

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

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|---|------------------------|
| _____) | |
| In the Matter of) | Docket Nos. 52-027-COL |
|) | 52-028-COL |
| SOUTH CAROLINA ELECTRIC & GAS) | |
| COMPANY AND SOUTH CAROLINA) | |
| PUBLIC SERVICE AUTHORITY (ALSO) | |
| REFERRED TO AS SANTEE COOPER)) | |
|) | |
| (Virgil C. Summer Nuclear Station Units 2) | October 27, 2011 |
| and 3)) | |
| _____) | |

**SOUTH CAROLINA ELECTRIC & GAS COMPANY’S SUPPLEMENTAL RESPONSES
TO IN-HEARING QUESTIONS AND RESPONSES TO POST-HEARING QUESTIONS
FOR THE V.C. SUMMER UNITS 2 AND 3 MANDATORY HEARING**

South Carolina Electric & Gas Company (SCE&G) provides the following responses to the questions in the Commission’s October 20, 2011 Order (Supplemental Responses and Post-Hearing Questions) regarding the mandatory hearing for V.C. Summer Units 2 and 3. SCE&G’s answers are limited to those questions directed to it and are divided into the supplemental responses to in-hearing questions and the responses to post-hearing questions.

SUPPLEMENTAL RESPONSES TO IN-HEARING QUESTIONS

| Item | Date | Panel | Transcript page(s) and line number(s) |
|--|---------------|----------------|--|
| F | Oct. 12, 2011 | Safety Panel 1 | p. 116, lines 22-25; p. 117, lines 1-5 |
| <p>Transcript Quotation: <u>Page 116</u> 22 the applicant first. On applicant slide 14, there's a statement that 23 Marine, military, air, nautical and additional industrial hazards are 24 not applicable, or probabilistically insignificant. As a point of 25 clarification, could you define the term probabilistically insignificant <u>Page 117</u> 1 as used in this context? 2 AMY MONROE: If you'll allow me to check my notes, which I 3 don't have available right now, I could provide you with that response. 4 COMMISSIONER SVINICKI: Okay, I can submit that for a post 5 hearing question, thank you. And on applicant slide eight, could you</p> | | | |

Response: (Amy M. Monroe)

SCE&G provided a response to this in-hearing question during the mandatory hearing. Specifically, Ms. Monroe stated the following (Transcript, Page 137, Lines 1-6):

Commissioner Svinicki, in the last panel, you asked me about the definition for what was probabilistically insignificant[.] [P]rior to providing you that response, I wanted to verify [in the] application that I had my value correct. But I did confirm that for the purposes of hazardous evaluation, it's considered probabilistically insignificant if the event frequency [is] less than 10 to the minus 7. Thank you.

While the above response is fully accurate, the following additional information provides a more detailed response to the in-hearing question:

Following the guidance of NUREG-0800 (Section 2.2.3, Subsection II) and Regulatory Guide 1.206 (Section C.I.2.2.3.1), for the purposes of the hazards evaluation, an event is considered probabilistically insignificant (*i.e.*, not considered a design-basis accident) if the event frequency is on the order of magnitude of 10^{-7} or less.

| Item | Date | Panel | Transcript page(s) and line number(s) |
|--|---------------|----------------|---------------------------------------|
| G | Oct. 12, 2011 | Safety Panel 1 | p. 117, lines 5-15 |
| <p>Transcript Quotation: <u>Page 117</u> 5 hearing question, thank you. And on applicant slide eight, could you 6 explain in layman's terms or something akin to that, the linear 7 regression analysis used to develop the 100 year return value of the wet 8 bulb temperatures, specifically, was it necessary, why was it necessary 9 or appropriate to do a regression analysis? Would that be a typical 10 approach, in your view, to this type of analysis? And is there a 11 generally accepted methodology for doing that type of analysis? And if 12 so, did you use it in this instance? 13 AMY MONROE: Again, I would like to refrain from providing a 14 response at this point, and provide it to you as subsequent to the 15 hearing, please.</p> | | | |

Response: (Amy M. Monroe)

The data summaries from which the maximum and minimum temperatures were developed do not include values that represent return intervals of 100 years. Therefore, the use of a mathematical analysis was necessary in order to obtain the 100-year return value. The maximum wet bulb temperatures (as well as the maximum and minimum dry bulb temperatures) corresponding to a 100-year return period were derived through linear regression using the corresponding individual daily maximum and minimum temperatures recorded over 30 years (*i.e.*, from 1966 through 1995) at the Columbia, South Carolina, National Weather Service (NWS) station. The Columbia, South Carolina, NWS station was selected because it is the nearest first order NWS station and the conditions there are comparable to those at the V.C. Summer site.

Linear regression is an approach commonly used in statistics to evaluate the relationship between a scalar variable and one or more other variables. Linear regression was the first type of regression analysis to be studied rigorously, and to be used extensively in practical applications. Linear regression models are often fitted using the least squares approach. This method calculates the best-fitting line for the observed data by minimizing the sum of the squares of the deviations from each data point to the line. Therefore, if a point lies on the fitted line exactly, then its deviation is 0.

The linear regression, based on a least squares fit, is a technique commonly used in the atmospheric sciences to extrapolate data (such as temperatures) to obtain a longer return period. Based on the linear regression analyses of the data sets, the maximum (non-coincident) wet bulb temperature for a 100-year return period is estimated to be 87.3°F.

| Item | Date | Panel | Transcript page(s) and line number(s) |
|--|---------------|----------------|--|
| I | Oct. 12, 2011 | Safety Panel 2 | p. 163, lines 1-10; p. 164, lines 8-16 |
| <p>Transcript Quotation:</p> <p><u>Page 163</u></p> <p>1 seismic hazards analysis. Could an applicant witness just take a moment 2 or two and describe the analysis in terms of, I don't know a better term 3 than kind of "State-of-the-art" or "Cutting edge" where the analysis 4 tools and techniques that were used, where you're working on the 5 advanced edge of knowledge in terms of probabilistic seismic hazards 6 analysis and a metric that might help characterize it as well as how 7 many analysis hours or labor hours do you think were spent in 8 development of this analysis?</p> <p>9 ROBERT WHORTON: Bob Whorton, South Carolina Electric and 10 Gas. I don't know if I can answer the number of man hours that went <u>Page 164</u></p> <p>8 COMMISSIONER SVINICKI: That description is helpful. Would 9 it be problematic or difficult to give or provide later an estimate of 10 just a rough order of magnitude of the amount of labor hours or the 11 full-time work that went into that? Is that something you could 12 provide? Just and it just has to be an order of magnitude estimate.</p> <p>13 ROBERT WHORTON: I don't think we've looked at it in that 14 detail at this point --</p> <p>15 COMMISSIONER SVINICKI: Okay.</p> <p>16 ROBERT WHORTON: -- but we can do that.</p> | | | |

Response: (Robert B. Whorton)

SCE&G estimates that the development of the final product, the Ground Motion Response Spectra (GMRS), required on the order of 2800 man-hours. This estimate includes the time of SCE&G's technical specialists and contract consultants to perform assessments and incorporate updates to the 1989 EPRI seismic source characterization model, conduct probabilistic seismic hazard analyses using the EPRI 2004-2006 ground motion attenuation model, and to develop the GMRS in accordance with ASCE/SEI 43-05. Each step of the process required development, review, approval, and Quality Assurance oversight of associated design calculations.

Additionally, the Seismic Technical Advisory Group (TAG), comprised of nationally recognized subject matter experts, was created to oversee the effort and provide expert panel input into each step of the process. Their hours are included in this estimate. This Seismic TAG was found to be a valuable asset in the process in part because the group was able to provide a very knowledgeable overview of the process, and direct activities to keep the process moving forward.

| Item | Date | Panel | Transcript page(s) and line number(s) |
|--|---------------|-----------------------|---|
| L | Oct. 13, 2011 | Environmental Panel 1 | p. 285, lines 14-25; p. 286, lines 1-17 |
| Transcript Quotation: | | | |
| <u>Page 285</u> | | | |
| 14 COMMISSIONER OSTENDORFF: Thank you, Mr. Chairman. Thank you all | | | |
| 15 for your presentations today. I'll start off the applicant in the area of | | | |
| 16 groundwater contamination. Can you talk -- can somebody address how you plan | | | |
| 17 to minimize the groundwater contamination? | | | |
| 18 STEPHEN SUMMER: Generally, the site does not have a major aquifer. | | | |
| 19 The water table tends to sit on top of the granite in that decomposed rock area | | | |
| 20 with some water in the cracks in the granite; so water wells are low-producing | | | |
| 21 in the area and also transmission of any contaminated floats [spelled | | | |
| 22 phonetically] tend to take a long time to get to a person or -- the word's | | | |
| 23 escaping me -- the receptors -- yes, thank you. | | | |
| 24 Evaluation looked at those float pathways off site. I'm -- I'm not | | | |
| 25 able to speak about the actual design of the facility. I know we will have -- | | | |
| <u>Page 286</u> | | | |
| 1 I expect we'll have groundwater wells put in place. | | | |
| 2 Right now, we put in groundwater wells before pre-construction | | | |
| 3 activities and monitored those, but some of those had to go away with the | | | |
| 4 pre-construction. There'll be new groundwater wells put in, and we can monitor | | | |
| 5 that. As far as spills that may occur inside the plant, I'm not able to | | | |
| 6 address that. | | | |
| 7 APRIL RICE: I guess I would add that Mr. Schmidt yesterday talked | | | |
| 8 a little bit about the wastewater discharge line and the fact that we will meet | | | |
| 9 the NEI guidance for providing groundwater monitoring wells, if that was your | | | |
| 10 specific question. | | | |
| 11 COMMISSIONER OSTENDORFF: Well, I know that that was the one | | | |
| 12 subset -- | | | |
| 13 APRIL RICE: Right. | | | |
| 14 COMMISSIONER OSTENDORFF: -- that was discussed yesterday | | | |
| 15 afternoon, but I just [inaudible] that was just one system though. It's not | | | |
| 16 necessarily a comprehensive piece. I'd ask you to take that question for the | | | |
| 17 record and provide a full response on that. | | | |

Response: (Timothy W. Schmidt)

As discussed in detail in subsections 11.2.1 and 12.1.2 of Revision 19 to the AP1000 Design Control Document (DCD), the standard plant design contains features to minimize radiological groundwater contamination in accordance with 10 CFR 20.1406. For example, consideration has been given to radioactive piping and fuel pool designs, and as described in the DCD, these features minimize the potential for leakage and allow for the capability to be able to identify leakage. In addition, site-specific design features associated with the disposition of treated liquid radwaste effluent are noted in subsection 11.2.1.2.4 of the Final Safety Analysis Report (FSAR), Revision 5, in accordance with 10 CFR 20.1406.

A groundwater monitoring program beyond the normal radioactive effluent monitoring program will be developed as described in Appendix 12AA of the FSAR. The groundwater monitoring program adopts the NRC-endorsed Nuclear Energy Institute (NEI) template, NEI 08-08A “Generic FSAR Template Guidance for Life Cycle Minimization of Contamination.” In accordance with the template, the groundwater monitoring program will ensure there is timely detection of inadvertent radiological releases to groundwater.

In addition to consideration to radiological groundwater contamination, the AP1000 standard plant also contains features to minimize groundwater contamination from pollutants. As noted in subsection 9.5.4 of the DCD, these features include above ground fuel oil storage tanks and use of a guard pipe containment system for below ground fuel oil transfer piping. In addition, the AP1000 waste water system (described in subsection 9.2.9 of the DCD) collects and processes equipment and floor drains from nonradioactive building areas. The site-specific waste water retention basin design (described in subsection 9.2.9.2.2 of the FSAR) includes a lining to ensure that basin contents do not leach into the ground. Provisions are also made for the collection and processing of wastewater from the transformer area and the fuel oil storage area.

As noted in subsection 5.2.3.1.2 of the V.C. Summer Units 2 and 3 Environmental Report, Revision 2, SCE&G will utilize a Spill Prevention, Control, and Countermeasures Plan and Facility Response Plan. This plan will address any minor spills of diesel fuel, hydraulic fluid, or lubricants during operations. A similar plan is already in place and being utilized during the pre-construction and construction phases of the project.

The disposition of wastewater will be controlled by a National Pollutant Discharge Elimination System (NPDES) Permit. This permit is obtained from the South Carolina Department of Health and Environmental Control and may include additional provisions for groundwater monitoring. SCE&G will implement a groundwater monitoring plan as directed by the State and required by the NPDES permit.

RESPONSES TO POST-HEARING QUESTIONS

| Question No. | Category | Reference | Question |
|--------------|----------|-----------|--|
| 1b | Safety | General | In the event the Commission decides to impose a license condition requiring implementation of all Commission-approved recommendations from the near-term task force report, what language would you recommend. |

Response: (Alfred M. Paglia, Jr.)

SCE&G does not believe that a license condition is necessary to ensure effective and timely implementation of any future Commission-approved recommendations issued in response to the Fukushima Near-Term Task Force report. As Mr. Stephen Byrne, SCE&G's Executive Vice President, Generation & Transmission, and Chief Operating Officer, testified at the mandatory hearing on October 12-13, 2011 (Transcript, Page 78, Lines 2-5 and Page 332, Lines 6-14), the existing NRC regulatory framework and the regulations provide the Commission with a number of options for imposing new requirements arising from the recommendations of the Near-Term Task Force report subsequent to the issuance of combined licenses (COLs). The options include those applicable to the operating fleet, such as imposition of plant-specific orders amending a license, or amendment of existing regulations when specific actions are determined to be necessary to protect public health and safety or for the common defense and security. These options are preferable to establishing a license condition to comply with as yet unspecified requirements in that they afford greater certainty and definition of the requirements to the licensee, the NRC, and the public, with due regard for well-established agency processes and procedural requirements. Notwithstanding the Commission's recently issued Staff Requirements Memorandum on SECY-11-0124, "Recommended Actions To Be Taken Without Delay From The Near-Term Task Force Report," October 18, 2011, sufficient information is not currently available to SCE&G with which to propose a license condition with appropriate specificity.

SCE&G believes that the COL Application for V.C. Summer Units 2 and 3 meets all currently-applicable regulatory requirements and provides reasonable assurance of adequate protection of public health and safety and common defense and security. For this reason, SCE&G believes that the COLs should be issued without a license condition associated with the Fukushima Near-Term Task Force recommendations and proceed utilizing existing regulatory approaches.

| Question No. | Category | Reference | Question |
|--------------|----------|--------------------|--|
| 8b | Safety | Emergency Planning | In regard to Emergency Planning, significant population in the area does not have transportation and the applicant has stated in the ETE evaluation that transportation would be provided. b. What is your relationship with Fairfield County? Are they available to provide assistance if necessary? |

Response: (Robert E. Williamson, III)

The relationship between Fairfield County and SCE&G has been strong throughout the existence of the V.C. Summer Nuclear Station (VCSNS). Members of SCE&G management and the Director of the Fairfield County Emergency Management Agency meet routinely to discuss items of interest to both parties. SCE&G has confidence in the ability and response of the Fairfield County Emergency Management Agency to assist in protecting the health and safety of the public. For example, SCE&G works with Fairfield County Emergency Management annually to provide public information calendars which include a self-addressed, postage paid “Special Needs Information” card with instructions to “**PLEASE COMPLETE THIS CARD EVERY YEAR.**” The card includes a specific question in regard to transportation needs during an emergency: “Would you have difficulty getting **TRANSPORTATION** in an emergency?” All cards returned to SCE&G are collected and recorded in a database for SCE&G records and then the original card is passed on to the county Emergency Management agency providing requestor’s address. The calendar also provides written guidance to “...call your local Emergency Preparedness Agency or Public Safety Department for evacuation.” Phone numbers of these agencies are included in the calendar. In addition, the Fairfield County Emergency Management Agency works with local support agencies such as the Department of Social Services, the SC Department of Health and Environmental Control, and the American Red Cross to identify special needs populations that do not reply via the calendars. These citizens are also identified for relocation in the unlikely event of an emergency.

The Fairfield County Emergency Operations Plan includes Annex L, Transportation, which details the guidance and resources to assist with special needs populations in the event of an emergency. The plan is reviewed by the county annually and utilizes all available resources such as county transit system and state school buses, and county and private vehicles, if needed. The Fairfield plan can mobilize in excess of 60 buses and vans with capacity of well over 3000 persons. In addition to Annex L, the Fairfield County plan has additional guidance in Annex Q, Fixed Nuclear Facilities, to add additional emphasis on assisting the special needs populations.

The Evacuation Time Estimate (ETE) surveyed and studied populations which require public transportation assistance in an emergency. The entire Emergency Planning Zone (EPZ), consisting of portions of Fairfield, Lexington, Newberry, and Richland Counties, has a population in 2009 of 11,826; 1.9% (222 persons) of these populations is dependent on public transportation during an emergency. Using these estimates, Fairfield County, and the other risk counties, have adequate transportation for dependant and special needs populations.

| Question No. | Category | Reference | Question |
|--------------|----------|-----------------------------------|--|
| 10 | Safety | Emergency Planning – Current Plan | While pursuing this application, the footprint of the site has expanded beyond Unit 1, including resources and personnel (e.g. craft and construction workers, engineering, and support staff). When do you plan to fully implement the Emergency Plan as submitted as a part of the licensing application for Units 2 and 3? Has any assessment been made related to impacts on the existing emergency plan until the new plan is [in] place? If so, in what way? How do you plan to protect the construction workers – are they included in a formal training program and do they/will they participate in emergency drills? |

Response: (Robert E. Williamson, III)

SCE&G is planning implementation of the new multiple unit Emergency Plan within 18 months prior to initial fuel load of VCSNS Unit 2. In the years leading up to the implementation of that plan, additional personnel hired to support operation of VCSNS Units 2 and 3 will be trained and assigned positions within the Emergency Response Organization (ERO). They will participate in drills with mentors, who are currently qualified in the ERO for Unit 1, until each is qualified to fill their assigned positions. This fully trained and qualified ERO will participate in the required NRC/FEMA graded exercise, which is currently scheduled in July 2015. The VCSNS Emergency Preparedness Organization continues to work to, and refine, this implementation process.

The existing VCSNS Unit 1 Emergency Plan is currently being revised to mimic the formatting, ERO structure and responsibilities consistent with the VCSNS Units 2 and 3 COL Application Emergency Plan, but limited to a single unit ERO. This revision includes the adoption of the new Technical Support Center (TSC) described in the Units 2 and 3 COL Application. This plan will be submitted to the NRC for review and approval. The submittal is expected to be made in late 2011 with implementation expected to be sometime within late 2012 or early 2013. The VCSNS Emergency Preparedness Organization has a plan in place to address all aspects of the revision and change management processes, including the necessary evaluation to transition to a single Emergency Plan applicable to multiple units, under 10 CFR 50.54(q), as Unit 2 and Unit 3 come on line.

SCE&G has installed a Construction Site Warning System which includes elevated electronic sirens, desk-top tone alert radios, and construction radio system interfaces to alert construction site personnel in the event of an emergency. This system works much like a Public Warning System, but is controlled by VCSNS New Nuclear Deployment personnel during the construction phase of VCSNS Units 2 and 3.

In addition to the warning system, construction personnel are provided training on how to respond to emergencies, including assembly, shelter in place, and evacuation, if needed. Construction site emergency procedures have been developed to provide specific guidance to construction site personnel in the event of an emergency. Construction site personnel have participated in assembly drills to demonstrate the procedures and training are effective, and can protect them in the event of an emergency. These drills will continue to be conducted as appropriate during the construction process.

Current VCSNS Emergency Plan implementing procedures and New Nuclear Deployment procedures have been revised or created to include emergency notification of construction personnel and specific actions to be taken in the event of an emergency, whether natural or operational. Maintenance of these procedures is performed, reviewed, and approved by Emergency Preparedness Organization personnel to ensure both Unit 1 and Construction Site personnel are protected.

| Question No. | Category | Reference | Question |
|--------------|----------|-----------|--|
| 11 | Safety | TSC & OSC | What is the relationship between the Technical Support Center (TSC) and the Operational Support Centers (OSCs) inside each unit? How will the OSCs be staffed? |

Response: (Robert E. Williamson, III)

The TSC is the lead facility for onsite emergency response and is the evaluation and decision-making facility for the onsite mitigation strategies. The Operational Support Centers (OSCs), one for each Unit, are the investigative and implementation facilities for onsite actions and assessments being taken during the emergency. Each OSC has a facility manager, the OSC Manager, who reports to the TSC Emergency Director per the Emergency Plan. Although these managers report to the TSC, the operation of each OSC is independent of the other OSCs. The OSC Manager controls the actions and assessments of that facility in order to maintain the priorities established by the TSC and to report on assessments being performed.

The OSCs will be staffed using personnel assigned to the specific Units during operation, and can be supplemented by personnel from any unaffected Unit. Each OSC/Unit will have minimum staffing as detailed in the Emergency Plan. ERO augmented staffing will take place at an Alert or higher classification and provides additional Unit specific resources in each OSC.

| Question No. | Category | Reference | Question |
|--------------|----------|---------------------------------------|--|
| 12a | Safety | Physical Security During Construction | There are no NRC regulatory requirements for the physical security plan during the construction phase and fabrication of components. a. What measures are being taken to assure security at the site during construction? |

Response: (Alan D. Torres)

For security during the construction of V.C. Summer Units 2 and 3, procedures have been developed and will be fully implemented at the time of COL issuance to provide security measures for the construction site. The current procedures utilize the guidance found in NEI 09-01, "Security Measures During New Reactor Construction," as appropriate to help ensure that key elements of new reactor construction security are in place. These procedures outline principles of physical security measures, such as physical barriers, postings, security force monitoring and surveillance, and communication and interfaces with local law enforcement. Procedures also address site access controls and methods for implementing 10 CFR Part 26 requirements along with temporary access for visitors, emergency responders, and other types of site access. In addition, procedures exist to ensure photographs of the site and equipment are properly screened and withheld, if appropriate, based on the content of the photographs.

These security measures provide a line of detection and deterrence to latent security issues during the construction of the facility along with the other barriers such as receipt inspections, ITAAC implementation, Quality Control/Quality Assurance reviews and inspections, system testing and turnover, pre-installation preparation, in-situ non-destructive testing, foreign material exclusion controls, software installation controls, control of safeguards information, and oversight of workers and their products by supervision and oversight personnel. The requirements of 10 CFR Part 26 provide further controls to help ensure a reliable construction workforce at the VCSNS site.

| Question No. | Category | Reference | Question |
|--------------|----------|---------------------------------------|---|
| 12b | Safety | Physical Security During Construction | b. What is being done for receipt inspection of components that are received on site or the fabrication of components off site? |

Response: (Alan D. Torres)

At the receipt location for material delivered to the VCSNS site, materials are inspected per the purchase documents to assure the material is authorized, has not been damaged, and meets the requirements of the purchase agreement as appropriate in accordance with site Quality Assurance requirements. Any anomalies are noted and placed into and addressed in the corrective action program. Components fabricated offsite will also go through a receipt inspection. The large items will need further preparation performed onsite and this again will be an opportunity to discover any anomalies.

| Question No. | Category | Reference | Question |
|--------------|----------|---------------------------------------|--|
| 12c | Safety | Physical Security During Construction | c. How will you implement the transition from construction to operation? |

Response: (Alan D. Torres)

Construction security will continue until an operational Protected Area is declared. Prior to the receipt of new fuel assemblies onsite, a portion of the facility will be declared as a Controlled Access Area per the Special Nuclear Material Physical Protection Program Description that was submitted in Part 8 of the COL Application. This area will be locked down for the receipt and storage of the new fuel assemblies and will be protected by security personnel who are members of the VCSNS security force and are trained in accordance with the Physical Security Plan. Once the facility reaches the point of systems completion such that an operational Protected Area can be declared, then the Physical Security Plan that was submitted in Part 8 of the COL Application will be implemented. At this point, the construction security measures will be upgraded to 10 CFR § 73.55 security standards for the unit that is nearing fuel load.

| Question No. | Category | Reference | Question |
|--------------|----------|---------------------------------------|--|
| 12d | Safety | Physical Security During Construction | d. What changes will occur in the security to initially establish a secure site? |

Response: (Alan D. Torres)

To initially establish a secure site after construction, the facility will be locked down to ensure those having unescorted access to the newly established Protected Area are properly screened in accordance with 10 CFR Part 26 requirements. At this point, the current plans are that the facility will undergo a security sweep to ensure that no contraband material is within the Protected Area. Subsequently, the full 10 CFR § 73.55 security requirements will be in place, the site will be considered secure, and the full security program described in the Physical Security Plan will be operational.

The unit that is still under construction will remain under the construction security program until the point when systems completion will allow the declaration of an operational Protected Area for that unit. The second unit will go through the same transitional process as the first unit as it moves toward completion and fuel load.

| Question No. | Category | Reference | Question |
|--------------|---------------|--|--|
| 21 | Environmental | Emergency Response/ Environmental Justice | Some of the scoping comments from the impacted community indicated that they do not have a robust emergency response infrastructure. How was this considered in your Environmental Justice analysis? |

Response: (April R. Rice; Robert E. Williamson, III)

Although the local emergency response infrastructure is not part of the National Environmental Policy Act (NEPA) environmental review process, it is a safety issue that is fully addressed outside the scope of the Environmental Report and NEPA. Specifically, the town of Jenkinsville, through standard mutual aid agreements with Fairfield County, has an emergency response infrastructure of well-trained personnel and modern equipment to support the needs of the community during any emergency. Although both the town and the county are considered rural areas, they include emergency response capabilities for fire, emergency medical services, and law enforcement. The relationship with Fairfield County, as described more fully in the SCE&G response to question 8b, is carried over in the emergency response areas as well. Thus, SCE&G is confident in the abilities and responses of the Fairfield County emergency agencies to protect the health and safety of the public, resources, and assets.

In addition, SCE&G works with Fairfield County emergency response agencies, such as Fire, Emergency Medical Services, and the Fairfield County Sheriff’s Department, to train, exercise, and support special requests, such as serving on community forum panels. It provides annual training sessions onsite, attends training offsite, and conducts onsite emergency response drills that include Fairfield County personnel and equipment to demonstrate interfaces with SCE&G responders and to strengthen these relationships. SCE&G also currently has Letters of Agreement in accordance with our Emergency Plan for response in each of these areas, which are reviewed on an annual basis.

Further, SCE&G and Fairfield County have successfully demonstrated the effectiveness of these relationships and the successes of the mutual training and drills during an actual event at VCSNS Unit 1 in 2009 and during various individual medical emergencies at the construction and operational sites over the years. SCE&G continues to build on the existing relationships by hosting training sessions and site visits/tours for these local agencies to observe first-hand the preconstruction activities for Units 2 and 3. This relationship will continue to be fostered as the construction continues and the new Units become operational.

Thus, SCE&G believes that the local community, including Environmental Justice and special needs populations, are fully protected by a robust Emergency Plan.

CERTIFICATIONS

I am responsible for the responses to In-Hearing Questions F and G. I certify that these responses were prepared by me or under my direction, and I adopt the responses as part of my sworn testimony in this proceeding.

I declare under penalty of perjury that the foregoing is true and correct to the best of my information, knowledge, and belief.

Executed on October 27, 2011.

Executed in Accord with 10 C.F.R. § 2.304(d)

/s/ Amy M. Monroe

Amy M. Monroe

Licensing Engineer

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I am responsible for the response to In-Hearing Question I. I certify that this response was prepared by me or under my direction, and I adopt the response as part of my sworn testimony in this proceeding.

I declare under penalty of perjury that the foregoing is true and correct to the best of my information, knowledge, and belief.

Executed on October 27, 2011.

Executed in Accord with 10 C.F.R. § 2.304(d)

/s/ Robert B. Whorton

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I am responsible for the response to In-Hearing Question L. I certify that this response was prepared by me or under my direction, and I adopt the response as part of my sworn testimony in this proceeding.

I declare under penalty of perjury that the foregoing is true and correct to the best of my information, knowledge, and belief.

Executed on October 27, 2011.

Executed in Accord with 10 C.F.R. § 2.304(d)

/s/ Timothy W. Schmidt

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I am responsible for the response to Post-Hearing Question 1b. I certify that this response was prepared by me or under my direction, and I adopt the response as part of my sworn testimony in this proceeding.

I declare under penalty of perjury that the foregoing is true and correct to the best of my information, knowledge, and belief.

Executed on October 27, 2011.

Executed in Accord with 10 C.F.R. § 2.304(d)

/s/ Alfred M. Paglia, Jr.

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I am responsible for the responses to Post-Hearing Questions 8b, 10, 11, and 21. I certify that these responses were prepared by me or under my direction, and I adopt the responses as part of my sworn testimony in this proceeding.

I declare under penalty of perjury that the foregoing is true and correct to the best of my information, knowledge, and belief.

Executed on October 27, 2011.

Executed in Accord with 10 C.F.R. § 2.304(d)

/s/ Robert E. Williamson, III

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I am responsible for the responses to Post-Hearing Questions 12a, 12b, 12c, and 12d. I certify that these responses were prepared by me or under my direction, and I adopt these responses as part of my sworn testimony in this proceeding.

I declare under penalty of perjury that the foregoing is true and correct to the best of my information, knowledge, and belief.

Executed on October 27, 2011.

Executed in Accord with 10 C.F.R. § 2.304(d)

/s/ Alan D. Torres

Alan D. Torres

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I am responsible for the response to Post-Hearing Question 21. I certify that this response was prepared by me or under my direction, and I adopt the response as part of my sworn testimony in this proceeding.

I declare under penalty of perjury that the foregoing is true and correct to the best of my information, knowledge, and belief.

Executed on October 27, 2011.

Executed in Accord with 10 C.F.R. § 2.304(d)

/s/ April R. Rice

April R. Rice

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