combined licenses?</p> <p>b) How much time and effort would it take the Staff to fully implement the Near-Term Task Force recommendations for near-term combined license applications as license conditions for VCSNS, Units 2 and 3? As inspections, tests, analyses and acceptance criteria for VCSNS, Units 2 and 3?</p> <p>c) Would the NRC Staff face any additional administrative or regulatory hurdles if the implementation of the near-term task force recommendations were delayed until after the VCSNS, Units 2 and 3 combined licenses are issued?</p> <p>d) Considering that the Fukushima accident clearly indicates that multiple concurrent events can occur at a multi-reactor site, why is the Staff confident that the finding that the license is not “inimical” to the health and safety of the public has been met? Did the Staff consider accident scenarios that required a response to concurrent</p>

² Acronyms used in the table: COL (Combined License); DAC (Design Acceptance Criteria); EIS (Environmental Impact Statement); EPZ (Emergency Planning Zone); Departure (DEP); ESP (Early Site Permit); FEIS (Final Environmental Impact Statement); FSER (Final Safety Evaluation Report); ISG (Interim Staff Guidance); MC&A (Material Control and Accounting); PARs (Preliminary Acceptability Reviews); RCOL (Reference Combined License); SCE&G (South Carolina Electric & Gas Company); SECY (Office of the Secretary of the Commission); USACE (U.S. Army Corps of Engineers); (VCSNS) Virgil C. Summer Nuclear Station.

<u>No.</u>	<u>Category</u>	<u>Reference</u>	<u>Directed To</u>	<u>Question</u>
				<p>events at multiple reactors and/or spent fuel storage facilities at the VCSNS site?</p> <p>e) Which parts of the VCSNS, Units 2 and 3 draft licenses and final safety evaluation report (FSER) would need to be modified in order to implement all the recommendations of the Near-Term Task Force that are applicable to design certifications or combined licenses?</p>
2	Safety	General	Staff	<p>The VCSNS, Units 2 and 3 draft combined licenses seem to contain a provision that would allow the licensee to make changes to the design prior to receiving NRC approval. Inclusion of such a provision seems contrary to the spirit of the finding that the facility will be constructed in accordance with the combined license. How is the Staff able to make the finding that the facility will be constructed in accordance with the license, if the COL holder can make changes prior to receiving NRC approval?</p>
3	Safety	General	Staff	<p>Pre-Operational Testing License Condition</p> <p>a) Each of the tests listed under heading (a) contains a note that test is to be performed by the first plant or the first three plants. Will this condition be included in all AP1000 combined licenses until a plant or the first three plants have completed the tests?</p> <p>b) Since this license condition would only have to be implemented by the first AP1000 or the first three AP1000s constructed, if the construction and operation of the VCSNS, Units 2 and 3 proceeds at a pace that it is not the first or among the first three that conducts the required test, how is the need to conduct or not conduct the tests communicated to the licensee?</p> <p>c) If the results of the tests identified in section (a) of the pre-operational testing license condition are not within an acceptable range, what actions are the first and subsequent "plants" required to perform? Where is that requirement</p>

<u>No.</u>	<u>Category</u>	<u>Reference</u>	<u>Directed To</u>	<u>Question</u>
				described?
4	Safety	General	Staff	What criteria were used to decide which operational programs to include in the operational program implementation license condition?
5	Safety	General	Staff & Applicant	Does the VCSNS site fall within the portion of the country that is being addressed under Generic Safety Issue 199, "Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States on Existing Plants?" If so, how did the applicant address the concerns stated in Generic Safety Issue 199?
6	Safety	FSEER (general) & draft COL	Staff	Please provide a summary of how the DAC from the certified design were addressed in the context of this COL.
7	Safety	General	Staff	Please provide a summary of the differences between this application and the reference COL that has already been presented to the Commission.
8	Safety	General	Staff	SECY-11-0115 describes a deviation from the 10- mile EPZ in some areas that are less than 10 miles from the plant site and describes the justification for this change. The justification is based on current land use for property not owned by the applicant. What triggers the licensee to re-evaluate this EPZ should the land use change from logging to an activity consisting of higher population density, such as a school? How does this differ from the EPZ configuration associated with the current unit?
9	Safety	General	Staff	The draft license contains requirements for safety testing to validate safety system performance such as the emergency core cooling system. Three of these five tests are "first plant only" tests. This would mean that after the first AP1000 unit is built anywhere in the country, the subsequent plants would not require the first plant only testing. The justification in the FSEER section 14.2.5.4 relies largely on administrative controls by the first plant. Why is a single test for such important safety systems sufficient to protect the health and safety

<u>No.</u>	<u>Category</u>	<u>Reference</u>	<u>Directed To</u>	<u>Question</u>
				of the public?
10	Safety	SECY-11-115 p. 4	Applicant	The COL for Unit 3 includes a license condition for geologic mapping of excavation. This license condition is not included in the COL for Unit 2 because this activity has already been performed. Why was this activity previously performed for Unit 2 but not for Unit 3?
11	Safety	FSER Sec. 1.5.4 SECY-11-115 p. 11	Staff	The Staff states that the MC&A program exemption request was similar to an exemption requested by the Vogtle RCOL applicant. Please explain noteworthy differences between the two exemption requests, if any.
12	Safety	VCS DEP 2.0-2 FSER Sec. 2.0.4 SECY-11-115 p. 12	a) Applicant b) Staff	a) Please explain the need for the departure regarding the maximum safety wet bulb air temperature. b) Is the departure regarding the maximum safety wet bulb air temperature a unique departure for the Summer COL, or is it expected for other COL applications referencing the AP1000 certified design?
13	Safety	VCS DEP 18.8-1 SECY-11-115 p. 13 FSER Attach. 13.3A	Applicant	Please provide a map of the EPZ for Units 2 & 3 (or a reference to an RAI response containing a map).
14	Safety	SECY-11-115 p. 23	Staff	Please identify the license conditions for implementing operational programs that were required in order to reach the reasonable assurance finding.
15	Safety	Draft license section 2.D.(1)	Staff	Draft license section 2.D.(1) <u>Changes During Construction</u> references COL-ISG-025, "Changes during Construction under Part 52." When will this interim Staff guidance be made final? What public comments have been received other than from industry? To what extent do we expect this to be used by SCE&G? How many License Amendment Request Preliminary Acceptability Reviews do we expect the applicant to submit each year?

<u>No.</u>	<u>Category</u>	<u>Reference</u>	<u>Directed To</u>	<u>Question</u>
				Have we tried to exercise this ISG in a table top all the way through the process with various types of PARs?
16	Environmental	General	Staff	Because you identified populations near the site that were potentially vulnerable to disproportionately large adverse environmental impacts, additional analysis was conducted to assess the potential impacts of significant pathways for human health and welfare effects. Aside from information obtained from SCE&G, the public scoping process and interviews with local officials, the information paper states that you conducted an independent evaluation and confirmatory analysis. Please describe the evaluation and confirmation process you followed and the conclusions you reached.
17	Environmental	General	Staff	Did the applicant propose any novel approaches in the environmental portion of its application? How did the Staff address these approaches?
18	Environmental	General	Staff	Please summarize differences between the environmental portion of the review for this COL application and the reviews for previously-issued ESPs.
19	Environmental	General	Staff	The draft license for VCSNS contains an environmental protection plan. This plan cites Unusual Events. Are these Unusual Events different from Unusual Events in the Emergency Plan discussed in the FSAR and FSER and do they drive a different plant response? If they are different, why use the same terminology? If they are the same, do they drive the same plant response?
20	Environmental	General	Staff	The various safety-related license requirements are well documented in the FSER. However, there are additional license requirements for the environmental protection plan that are attached to the draft license. Where in the FEIS are they evaluated?
21	Environmental	General	Staff	Section 4.2 of the draft license environmental protection plan cites a license requirement to perform independent review and audit of section 2.3 of the Endangered Species Act of 1973. This

<u>No.</u>	<u>Category</u>	<u>Reference</u>	<u>Directed To</u>	<u>Question</u>
				license requirement appears to be lacking in specificity for the frequency, depth, and scope of review. Where is the requirement discussed in the Staff's evaluation and what are the performance requirements to satisfy this license?
22	Environmental	General	Staff	SECY-11-0115 states that the USACE has not made a final permit decision. When do we expect this decision to be issued? Do we know that it will not contain any contrary information from our conclusions? Can we conduct the hearing and issue the license prior to the USACE issuing its Record of Decision?
23	Environmental	General	Staff	SECY-11-0115 also notes that SCE&G has not yet received from the South Carolina Department of Health and Environmental Control the certification required under Section 401 of the Clean Water Act. The Clean Water Act prohibits the NRC from issuing the license until the certification is received. Have we reviewed the responsibilities of other regulatory agencies to assure ourselves that we are properly coordinating our COL issuance with any required decisions or permits that they must render before us?
24	Environmental	General	Staff	Describe the areas of the FEIS which were developed differently from existing NRC guidance or regulations due to cooperation with the USACE (e.g., alternatives and description of preconstruction activities).
25	Environmental	FEIS Table 4-7, FEIS p. 4-89	Staff	What is the relationship between the measures and controls to limit adverse impacts listed in Table 4-7 of the FEIS, the Construction Environmental Controls Plan referenced on page 4-89 of the FEIS, and the Environmental Protection Plan that is required by the NRC license? Address whether measures and controls outside of the NRC's regulatory jurisdiction were described in the FEIS.

<u>No.</u>	<u>Category</u>	<u>Reference</u>	<u>Directed To</u>	<u>Question</u>
26	Environmental	FEIS App. D SECY-11-115 p. 17	Staff	The Staff used a unique approach to public outreach for the environmental scoping process. Does the Staff believe that this approach was successful in garnering meaningful public comments, and would Staff consider using this approach again in similar circumstances?
27	Environmental	FEIS App. E	Staff	Please highlight major themes from the comments on the DEIS, and generally describe the Staff's responses to those comments.
28	Environmental	SECY-11-115 p. 19	Staff	Please identify the SCE&G commitments intended to mitigate the traffic-related impacts related to building the additional units.
29	Environmental	SECY-11-115 p. 19	Staff	Since this was the first COL FEIS completed under the Memorandum of Understanding with USACE, are there any lessons learned that the Staff would apply to future COL FEIS reviews?
30	Environmental	SECY-11-115 p. 26	Applicant	Is there a projected timeline for a decision by the South Carolina Department of Health and Environmental Control regarding the Section 401 Clean Water Act certification?

IT IS SO ORDERED.

For the Commission

[SEAL]

/RA/

Annette L. Vietti-Cook
Secretary of the Commission

Dated at Rockville, Maryland,
this 15th day of September 2011.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
SOUTH CAROLINA ELECTRIC)
AND GAS COMPANY, ACTING FOR ITSELF)
AND AS AGENT FOR THE SOUTH CAROLINA) Docket Nos. 52-027-COL and 52-028-COL
PUBLIC SERVICE AUTHORITY (ALSO)
REFERRED TO AS SANTEE COOPER))
)
(Virgil C. Summer Nuclear Station, Units 2 and 3))
)
(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
Mail Stop: O-16C1
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
ocaamail@nrc.gov

U.S. Nuclear Regulatory Commission
Office of the Secretary of the Commission
Mail Stop O-16C1
Washington, DC 20555-0001
Hearing Docket
hearingdocket@nrc.gov

U.S. Nuclear Regulatory Commission
Office of the General Counsel
Mail Stop O-15D21
Washington, DC 20555-0001
Marian Zabler, Esq.
Patrick Moulding, Esq.
Sara Kirkwood, Esq.
Jody Martin, Esq.
Sarah Price, Esq.
Kevin Roach, Esq.
Karin Francis, Paralegal
Joseph Gilman, Paralegal
E-mail:
marian.zabler@nrc.gov
patrick.moulding@nrc.gov
sara.kirkwood@nrc.gov
jody.martin@nrc.gov
sara.price@nrc.gov
kevin.roach@nrc.gov
karin.francis@nrc.gov
joseph.gilman@nrc.gov

OGC Mail Center: OGCMailCenter@nrc.gov

SCANA Corporation
1426 Main Street
Columbia, South Carolina 29201
Alvis J. Bynum, Jr.
Associate General Counsel for Major Projects
abynum@scana.com

Docket Nos. 52-027 and 52-028-COL
ORDER (Transmitting Pre-Hearing Questions)

Morgan, Lewis & Bockius, LLP
Co-Counsel for Southern Nuclear Operating
Company, Inc.

1111 Pennsylvania Ave., NW
Washington, DC 20004

Kathryn M. Sutton, Esq.

Lawrence J. Chandler, Esq.

Stephen Burdick, Esq.

Mary Freeze

E-mail: ksutton@morganlewis.com

lchandler@morganlewis.com

sburdick@morganlewis.com

mfreeze@morganlewis.com

[Original signed by Nancy Greathead]
Office of the Secretary of the Commission

Dated at Rockville, Maryland
this 15th day of September 2011