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AUG 6 1982

Docket No.: 50-395

Mr. O. W. Dixon, Jr.
Vice President, Nuclear Operations
South Carolina Electric & Gas Company
P. O. Box 764 (Mail Code F-04)
Columbia, South Carolina 29218

Dear Mr. Dixon:

Subject: Virgil C. Summer Nuclear Station, Unit 1 - Issuance of Facility Operating License

The U. S. Nuclear Regulatory Commission has issued the enclosed Facility Operating License No. NPF-12 to South Carolina Electric & Gas Company and South Carolina Public Service Authority for the Virgil C. Summer Nuclear Station, Unit 1 located in Fairfield County, South Carolina. License No. NPF-12 authorizes operation of the Virgil C. Summer Nuclear Station, Unit 1 at 2775 megawatts thermal. Authorization to operate beyond five percent of full power (139 megawatts thermal) is still under consideration and will require Commission approval.

A copy of a related Federal Register notice, the original of which has been forwarded to the Office of the Federal Register for publication is also enclosed.

Three signed copies of Amendment No. 2 to Indemnity Agreement No. B-86 which covers the activities authorized under License No. NPF-12 are also enclosed. Please have each licensee sign all copies and return one copy to this office.

Sincerely,

Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation

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Enclosures:
1. Facility Operating License No. NPF-12
2. Federal Register Notice
3. Amendment No. 2 to Indemnity Agreement B-86

cc w/encls.: See next page

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AUG 6 1982

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Resident Inspector/Summer NPS
c/o U. S. NRC
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Jenkinsville, South Carolina 29065

Mr. James P. O'Reilly
U. S. NRC, Region II
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AUG 6 1982

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Winnsboro, South Carolina 29180

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Division of Administration
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Columbia, South Carolina 29201

Attorney General
Box 11549
Columbia, South Carolina 29211

Mr. Heyward G. Shealy, Chief
Bureau of Radiological Health
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Director, Criteria & Standards (ANR-460)
Office of Radiation Programs
U. S. Environmental Protection Agency
Washington, D. C. 20460

Director, Eastern Environmental Radiation
Facility
U. S. Environmental Protection Agency
P. O. Box 3009
Montgomery, Alabama 36193

EIS Review Coordinator
U. S. Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, Georgia 30308

DISTRIBUTION LIST FOR: ISSUANCE OF OPERATING LICENSE NPF-12 - SOUTH CAROLINA ELECTRIC & GAS COMPANY, SUMMER NUCLEAR STATION, UNIT 1

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**To Receive Tech. Specs.

SOUTH CAROLINA ELECTRIC & GAS COMPANY
SOUTH CAROLINA PUBLIC SERVICE AUTHORITY
DOCKET NO. 50-395
VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1
FACILITY OPERATING LICENSE

License No. NPF-12

1. The Nuclear Regulatory Commission (the Commission or the NRC) having found that:

   A. The application for a license filed by South Carolina Electric & Gas Company acting for itself and South Carolina Public Service Authority (the licensees) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made;

   B. Construction of the Virgil C. Summer Nuclear Station, Unit No. 1 (the facility) has been substantially completed in conformity with Construction Permit No. CPPR-94 and the application, as amended, the provisions of the Act, and the regulations of the Commission;

   C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission;

   D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;

   E. South Carolina Electric & Gas Company* is technically qualified to engage in the activities authorized by this operating license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;

   F. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements", of the Commission's regulations;

   G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;

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*South Carolina Electric & Gas Company is authorized to act as agent for the South Carolina Public Service Authority and has exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

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H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Facility Operating License NPF-12, subject to the conditions for protection of the environment set forth herein, is in accordance with 10 CFR Part 51, of the Commission's regulations and all applicable requirements have been satisfied; and

I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40, and 70.

2. Based on the foregoing findings regarding this facility, the Partial Initial Decision issued by the Atomic Safety and Licensing Board on July 20, 1982, and the Supplemental Partial Initial Decision issued by the Atomic Safety and Licensing Board on August 4, 1982, Facility Operating License No. NPF-12 is hereby issued to the South Carolina Electric & Gas Company and the South Carolina Public Service Authority (the licensees) to read as follows:

A. This license applies to the Virgil C. Summer Nuclear Station, Unit 1, a pressurized water reactor and associated equipment (the facility), owned by the South Carolina Electric & Gas Company and South Carolina Public Service Authority. The facility is located in Fairfield County, South Carolina, and is described in South Carolina Electric & Gas Company's Final Safety Analysis Report, as amended through Amendment No. 33, and the Environmental Report, as amended through Amendment No. 5.

B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:

(1) South Carolina Electric & Gas Company (SCE&G), pursuant to Section 103 of the Act and 10 CFR Part 50, to possess, use, and operate the facility at the designated location in Fairfield County, South Carolina, in accordance with the procedures and limitations set forth in this license;

(2) South Carolina Public Service Authority to possess the facility at the designated location in Fairfield County, South Carolina, in accordance with the procedures and limitations set forth in this license;

(3) SCE&G, pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as amended through Amendment No. 33;

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(4) SCE&G, pursuant to the Act and 10 CFR Parts 30, 40 and 70 to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed neutron sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

(5) SCE&G, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and

(6) SCE&G, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This license shall be deemed to contain, and is subject to, the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

SCE&G is authorized to operate the facility at reactor core power levels not in excess of 2775 megawatts thermal in accordance with the conditions specified herein and in Attachment 1 to this license. The preoperational tests, startup tests and other items identified in Attachment 1 to this license shall be completed as specified. Attachment 1 is hereby incorporated into this license. Pending Commission approval, this license is restricted to power levels not to exceed 5 percent of full power (139 megawatts thermal).

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. SCE&G shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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(3) Conduct of Work Activities During Fuel Load and Initial Startup

SCE&G shall review by committee all facility construction, preoperational testing, and system demonstration activities performed concurrently with facility initial fuel loading or with the facility startup test program to assure that the activity will not affect the safe performance of the facility fuel loading or the portion of the facility startup program being performed. The review shall address, as a minimum, system interaction, span of control, staffing, security, and health physics, with respect to performance of the activity concurrently with the facility fuel loading or the portion of the facility startup program being performed. The committee for the review shall be composed of at least three members, knowledgeable in the above areas, and who meet the qualifications for professional-technical personnel specified by Section 4.4 of ANSI N18.7-1971. At least one of these three shall be a senior member of the Plant Manager's staff.

(4) Initial Test Program

SCE&G shall conduct the post-fuel-loading initial test program set forth in Chapter 14 of the Final Safety Analysis Report, as amended through Amendment No. 33, without making any major modifications to this program unless such modifications have been identified and have received prior NRC staff approval. Major modifications are defined as:

a. Elimination of any test other than those identified as non-essential in Chapter 14 of SCE&G's Final Safety Analysis Report, as amended through Amendment No. 33,

b. Modification of test objectives, methods or acceptance criteria for any test other than those identified as non-essential in Chapter 14 of SCE&G's Final Safety Analysis Report, as amended through Amendment No. 33,

c. Performance of any test at a power level different from the power level indicated in the described program; and

d. Failure to complete any tests included in the described program (planned or scheduled for power levels up to the authorized power level).

For the performance of startup testing as described in Table 14.1-75 of the Final Safety Analysis Report, as amended through Amendment No. 33, compliance with items 3 and 4 of Table 3.3-1 of the Technical Specifications is not required.

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(5) Stability of the West Embankment and its Effects on the Intake Structure (Section 2.5.4, SSER 3)

SCE&G shall conduct the monitoring program discussed in Section 2.5.4.10.6.2 of the Final Safety Analysis Report, as amended through Amendment No. 33, to specifically include the following:

a. At the vicinity of the pumphouse and intake structure, four settlement points capable of monitoring both horizontal and vertical movements shall be established to monitor the embankment movements.

b. The submerged slope profile of the west embankment over the intake structure shall be established and monitored to detect any unusual movements that may affect the intake structure.

c. The condition of the intake structure shall be monitored to detect new cracks and changes to the old, grouted or ungrouted cracks. Should any cracks wider than 0.015 inch be discovered, the extent and size of such cracks shall be reported by SCE&G to the NRC staff along with a plan for remedial action. Such inspections shall also be conducted immediately following any earthquake during which the plant seismic instrumentation indicates that the operating basis earthquake has been exceeded.

d. The schedule and the reporting requirements of the above inspection shall be in accordance with the recommendations stated in Regulatory Guide 1.127.

(6) Design Verification Program (Section 3.7.4, SSER 4)

Prior to exceeding 5 percent of full power, SCE&G shall provide, for NRC staff review and approval, the final report of the design verification program being conducted on the emergency feedwater system.

(7) Thermal Sleeves (Section 3.9.3, SSER 4)

Prior to exceeding 5 percent of full power, SCE&G shall provide, for NRC staff review and approval, justification for the removal of the thermal sleeves from selected nozzles in the reactor coolant system.

(8) Environmental Qualification of Mechanical and Electrical Equipment (Section 3.11, SSER 4)

a. SCE&G shall complete all actions related to environmental qualification of equipment on a schedule specified in Section 3.11 of Supplement No. 4 to the Safety Evaluation Report.

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b. Complete and auditable records shall be available and maintained at a central location by SCE&G. Such records shall describe the environmental qualification methods used for all safety-related electrical equipment in sufficient detail to document the degree of compliance with NUREG-0588, "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment," Revision 1, dated July 1981. Such records shall be updated and maintained current as equipment is replaced, further tested, or otherwise further qualified to document compliance with NUREG-0588.

c. Prior to startup after the first major shutdown or refueling outage after June 1983, SCE&G shall be in compliance with the provisions of NUREG-0588 for safety-related electrical equipment exposed to a harsh environment.

(9) Mechanical Performance (Section 4.2.3, SER)

Prior to startup after the first refueling outage, SCE&G shall examine fuel rods for baffle-jetting failure as specified in Section 4.2.3 of the Safety Evaluation Report. Should damage be observed at that time, a corrective action plan shall be submitted to the NRC staff for review and approval.

(10) Overpressurization Protection (Section 5.2.2, SSER 4)

Prior to startup after the first refueling outage, SCE&G shall install an NRC staff-approved low-temperature overpressurization protection system. The preliminary design shall be provided for NRC staff review not later than June 30, 1983.

(11) Inservice Inspection and Testing (Section 5.2.4, SSER 3)

SCE&G shall perform the following actions in conjunction with the first inservice examination:

a. Demonstrate the ability of the ultrasonic examination procedure to detect actual flaws and/or artificial reflectors in the volume subject to examination to the acceptance standards of Paragraph IWB-3500 in weldments representative of the design and materials of construction.

b. In the event that one-third thickness semi-circular reference flaws cannot be detected and discriminated from inherent anomalies, the entire volume of the weld shall be examined during the inservice inspection.

c. The reporting of the inservice inspection examination results shall be documented in a manner to define qualitatively whether, the weldment and the heat affected zone and adjacent base metal on both sides of the weld were examined by ultrasonic angle beam techniques.

(12) Design Description - Control (Section 4.3.2, SER)

SCE&G is prohibited from using part-length rods during power operation.

(13) Steam Generator Inspection Ports (Section 5.4.2, SER)

Prior to startup after the first refueling outage, SCE&G shall install steam generator inspection ports at the locations specified in Section 5.4.2 of the Safety Evaluation Report unless justification is submitted to the NRC staff for not installing such ports and written approval is given by the NRC staff.

(14) Model D-3 Steam Generators (Section 5.4.2, SSER 4)

Prior to exceeding 5 percent of full power, SCE&G shall provide a detailed program for operation for NRC staff review and approval pending the implementation of design modifications to correct potentially damaging tube vibrations.

(15) Residual Heat Removal System (Section 5.4.3, SSER 3)

Prior to startup after the first refueling outage, SCE&G shall complete the installation of the design modification to the residual heat removal system suction valves described in Section 5.4.3 of Supplement No. 3 to the Safety Evaluation Report.

(16) Cable Tray Separation (Section 8.3.3, SSER 4)

Prior to startup after the first refueling outage, SCE&G shall implement the modifications to the cable trays discussed in Section 8.3.3 of Supplement No. 4 to the Safety Evaluation Report or demonstrate to the NRC staff that faults induced in non-Class 1E cable trays will not result in failure of cable in the adjacent Class 1E cable trays.

(17) Alternate Shutdown System (Section 9.5.1, SSER 4)

Prior to startup after the first refueling outage, SCE&G shall install a source range neutron flux monitor independent of the control complex as part of the alternate shutdown system.

(18) Fire Protection System (Section 9.5.1, SSER 4)

a. SCE&G shall maintain in effect, and fully implement, all provisions of the approved fire protection plan, as amended through Amendment No. 33 to the Final Safety Analysis Report. In addition, SCE&G shall maintain the fire protection program set forth in Appendix R to 10 CFR Part 50, except for the following:

(i) Twenty-foot separation need not be maintained between component cooling water pumps B and C.

(ii) Twenty-foot separation need not be maintained between heating, ventilation, and air conditioning system chilled water pumps.

(iii) No automatic fire suppression systems are required in the areas listed in Supplement No. 4 to the Safety Evaluation Report.

(iv) No automatic fire detectors are required in the areas listed in Supplement No. 4 to the Safety Evaluation Report.

b. Prior to startup after the first refueling outage, SCE&G shall install and make operable a fire detection system in the areas listed in Table 9-1 of Supplement No. 4 to the Safety Evaluation Report. Pending installation of the fire detectors in these areas the following actions shall be taken:

(i) Prior to initially exceeding 5 percent of full power, SCE&G shall, in lieu of Section 3.3.3.7 of the Technical Specifications, establish a fire watch patrol to inspect each area every 2 hours in accordance with Section 9.5.1 of Supplement No. 4 to the Safety Evaluation Report.

(ii) For all operating conditions subsequent to initially exceeding 5 percent of full power, SCE&G shall comply with Section 3.3.3.7 of the Technical Specifications.

(19) Instrument and Control Vibration Tests for Emergency Diesel Engine Auxiliary Support Systems (Section 9.5.4, SER)

Prior to startup after the first refueling outage, SCE&G shall either provide test results and results of analyses to the NRC staff for review and approval which validate that the skid-mounted control panels and mounted equipment have been developed, tested,

and qualified for operation under severe vibrational stresses encountered during diesel engine operation, or SCE&G shall floor mount the control panels presently furnished with the diesel generators separate from the skid on a vibration-free floor area.

(20) Solid Radioactive Waste Treatment System (Section 11.2.3, SSER 4)

SCE&G shall not ship "wet" solid wastes from the facility until the NRC staff has reviewed and approved the process control program for the cement solidification system.

(21) Process and Effluent Radiological Monitoring and Sampling Systems (Section 11.3, SSER 4)

Prior to startup after the first refueling outage, SCE&G shall install and calibrate the condensate demineralizer backwash effluent monitor RM-L11.

(22) Core Reactivity Insertion Events (Section 15.2.4, SSER 4)

For operations above 90% of full power, SCE&G shall control the reactor manually or the rods shall be out greater than 215 steps until written approval is received from the NRC staff authorizing removal of this restriction.

(23) NUREG-0737 Conditions (Section 22)

SCE&G shall complete the following conditions to the satisfaction of the NRC staff. Each item references the related subpart of Section 22 of the SER and/or its supplements.

a. Procedures for Transients and Accidents (I.C.1, SSER 4)

Prior to startup after the first refueling outage, SCE&G shall implement emergency operating procedures based on guidelines approved by the NRC staff.

b. Special Low Power Testing and Training (I.G.1, SSER 4)

Within twelve months following completion of the startup test program, SCE&G shall provide a report describing the results of a comparison of actual plant data taken during the natural circulation test program to the simulator responses described in the SCE&G letter, T. C. Nichols, Jr. to H. R. Denton dated March 31, 1982.

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c. Direct Indication of Safety Valve Position (II.D.3, SSER 4)

Prior to exceeding 5 percent of full power, the safety valve position indication system shall be seismically qualified by SCE&G consistent with the component or system to which it is attached, and documentation of this shall be provided to the NRC staff for review and approval.

d. Inadequate Core Cooling Instruments (II.F.2, SSER 4)

Prior to startup after the first major shutdown or refueling outage after June 30, 1983, SCE&G shall complete upgrading of the incore thermocouple wiring and qualification of isolators, reference junction boxes and connectors.

e. Plant-Specific Calculations for Compliance with 10 CFR Section 50.46 (II.K.3.31, SSER 1)

Within one year after model revisions are approved by the NRC staff, SCE&G shall provide a supplemental plant-specific analysis to verify compliance with 10 CFR 50.46, using the revised models developed under item II.K.3.30 of NUREG-0737.

f. Upgrade Emergency Support Facilities (III.A.1.2, SSER 4)

SCE&G shall complete its emergency response facilities as follows:

(i) Safety parameter display system - April 1, 1983
(ii) Emergency operations facility - April 1, 1983
(iii) Technical support center - April 1, 1983

(24) Seismic Monitoring Program (ASLB Partial Initial Decision, July 20, 1982, Section VI.1)

SCE&G shall continue the seismic monitoring program discussed in Section 2.5.3 of the Safety Evaluation Report until December 31, 1983, at which time there shall be a reevaluation of the need for further monitoring to be made an additional licensing requirement.

(25) Confirmatory Seismic Analysis (ASLB Partial Initial Decision, July 20, 1982, Section VI.2)

During the first year of operation, SCE&G shall sucessfully complete the confirmatory program on plant equipment and components within the guidelines established in the findings contained in the ASLB Partial Initial Decision dated July 20,

1982, to demonstrate to the NRC staff's satisfaction that explicit safety margins exist for each component necessary for shutdown and continued heat removal in the event of the maximum potential shallow earthquake.

(26) Plume Exposure Emergency Planning Zone (ASLB Supplemental Partial Initial Decision, August 4, 1982, Section VIII.3)

During the first year of operation, SCE&G shall assure that the plume exposure emergency planning zone has been expanded to include the Kelly Miller, Greenbriar Headstart and Chapin Elementary schools and the emergency evacuation plans have been adjusted accordingly.

(27) Transportation Planning (ASLB Supplemental Partial Initial Decision, August 4, 1982, Section VIII.4)

During the first year of operation, SCE&G shall assure that the defects in transportation planning discussed in Finding 24 of the ASLB Supplemental Partial Initial Decision dated August 4, 1982 have been remedied.

(28) Food Pathway Contamination (ASLB Supplemental Partial Initial Decision, August 4, 1982, Section VIII.6)

During the first year of operation, SCE&G shall assure that plans to implement remedial and preventive measures for consumer protection against food pathway contamination have been formulated and communicated to the agricultural community.

(29) Siren Alerting System (ASLB Supplemental Partial Initial Decison, August 4, 1982, Section VIII.7)

Prior to exceeding 5% of full power, SCE&G shall complete installation and satisfactory testing of its siren alerting system.

(30) Emergency Facilities and Staffing (ASLB Supplemental Partial Initial Decision, August 4, 1982, Section VIII.8)

SCE&G shall complete the following three items related to emergency preparedness to the satisfaction of the NRC staff, consistent with Supplement No. 2 to the Safety Evaluation Report, page A-13:

(i) Minimum shift manning requirements
(ii) Emergency response facilities
(iii) Meteorological and dose assessment capability

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(31) Final NRC Approval of Emergency Preparedness (ASLB Supplemental Partial Initial Decision, August 4, 1982, Section VIII.9)

Prior to exceeding 5% of full power, final NRC staff approval of the state of emergency preparedness for the Virgil C. Summer Nuclear Station site shall be required.

(32) Steam Generator Tube Vibration (ASLB Supplemental Partial Initial Decision, August 4, 1982, Section VIII.10)

Prior to operation at full power, SCE&G shall satisfy the NRC staff that appropriate surveillance measures and remedial action plans have been implemented with respect to the steam generator tube failure problem.

D. An exemption to the requirements of Paragraph III.B.4 of Appendix G to 10 CFR Part 50 is described in Section 5.3.1 of Supplement No. 1 to the Office of Nuclear Reactor Regulation's Safety Evaluation Report. This exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest. Therefore, this exemption is hereby granted. The facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

E. SCE&G shall maintain in effect and fully implement all provisions of the Commission-approved physical security plan, guard training and qualification plan, and safeguards contingency plan, including amendments made pursuant to the authority of 10 CFR 50.54(p). The approved plans, which contain safeguards information protected under 10 CFR 73.21, are collectively entitled, "Virgil C. Summer Nuclear Station Physical Security Plan" Amendment 2, dated September 1980, Amendment 3, dated October 1980, Amendment 4, dated February 1981, Amendment 5, dated June 1981, and Amendment 6, dated December 1981; "Virgil C. Summer Nuclear Station Training and Qualification Plan" dated January 1981 as revised April 1981; and the "Virgil C. Summer Station Safeguards Contingency Plan" dated January 1981 as revised April 1981.

F. This license is subject to the following additional condition for the protection of the environment:

Before engaging in activities that may result in a significant adverse environmental impact that was not evaluated or that is significantly greater than that evaluated in the Final Environmental Statement, SCE&G shall provide a written notification of such activities to the NRC Office of Nuclear Reactor Regulation and receive written approval from that office before proceeding with such activities.

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G. Reporting to the Commission:

(1) SCE&G shall report any violations of the requirements contained in Section 2, Items C(1), C(3) through (32), E and F of this license within twenty-four (24) hours by telephone and confirmed by telegram, mailgram, or facsimile transmission to the NRC Regional Administrator, Region II, or designee, not later than the first working day following the violation, with a written followup report within fourteen (14) working days.

(2) SCE&G shall notify the Commission, as soon as possible but not later than one hour, of any accident at this facility which could result in an unplanned release of quantities of fission products in excess of allowable limits for normal operation established by the Commission.

H. The licensees shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.

I. This license is effective as of the date of issuance and shall expire at midnight on March 21, 2013.

FOR THE NUCLEAR REGULATORY COMMISSION

/s/

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosures:
1. Appendix A (Technical Specifications)
2. Appendix B (Environmental Protection Plan)

Date of Issuance: AUG 6 1982

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SURNAME	MRushbrook/yt WKane	ADinitz	J.R. GRAY	BJYoungblood	TMNovak	DEisenhut	HDenton
DATE	8/5/82	8/ /82	8/5/82	8/5/82	8/5/82	8/5/82	8/6/82

Attachment 1 to License NPF-12

This attachment identifies certain preoperational tests, system demonstrations and other items which must be completed to the satisfaction of NRC Region II. SCE&G shall not proceed without written confirmation from NRC Region II that the following items have been completed in accordance with the conditions and schedules set forth below:

1. Prior to initial criticality, SCE&G shall complete to the satisfaction of NRC Region II the following 10 CFR Part 21 identified item:

   Correct the diesel generator slow start times attributed to fuel oil header drain down (81-29-01).

2. Prior to initial criticality, SCE&G shall complete to the satisfaction of NRC Region II the following open items:

   a. Complete the replacement of all damaged prefilters external to the containment building (82-07-03).

   b. Complete the repair and testing of diesel generator B before entering Mode 4.

3. Prior to exceeding 5% of full power, SCE&G shall complete to the satisfaction of NRC Region II the requirements of the following bulletins:

   a. Failure of gate-type valves to close against differential pressure (81-BU-02).

   b. Seismic analysis for as-built safety-related piping systems required to support operations above 5% of full power (79-BU-14).

4. Prior to exceeding 5% of full power, SCE&G shall complete to the satisfaction of NRC Region II the following 10 CFR Part 21 identified items:

   a. Westinghouse 3-inch gate valve closure failure (80-37-10)

   b. Westinghouse 4-inch gate valve closure failure (81-05-09).

5. Prior to exceeding 5% of full power, SCE&G shall complete to the satisfaction of NRC Region II the following open items:

   a. Correct the hydrogen recombiner high hydrogen alarm set at 6% versus proposed Technical Specification limit of 2% (80-06-07).

   b. Satisfactorily complete the capability test for Fe-55 analyses of liquid waste samples.

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6. Prior to full power operation, SCE&G shall complete to the satisfaction of NRC Region II the requirements of the following bulletin:

   Audibility problems encountered during evacuation alarm in high noise area (79-BU-18).

7. Prior to full power operation, SCE&G shall complete to the satisfaction of NRC Region II the following open item:

   Resolve the problem of the reactor building temperature being greater than expected during hot functional testing (80-25-09).

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UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-395

VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1

NOTICE OF ISSUANCE OF FACILITY

OPERATING LICENSE

Notice is hereby given that the Nuclear Regulatory Commission (the Commission) has issued Facility Operating License No. NPF-12 to the South Carolina Electric & Gas Company and the South Carolina Public Service Authority (the licensees) which authorizes operation of the Virgil C. Summer Nuclear Station, Unit 1, (the facility) at reactor core power levels not in excess of 2775 megawatts thermal in accordance with the provisions of the License, the Technical Specifications and the Environmental Protection Plan with a condition currently limiting operation to five percent of full power (139 megawatts thermal). Authorization to operate beyond five percent of full power will require specific Commission approval.

The Virgil C. Summer Nuclear Station, Unit 1 is a pressurized water reactor located in Fairfield County, South Carolina, approximately 26 miles northwest of Columbia, South Carolina and approximately one mile east of the Broad River, near Parr, South Carolina. The license is effective as of its date of issuance and shall expire at midnight on March 21, 2013.

The application for the license complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations. Issuance of this license has been authorized by the Atomic Safety and Licensing Board by its Partial Initial Decision, dated July 20, 1982 and its Supplemental Partial Initial Decision dated August 4, 1982. The Commission has made appropriate findings as required by the Act and the

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Commission's regulations in 10 CFR Chapter I, which are set forth in the license. Prior public notice of the overall action involving the proposed issuance of an operating license was published in the Federal Register on April 18, 1977 (42 FR 20203).

The Commission has determined that the issuance of this license will not result in any environmental impacts other than those evaluated in the Final Environmental Statement since the activity authorized by the license is encompassed by the overall action evaluated in the Final Environmental Statement.

For further details in respect to this action, see (1) Facility Operating License NFP-12 complete with Technical Specifications and the Environmental Protection Plan; (2) the report of the Advisory Committee on Reactor Safeguards, dated March 18, 1981; (3) the Commission's Safety Evaluation Report, dated February 1981 (NUREG-0717), and Supplement No. 1, dated April 1981, Supplement No. 2, dated May 1981, Supplement No. 3, dated January 1982 and Supplement No. 4, dated August 1982; (4) the Final Safety Analysis Report and Amendments thereto; (5) the Final Environmental Statement, dated May 1981, (NUREG-0719); (6) the Environmental Report, dated February 1977, and supplements thereto and (7) the Initial Decisions of the Atomic Safety and Licensing Board, dated July 20, 1982 and August 4, 1982.

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These items are available at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. 20555, and at the Fairfield County Library, Garden and Washington Streets, Winnsboro, South Carolina 29180. A copy of Facility Operating License NPF-12 may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing. Copies of the Safety Evaluation Report and its Supplements (NUREG-0717) and the Final Environmental Statement (NUREG-0719) may be purchased at current rates from the National Technical Information Service, Department of Commerce, 528 Port Royal Road, Springfield, Virginia 22161, and through the NRC GPO sales program by writing to the U. S. Nuclear Regulatory Commission, Attention: Sales Manager, Washington, D. C. 20555. GPO deposit account holders may call 301-492-9530.

Dated at Bethesda, Maryland, this 6th day of August 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

/s/

B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing

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SURNAME	MRushbrook/yt	WKane	J R GRAY	BJYoungblood			
DATE	8/5/82	8/5/82	8/5/82	8/5/82			

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

Docket No. 50-395

AMENDMENT TO INDEMNITY AGREEMENT NO. B-86
AMENDMENT NO. 2

Effective August 6, 1982 Indemnity Agreement No. B-86, between South Carolina Electric and Gas Company and South Carolina Public Service Authority, and the Nuclear Regulatory Commission, dated September 15, 1978, as amended is hereby further amended as follows:

Item 2a. of the Attachment to the indemnity agreement is deleted in its entirety and the following substituted therefor:

Item 2 - Amount of financial protection

a.	$1,000,000	(From 12:01 a.m., September 15, 1978, to 12 midnight, August 5, 1982 inclusive)
	$160,000,000*	(From 12:01 a.m., August 6, 1982)

Item 3 of the Attachment to the indemnity agreement is deleted in its entirety and the following substituted therefor:

Item 3 - License number or numbers

SNM-1834	(From 12:01 a.m., September 15, 1978, to 12 midnight August 5, 1982 inclusive)
NPF-12	(From 12:01 a.m., August 6, 1982)

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Item 5 of the Attachment to the indemnity agreement is amended by adding the following:

Nuclear Energy Liability Policy (Facility Form) No. MF-108 issued by Mutual Atomic Energy Liability Underwriters.

FOR THE UNITED STATES NUCLEAR REGULATORY COMMISSION

Jerome Saltzman, Assistant Director
State and Licensee Relations
Office of State Programs

Accepted_____1982

By_____
SOUTH CAROLINA ELECTRIC AND GAS COMPANY

Accepted_____1982

By_____
SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

*_____
and, as of August 1, 1977, the amount available as secondary financial protection.

APPENDIX B

TO FACILITY LICENSE NO. NPF-12

FOR

VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

DOCKET NO. 50-395

ENVIRONMENTAL PROTECTION PLAN

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VIRGIL C. SUMMER NUCLEAR STATION

UNIT NO. 1

ENVIRONMENTAL PROTECTION PLAN

(NON-RADIOLOGICAL)

TABLE OF CONTENTS

Section		Page
1.0	Objectives of the Environmental Protection Plan	1-1
2.0	Environmental Protection Issues	2-1
3.0	Consistency Requirements	3-1
3.1	Facility Design and Operation	3-1
3.2	Reporting Related to the NPDES Permits and State Certification	3-2
3.3	Changes Required for Compliance with Other Environmental Regulations	3-2
4.0	Environmental Conditions	4-1
4.1	Unusual or Important Environmental Events	4-1

1.0 Objectives of the Environmental Protection Plan

The Environmental Protection Plan (EPP) is to provide for protection of environmental values during construction and operation of the nuclear facility. The principal objectives of the EPP are as follows:

(1) Verify that the facility is operated in an environmentally acceptable manner, as established by the Final Environmental Statement (FES) and other NRC environmental impact assessments.

(2) Coordinate NRC requirements and maintain consistency with other Federal, State and local requirements for environmental protection.

(3) Keep NRC informed of the environmental effects of facility construction and operation and of actions taken to control those effects.

Environmental concerns identified in the FES which relate to water quality matters are regulated by means of the licensees' NPDES permit.

2.0 Environmental Protection Issues

In the FES-OL dated May 1981, the staff has considered the environmental impacts associated with the operation of the Virgil C. Summer Nuclear Station, Unit No. 1. No environmental issues were identified which require license conditions to resolve environmental concerns and to assure adequate protection of the environment.

Aquatic monitoring is addressed by the effluent limitations, monitoring requirements and demonstration studies contained in the effective NPDES permit issued by the South Carolina Department of Health and Environmental Control. The NRC will rely on that agency for regulations of matters involving water quality and aquatic biota.

3.0 Consistency Requirements

3.1 Facility Design and Operation

The licensees may make changes in facility design or operation or perform tests or experiments affecting the environment provided that such changes, tests or experiments do not involve an unreviewed environmental question. Changes in facility design or operation or performance of tests or experiments which do not affect the environment are not subject to this requirement. Activities governed by Section 3.3 are not subject to the requirements of this section.

Before engaging in unauthorized construction or operational activities which may affect the environment, the licensees shall prepare and record an environmental evaluation of such activity.* When the evaluation indicates that such activity involves an unreviewed environmental question, the licensees shall provide a written evaluation of such activities and obtain prior approval from the NRC.

A proposed change, test or experiment shall be deemed to involve an unreviewed environmental question if it concerns (1) a matter that may result in a significant increase in any adverse environmental impact previously evaluated in the Final Environmental Statement (FES) as modified by the staff's testimony to the Atomic Safety and Licensing Board, supplements to the FES, environmental impact appraisals, or in any decisions of the Atomic Safety and Licensing Board; or (2) a significant change in effluents or power level (in accordance with 10 CFR Part 51.5(b)(2)) or (3) a matter not previously reviewed and evaluated in the documents specified in (1) of this paragraph, which may have a significant adverse environmental impact.

*Activities are excluded from this requirement if all measurable nonradiological effects are confined to the on-site areas previously disturbed during site preparation and plant construction.

The licensees shall maintain records of changes in facility design or operation and of tests and experiments carried out pursuant to this subsection. These records shall include a written evaluation which provides bases for the determination that the change, test, or experiment does not involve an unreviewed environmental question.

3.2 Reporting Related to the NPDES Permits and State Certifications

Violations of the NPDES permit or State certification (pursuant to Section 401 of the Clean Water Act) shall be reported to the NRC by submittal of copies of the reports required by the NPDES permit or certification. South Carolina Electric & Gas Company shall also provide the NRC with a copy of the results of the following studies at the same time they are submitted to the permitting agency:

(1) Thermal Effects Study Plan

(2) Section 316(b) Demonstration Study

Changes and additions to the NPDES permit or the State certification shall be reported to the NRC within 30 days following the date the change is approved. If a permit or certification, in part or in its entirety, is appealed and stayed, the NRC shall be notified within 30 days following the date the stay is granted.

The NRC shall be notified of changes to the effective NPDES permit proposed by the licensees by providing NRC with a copy of the proposed change at the same time it is submitted to the permitting agency. South Carolina Electric & Gas Company shall provide the NRC with a copy of the application for renewal of the NPDES permit at the same time the application is submitted to the permitting agency.

3.3 Changes Required for Compliance with Other Environmental Regulations

Changes in facility design or operation and performance of tests or experiments which are required to achieve compliance with other Federal, State or local environmental regulations are not subject to the requirements of Section 3.1.

4.0 Environmental Conditions

4.1 Unusual or Important Environmental Events

Any occurrence of an unusual or important event that indicates or could result in significant environmental impact causally related to facility operation shall be recorded and promptly reported to the NRC within 24 hours followed by a written report within 30 days. No routine monitoring programs are required to implement this condition.

The written report shall (a) describe, analyze, and evaluate the event, including the extent and magnitude of the impact and facility operating characteristics, (b) describe the probable cause of the event, (c) indicate the action taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems, and (d) indicate the agencies notified and their preliminary responses.

Events reportable under this subsection which also require reports to other Federal, State or local agencies shall be reported in accordance with those reporting requirements in lieu of the requirements of this subsection. The NRC shall be provided with a copy of such reports at the same time they are submitted to the other agencies.

The following are examples of unusual or important events: excessive bird impaction events; onsite plant or animal disease outbreaks; mortality or unusual occurrence of any species protected by the Endangered Species Act of 1973; unusual fish kills; increase in nuisance organisms or conditions; and unanticipated or emergency discharge of waste water or chemical substance.