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Chief, Rules & Directives Branch
U.S. Nuclear Regulatory Commission
Mail Stop T6-D59
Washington, DC 20555-0001

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68 FR 42431

(2)

Ladies and Gentlemen:

Subject: VIRGIL C. SUMMER NUCLEAR STATION
DOCKET NO. 50/395
OPERATING LICENSE NO. NPF-12
NUREG-1437, SUPPLEMENT 15, DRAFT

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Rules and Directives Branch

Attached is a table containing South Carolina Electric & Gas Company's comments on draft Supplement 15 to the Generic Environmental Impact Statement for License Renewal of Nuclear Plants regarding V.C. Summer Nuclear Station. If you have any questions concerning the comments, please contact Stephen Summer at (803) 345-4252.

Very truly yours,

Stephen A. Byrne

SAB/SS/mbb
Attachment

- c: N. O. Lorick
- N. S. Carns
- T. G. Eppink (w/o attachment)
- R. J. White
- R. B. Clary
- L. A. Reyes
- K. R. Cotton
- NRC Resident Inspector

- R. C. Auluck
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- File (821.00)
- DMS (RC-03-0210)

Template = ADM-013

E-RIS = ADM-03
Adm = E. Suber (SXS)
B. DAM (WLD)

**South Carolina Electric & Gas Company, V.C. Summer Nuclear Station
Comments on the GEIS Supplement 15, regarding the V.C. Summer Nuclear Station, Draft Report for Comment.**

Location	Comment
Tables, page xii, line 7	Correct title of Table 2-3 is "Aquatic Species Listed or Candidates for Listing as Endangered...by U.S. Fish and Wildlife Service or State of South Carolina..." Delete reference to National Marine Fisheries Service.
Executive Summary, page xviii, line 38	Should be "U.S. <i>Nuclear Regulatory Commission's</i> FES Related to Operation..." rather than U.S. Atomic Energy Commission's FES, etc.
Abbreviations/Acronyms, page xxii, line 38	SCANA Corp. is a completely separate entity from the S.C. Public Service Authority. SCANA Corp. is a holding company with a number of subsidiaries, including SCE&G. The S.C. Public Service Authority is also known as "Santee Cooper."
Page 1-1, line 21	Delete "Power."
Page 2-1, line 17 and 18	Grade elevation at Summer Station is approximately 436 feet above sea level. Monticello Reservoir's full pool elevation is 425 feet above sea level.
Page 2-4, line 14	Delete "State Park." Lake Murray is an SCE&G hydroelectric reservoir.
Page 2-4, lines 17 and 18	The southern boundary of the 161,000-acre Enoree Ranger District of the Sumter National Forest is only 6 or 7 miles north of VCSNS. Note that the Sumter NF consists of 3 ranger districts, one in the mountains, one in the western Piedmont, and one (the Enoree) in the central Piedmont of S.C.
Page 2-4, lines 19-21	The Congaree Swamp National Monument is on the Congaree River near, but several miles upstream of, the confluence of the Congaree and the Wateree Rivers (not the Broad and Saluda Rivers). It would be more accurate to say that it contains "one of" the last significant tracts of old-growth bottomland hardwood forest in the southeastern U.S.
Page 2-9, line 26.	Summer Station also uses the Envirocare facility in Clive, Utah for disposal of solid waste (as noted in Section 2.1.4.3).
Page 2-10, line 5	In some circumstances, liquid wastes may be monitored during release, rather than being sampled and analyzed prior to release.
Page 2-10, line 7-10	Change wording to the following: "The LWPS consists of 5 collection systems which are provided by the waste holdup tank, floor drain tank, the laundry and hot shower tank, the excess liquid waste processing system (the excess waste holdup tank and the decon pit collection tank) and the laboratory drain system. The LWPS does not process secondary system wastes."*
Page 2-10, line 14	Replace the words "Drain Channel A processes" with "The waste holdup tank is provided to process".*

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Page 2-10, line 17-21	Reword: "...may be directed to the recycle holdup tanks for processing." Delete the sentences: "Administratively controlled equipment drains are the major contributors of water to Drain Channel A. Valve and pump leakoffs outside the Reactor Building are also collected in the waste holdup tank for processing and recycling. Abnormal liquid sources include leaks that may develop in the reactor coolant and auxiliary systems."*
Page 2-10, line 24-33	Change wording to the following: "Liquid in this tank is normally processed through the Durotek demineralizers and released to the environment under controlled conditions. Alternatively, the liquid may be recycled for use in the plant. Liquid wastes are released from the waste monitor tanks through the penstocks of the Fairfield Pumped Storage Facility. The discharge valve is interlocked with a process radiation monitor and closed automatically when the radioactivity concentration in the liquid discharge exceeds a preset limit. The waste monitor tank acts as a reservoir for holding waste which is to be released from the LWPS to the Fairfield Pumped Storage Facility. Prior to entering these tanks, the liquid may pass through a waste monitor tank demineralizer and a waste monitor tank filter. A sample is taken and, after analysis, the results are logged and the liquid is discharged or recycled. Liquid waste discharge flow and volume are recorded."*
Page 2-10, line 35-39	Change the wording to the following: "The floor drain tank is provided to collect and process non-reactor grade (non-recyclable) liquid wastes. These include floor drains, equipment drains containing non-reactor grade water, and other non-reactor grade sources. If the activity in the floor drain tank is such that the discharge limits cannot be met without cleanup, the liquid is processed through the Duratek demineralizers and released under controlled conditions via the penstocks of the Fairfield Pumped Storage Facility. Non-recyclable reactor coolant..."*
Page 2-11, line 1	Change the wording to the following: "...via the floor drains." (Delete remainder of sentence.)*
Page 2-11, line 2-10	Delete these lines and replace with: "Laundry and hot shower drains normally need no treatment for removal of radioactivity. This water is transferred to waste monitor tank number 2 via the laundry and hot shower filter. A sample is taken, and after analysis, the results logged and the water is discharged if the activity level is below acceptable limits."*
Page 2-11, line 12-21	The Excess Liquid Waste Processing System (ELWS) consists of two storage tanks, the excess liquid waste holdup tank and the decon pit holdup tank. The excess waste holdup tank is used to accept waste from the floor drain tank, laundry and hot shower tank, and waste holdup tank when these tanks are filled to capacity. The liquid from this tank can be recycled back to these tanks, released directly to the

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	<p>environment via the waste monitor tank, or processed through the Duratek demineralizers and released under controlled conditions via the penstocks of the Fairfield Pumped Storage Facility. The decon pit collection tank collects liquid from the Fuel Handling Building sumps, the Radiological Maintenance Building drains, excess waste holdup area sump, and decon pit drains. If the activity in this tank liquid is such that the discharge limits cannot be met without cleanup, the liquid is processed through the Duratek demineralizers and released under controlled conditions via the penstocks of the Fairfield Pumped Storage Facility.*</p> <p>The Laboratory Drain System consists of three sinks in the radiochemical laboratory and two sinks in the sample room. In the radiochemical laboratory, spent reactor coolant samples, equipment rinse water and other non-reactor grade fluids are disposed of in the two sinks that drain to the floor drain tank. No liquids or wastes are intentionally disposed of in the sink that drains to the chemical drain tank. In the sample room, excess sample purges of reactor grade water and excess reactor coolant samples are drained from one sink to the waste holdup tank for processing. The other sink is used for draining non-reactor grade fluids to the nuclear blowdown holdup tank.*</p>
Page 2-12, line 38	Purge is limited to 1,000 hours per year by Tech Spec.
Page 2-13, line 7-11	Condenser Air Removal System is normally released through the Charcoal Exhaust System, not only under primary to secondary leakage conditions.
Page 2-14, line 4	Delete the words "evaporator concentrates".*
Page 2-14, lines 8-11	Delete these lines.*
Page 2-17, line 12	Since submittal of the ER, SCE&G has modified a transmission line connection. As a result, transmission line descriptions have changed. Line 12 - Replace "Denny Terrace 1 Tie Line" with "Summer-McMeekin-Edenwood segment" (a 2.5 mile section of the line that now connects Summer Station to the pre-existing Parr-McMeekin-Edenwood line).
Page 2-17, Table 2-1, line 28	Replace "Denny Terrace 1 Tie Line" with "Summer-McMeekin-Edenwood",
Page 2-19, lines 10 through 12	Replace current wording with the following: "Summer-McMeekin-Edenwood segment. This 230 kV line provides power to SCE&G's Edenwood Substation by way of a 2.5 mile line running from Summer Station to the pre-existing Parr-McMeekin-Edenwood line (total of 32.5 miles between Summer Station

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	and the Edenwood substation). This line occupies a 100' right-of-way."
Page 2-20, line 26	Insert "Fairfield Pumped Storage Facility" for "Parr Hydro".
Page 2-21, line 6	Power boating is permitted on Monticello Reservoir, but the use of gasoline-powered motors is not allowed on the Monticello Sub-Impoundment.
Page 2-21, line 7	Change wording to: "water level varies daily up to 1.3 m (4.5 feet) to service Fairfield Pumped Storage". (or "the Parr Project").
Page 2-30, lines 25-26	Suggest that wording be changed to indicate that shortnose sturgeon are found in rivers that flow into Winyah Bay, rivers that flow into Lake Marion, the Santee, Cooper, and Savannah Rivers, and the ACE Basin (Ashepoo, Combahee, and Edisto Rivers).
Page 2-31, line 15	Scientific name is <i>Lasmigona decorata</i> .
Page 2-31, line 16	Scientific name is <i>Pyganodon cataracta</i> .
Page 2-32, line 20	Scientific name is <i>Pyganodon cataracta</i> .
Page 2-31, line 29-30	Incomplete sentence.
Table 2-5, page 2-40	Adding the percentages for Fairfield, Lexington, Newberry and Richland Counties yields a total of 96 %. "Approximately 95%" is used on page 2-39, line 37. The difference is assumed to be due to rounding of percentages.
Table 2-6, page 2-42	Problems with table format, left-hand column (at least in printed version).
Table 2-9, page 2-47	To be consistent with text on preceding page and the table heading, suggest that numbers in right-hand column be presented as whole numbers, i.e., 87 (percent) rather than 0.87, 3 (percent) rather than 0.03, etc.
Table 2-10, page 2-50	Problems with table format, header section (at least in printed version).
Page 2-52, lines 25 and 26	Suggest re-wording to reflect that there are 5 public boat ramps related to the Parr Project (two on Monticello Reservoir, one on the Monticello Sub-impoundment, and two on Parr Reservoir.). Gasoline-powered boat use is only restricted on the Monticello Sub-impoundment.
Section 2.2.8.6, page 2-54	It might be helpful to give dates here for the data presented (unemployment rates, families below poverty level, and median household income) in Table 2-13. Are the data from 1999, 2000, 2001, or 2002? As is, the discussion lacks a context, particularly the remark about Fairfield County's declining unemployment rate, which was 10 percent in 1997.
Page 2-60, lines 19	The Parr Project did not include the construction of V.C. Summer Nuclear Station.

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through 23	
Page 4-18, line 3	Recommend that "cooling bay" and "cooling discharge" be changed to "discharge bay" and "discharge canal", the terminology used later in this paragraph and in other sections of the DSEIS.
Page 4-26, Section 4.3	The draft SEIS states, "The staff has not identified any new and significant information. Therefore the staff concludes that there are no impacts of radiation exposures to the public during the renewal term beyond those discussed in the GEIS." For other Category 1 issues, the Staff's review states, "The staff has not identified any significant new information during its independent review of the SCE&G ER, the staff's site visit, the scoping process, or staff evaluation of other available information." If this is in fact the case for radiological impacts, then similar language should be used in Section 4.3.
Page 4-30, line 37	The value 90 percent (from the ER) is used here, but 95 percent is used earlier, page 2-39. The higher percentage, based on a more recent SCE&G review of employees' addresses, should be used throughout.
Page 4-45, Section 4.6.1	Regarding aquatic species, the draft concludes that license renewal will not impact Federally-listed aquatic threatened or endangered species, or their critical habitat, and determined that mitigation in place at Summer is appropriate and no additional mitigation is warranted. The Staff neglects to make a conclusion that the impacts on aquatic species are SMALL. (This conclusion is drawn in Section 4.8.6, but should be made here as well.)
Section 5.2.1, first two sentences of the third paragraph:	The description of the SAMA development process provided here makes it sound as though SCE&G initially identified SAMAs from the PRA importance listings. In other sections the NRC has correctly described the process, but these particular sentences do not appear to reflect the actual steps used in the VCSNS SAMA analysis. A more accurate description would be something like, "The second step involved the development of a list of potential measures to reduce plant risk. This list was compiled based on information included in the VCSNS IPE, VCSNS IPEEE, previously submitted SAMA analyses, and NCR/industry documentation discussing potential plant improvements. The proposed risk reduction measures were subsequently compared against PRA results to ensure the major risk contributors were addressed by the proposed enhancements."
Table 5-4, page 5-7	Because this table reports dose-risk rather than dose, the table heading should be "Breakdown of Population Dose-Risk by Containment Release Mode."
Page 8-5, line 16	As noted before, need to use the same percentage that's used in Chapter 2 and 4, 95 percent (see comment on page 4-30).

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Page 8-6, line 36	Not familiar with word “contra-act” (counteract?).
Page 8-16, lines 22-26	NRC indicates that SCDHEC published a “Notice of Drafting” in August 2002 for an Early Action Plan for measures to attain the 8-hour (ozone) standard prior to any non-attainment designation. The NRC should be advised that SCDHEC submitted an Implementation Plan for the 8-hour ozone standard to EPA in July 2003 (after the DSEIS had been completed). Under that plan, the Columbia Intrastate AQCR would be designated a non-attainment area under the 8-hour ozone standard.
Page 8-17, line 13	Correct name is Cape Romain (not “Romaine”) National Wildlife Refuge.
Page 8-32, line 35	Correct name is Cape Romain (not “Romaine”) National Wildlife Refuge.
Page 8-35, lines 9-10	Note that this text is not consistent with the analysis in the preceding pages, which assumes that 150 workers would be required to operate the gas-fired plant (2 units), while only 70 (page 8-22) would be required to operate the coal-fired plant (one unit). Although this has no real bearing on the section’s conclusions, it may produce confusion in the reader.
Page A-2, line 23	Commenter Stephen Summer’s affiliation is SCANA Services (as in line15).
*Note	Comments in this table followed by an asterisk describe current plant operations that may not be consistent with the FSAR. The differences have been identified and changes to the FSAR are in process. Changes will be submitted to the NRC in a subsequent FSAR amendment.