May 10, 1996

Mr. Gary J. Taylor
Vice President, Nuclear Operations
South Carolina Electric & Gas Company
Virgil C. Summer Nuclear Station
Post Office Box 88
Jenkinsville, South Carolina 29065

SUBJECT: ISSUANCE OF AMENDMENT NO. 134 TO FACILITY OPERATING LICENSE NO. NPF-12 REGARDING ECCS PUMP TESTING - VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1 (TSCR-TSP 95007) (TAC NO. M94259)

Dear Mr. Taylor:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 134 to Facility Operating License No. NPF-12 for the Virgil C. Summer Nuclear Station, Unit No. 1. The amendment changes the Technical Specifications (TS) in response to your application dated December 8, 1995.

The amendment revises the TS to: 1) add a new surveillance requirement to 4.1.2.2, 2) delete 3.1.2.3 and 3.1.2.4, 3) revise 3.4.9.3 to assure that only one charging pump is capable of injection into the reactor coolant system in Modes 4, 5 and 6, 4) add a new surveillance requirement to 4.4.9.3, 5) revise the Emergency Core Cooling System pump testing acceptance criteria and 6) revise the BASES supporting the above changes.

A copy of the related Safety Evaluation is enclosed. Notice of Issuance will be included in the Commission's Biweekly Federal Register notice. This completes the staff's efforts on TAC No. M94259.

Sincerely,

Original signed by:

Allen R. Johnson, Project Manager
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-395

Enclosures:
1. Amendment No. 134 to NPF-12
2. Safety Evaluation

cc w/enclosures: See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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Docket No. 50-395

Enclosures:
1. Amendment No. 134 to NPF-12
2. Safety Evaluation

cc w/enclosures: See next page

cc:

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

DOCKET NO. 50-395

VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 134
License No. NPF-12

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by South Carolina Electric & Gas Company (the licensee), dated December 8, 1995 complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment 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;

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

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications, as indicated in the attachment to this license amendment; and paragraph 2.C.(2) of Facility Operating License No. NPF-12 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 134 , and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. South Carolina Electric & Gas Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This amendment is effective as of its date of issuance and shall be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Eugene V. Imbro, Director
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: May 10, 1996

ATTACHMENT TO LICENSE AMENDMENT NO. 134

TO FACILITY OPERATING LICENSE NO. NPF-12

DOCKET NO. 50-395

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised pages are indicated by marginal lines.

Remove Pages	Insert Pages
III	III
3/4 1-7	3/4 1-7
3/4 1-9	3/4 1-9
3/4 1-10	3/4 1-10
3/4 4-34	3/4 4-34
3/4 4-35	3/4 4-35
3/4 5-5	3/4 5-5
B3/4 1-3	B3/4 1-3
B3/4 4-2	B3/4 4-2
B3/4 4-14a	B3/4 4-14a

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

3/4.1.2 BORATION SYSTEMS

FLOW PATH - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.1.2.1 As a minimum, one of the following boron injection flow paths shall be OPERABLE and capable of being powered from an OPERABLE emergency power source:

a. A flow path from the boric acid tanks via either a boric acid transfer pump or a gravity feed connection and a charging pump to the Reactor Coolant System if the boric acid storage tank in Specification 3.1.2.5a is OPERABLE, or

b. The flow path from the refueling water storage tank via a charging pump to the Reactor Coolant System if the refueling water storage tank in Specification 3.1.2.5b is OPERABLE.

APPLICABILITY: MODES 5 and 6.

ACTION:

With none of the above flow paths OPERABLE or capable of being powered from an OPERABLE emergency power source, suspend all operations involving CORE ALTERATIONS or positive reactivity changes.

SURVEILLANCE REQUIREMENTS

4.1.2.1.1 At least one of the above required flow paths shall be demonstrated OPERABLE at least once per 31 days by verifying that each valve (manual, power operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.

4.1.2.1.2 Demonstrate operability of the required charging pump per Surveillance 4.5.2.f.

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OVERPRESSURE PROTECTION SYSTEMS

LIMITING CONDITION FOR OPERATION

3.4.9.3 At least one of the following overpressure protection systems shall be OPERABLE:

a. Two RHR relief valves with:

1. A lift setting of less than or equal to 450 psig, and

2. The associated RHR relief valve isolation valves open; or

b. The Reactor Coolant System (RCS) depressurized with an RCS vent of greater than or equal to 2.7 square inches.

APPLICABILITY:

MODE 4 when the temperature of any RCS cold leg is less than or equal to 300°F, MODE 5, and MODE 6 with the reactor vessel head on.

ACTION:

a. With one RHR relief valve inoperable, restore the inoperable valve to OPERABLE status within 72 hours or depressurize and vent the RCS through a greater than or equal to 2.7 square inch vent within the next 8 hours.

b. With both RHR relief valves inoperable, within 8 hours either:

1. Restore at least one RHR relief valve to OPERABLE status, or

2. Depressurize and vent the RCS through a greater than or equal to 2.7 square inch vent.

c. In the event an RHR relief valve or RCS vent is used to mitigate an RCS pressure transient, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 30 days. The report shall describe the circumstances initiating the transient, the effect of the RHR relief valves or vent on the transient and any corrective action necessary to prevent recurrence.

d. In the event that two or more charging pumps are capable of injecting into the RCS, immediately initiate action to ensure a maximum of one charging pump is capable of injecting into the RCS#.

e. The provisions of Specification 3.0.4 are not applicable.

Two charging pumps may be capable of injecting into the RCS while swapping pumps, ≤15 minutes.

SURVEILLANCE REQUIREMENTS

4.4.9.3.1 Each RHR relief valve shall be demonstrated OPERABLE by:

a. Verifying the RHR relief valve isolation valves (8701A, 8701B, 8702A, and 8702B) are open at least once per 72 hours when the RHR relief valve is being used for overpressure protection.

b. Testing pursuant to Specification 4.0.5.

c. Verification of the RHR relief valve setpoint of at least one RHR relief valve, at least once per 18 months on a rotating basis.

4.4.9.3.2 The RCS vent shall be verified to be open at least once per 12 hours* when the vent is being used for overpressure protection.

4.4.9.3.3 At least two charging pumps shall be verified incapable of injecting into the RCS at least once per 31 days, except when the reactor vessel head is removed, by verifying that the motor circuit breakers are secured in the open position.

* Except when the vent pathway is provided with a valve which is locked, sealed, or otherwise secured in the open position, verify these valves open at least once per 31 days.

SURVEILLANCE REQUIREMENTS (Continued)

2. A visual inspection of the containment sump and verifying that the subsystem suction inlets are not restricted by debris and that the sump components (trash racks, screens, etc.) show no evidence of structural distress or abnormal corrosion.

e. At least once per 18 months, during shutdown, by:

1. Verifying that each automatic valve in the flow path actuates to its correct position on a safety injection actuation and containment sump recirculation test signal.

2. Verifying that each of the following pumps start automatically upon receipt of a safety injection actuation test signal:

a) Centrifugal charging pump

b) Residual heat removal pump

f. By verifying each ECCS pump's developed head at the test flow point for that pump is greater than or equal to the required developed head in accordance with Specification 4.0.5.

g. By verifying the correct position of each mechanical position stop for the following ECCS throttle valves:

1. Within 4 hours following completion of each valve stroking operation or maintenance on the valve when the ECCS subsystems are required to be OPERABLE.

2. At least once per 18 months.

HPSI System Valve Number
a. 8996A
b. 8996B
c. 8996C
d. 8994A
e. 8994B
f. 8994C
g. 8989A
h. 8989B
i. 8989C
j. 8991A
k. 8991B
l. 8991C

BORATION SYSTEMS (Continued)

MARGIN from expected operating conditions of 1.77% delta k/k or as required by Figure 3.1-3 after xenon decay and cooldown to 200°F. The maximum expected boration capability requirement occurs from full power equilibrium xenon conditions and is satisfied by 13269 gallons of 7000 ppm borated water from the boric acid storage tanks or 98631 gallons of 2300 ppm borated water from the refueling water storage tank.

With the RCS temperature below 200°F, one injection system is acceptable without single failure consideration on the basis of the stable reactivity condition of the reactor and the additional restrictions prohibiting CORE ALTERATIONS and positive reactivity changes in the event the single injection system becomes inoperable.

The boron capability required below 200°F is sufficient to provide the required SHUTDOWN MARGIN of 1 percent delta k/k or as required by Figure 3.1-3 after xenon decay and cooldown from 200°F to 140°F. This condition is satisfied by either 2000 gallons of 7000 ppm borated water from the boric acid storage tanks or 23266 gallons of 2300 ppm borated water from the refueling water storage tank.

The contained water volume limits include allowance for water not available because of discharge line location and other physical characteristics.

The OPERABILITY of one boron injection system during REFUELING ensures that this system is available for reactivity control while in MODE 6.

3/4.1.3 MOVABLE CONTROL ASSEMBLIES

The specifications of this section ensure that (1) acceptable power distribution limits are maintained, (2) the minimum SHUTDOWN MARGIN is maintained, and (3) limit the potential effects of rod misalignment on associated accident analyses. OPERABILITY of the control rod position indicators is required to determine control rod positions and thereby ensure compliance with the control rod alignment and insertion limits.

3/4.4.2 SAFETY VALVES

The pressurizer code safety valves operate to prevent the RCS from being pressurized above its Safety Limit of 2735 psig. Each safety valve is designed to relieve 420,000 lbs per hour of saturated steam at the valve set point plus 3% accumulation. The relief capacity of a single safety valve is adequate to relieve any overpressure condition which could occur during shutdown. In the event that no safety valves are OPERABLE, an operating RHR loop, connected to the RCS, provides overpressure relief capability and will prevent RCS overpressurization.

During operation, all pressurizer code safety valves must be OPERABLE to prevent the RCS from being pressurized above its safety limit of 2735 psig. The combined relief capacity of all of these valves is greater than the maximum surge rate resulting from a complete loss of load assuming no reactor trip until the first Reactor Protective System trip set point is reached (i.e., no credit is taken for a direct reactor trip on the loss of load) and also assuming no operation of the power operating relief valves or steam dump valves.

Demonstration of the safety valves' lift settings will be performed in accordance with the provisions of Section XI of the ASME Boiler and Pressure Code.

3/4.4.3 PRESSURIZER

The limit on the maximum water volume in the pressurizer assures that the parameter is maintained within the normal steady state envelope of operation assumed in the SAR. The limit is consistent with the initial SAR assumptions. The 12 hour periodic surveillance is sufficient to ensure that the parameter is restored to within its limit following expected transient operation. The maximum water volume also ensures that a steam bubble is formed and thus the RCS is not a hydraulically solid system. The requirement that a minimum number of pressurizer heaters be OPERABLE enhances the capability of the plant to control Reactor Coolant System pressure and establish natural circulation.

3/4.4.4 RELIEF VALVES (PORVs)

The pressurizer power operated relief valves (PORVs) and steam bubble function to relieve RCS pressure during all design transients up to and including the design step load decrease with steam dump. The PORVs and block valves may be used to depressurize the RCS when normal pressurizer spray is unavailable. Operation of the air operated PORVs minimizes the undesirable opening of the spring loaded pressurizer code safety valves. Each PORV has a remotely controlled motor-operated block valve to provide a positive shutoff capability should a relief valve become inoperable. The series arrangement of the PORV and its associated block valve permit surveillance while at power.

Although the pressurizer operates in temperature ranges above those for which there is reason for concern of non-ductile failure, operating limits are provided to assure compatibility of operation with the fatigue analysis performed in accordance with the ASME Code requirements.

The OPERABILITY of two RHRSRVs or an RCS vent opening of at least 2.7 square inches ensures that the RCS will be protected from pressure transients which could exceed the limits of Appendix G to 10 CFR Part 50 when one or more of the RCS cold legs are less than or equal to 300°F. Either RHRSRV has adequate relieving capability to protect the RCS from overpressurization when the transient is limited to either (1) the start of an idle RCP with the secondary water temperature of the steam generator less than or equal to 50°F above the RCS cold leg temperatures or (2) the start of an HPSI pump and its injection into a water solid RCS.

The limitation for a maximum of one charging pump to be capable of injecting into the RCS, and the Surveillance Requirement to verify at least two charging pumps are demonstrated to be INOPERABLE at least once per 31 days, while the RCS is below 300°F, provides assurance that a mass addition transient can be mitigated by a single RHR suction relief valve.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 134 TO FACILITY OPERATING LICENSE NO. NPF-12

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1

DOCKET NO. 50-395

1.0 INTRODUCTION

By letter dated December 8, 1995, South Carolina Electric & Gas Company (the licensee), submitted a request for changes to the Virgil C. Summer Nuclear Station, Unit No. 1, (Summer Station) Technical Specifications (TS). The proposed changes add a new surveillance requirement to Technical Specification (TS) Section 4.1.2.2 and delete TS Sections 3/4.1.2.3 and 3/4.1.2.4 associated with the Boration Systems section. TS Section 3/4.9.3 is being revised to assure only one charging pump is capable of Reactor Coolant System injection in the applicable modes and to add a new surveillance requirement to demonstrate this assurance. TS Section 4.5.2.f is being revised to delete specific Emergency Core Cooling System pump testing acceptance criteria and reference acceptance criteria located in the plant Inservice Testing Program. In addition, the licensee has proposed changes to the bases.

2.0 EVALUATION

The chemical and volume control system (CVCS) at Summer includes three high head safety injection/centrifugal charging pumps, each rated at 150 gpm at a design head of 5800 feet. The normal operation of the CVCS is to maintain a programmed water level in the pressurizer (i.e., maintain required water inventory in the reactor coolant system [RCS]), maintain about 8 gpm seal water injection flow to each reactor coolant pump and control water chemistry, coolant activity levels, boric acid concentrations and coolant makeup. During normal power operation, only one charging pump is employed and charging flow is controlled automatically from pressurizer level.

The centrifugal charging pumps also serve as high head safety injection pumps in the emergency core cooling system (ECCS). In the event of an accident, two charging pumps are started automatically on receipt of a safety injection signal and are automatically aligned to take suction from the refueling water storage tank (RWST) during injection. These pumps deliver flow through the boron injection tank (BIT) to the RCS at the prevailing RCS pressure. As

ENCLOSURE

noted above during normal plant operation, at least one charging pump is continuously in service. The second pump is a non-running pump on the inactive loop and the third pump is designated as a spare and its breaker(s) are racked out. The other charging pumps may be tested during power operation via the minimum flow bypass lines.

The three centrifugal charging pumps are considered part of the CVCS with respect to normal power operation and as part of the ECCS with respect to accident mitigation. In the Summer Final Safety Analysis Report (FSAR), the functional performance of these pumps is described in Section 9.3.4, along with other components in the CVCS, and in Section 6.3 discussing the capability of the overall ECCS components. In the Commission's Safety Evaluation Report (SER) related to operation of the Summer Nuclear Station (NUREG-0717), the evaluation of these pumps was addressed in both Sections 6.3 and 9.3.4. As is the case with many other pressurized water reactors (PWRs), limiting conditions for operation (LCO) and surveillance requirements (SRs) on these centrifugal charging pumps are included in TS 3/4.1.2.3 (Charging Pump-Shutdown) and TS 3/4.1.2.4 (Charging Pumps-Operating) as part of the requirements on "Boration Systems" as well as in TS 3/4.5.2 and TS 3/4.5.3 as part of the requirements on "ECCS Subsystems." The LCO's and SRs on the centrifugal charging pumps in these two sections of the TSs are essentially the same.

The proposed changes to the TSs are discussed below:

1. LCO 3.1.2.1 (p. 3/4 1-7) requires that one of two boron injection flow paths shall be OPERABLE in Modes 5 and 6. The possible paths include a charging pump aligned to the boric acid storage tank, or alternatively, aligned to the RWST. The licensee proposed to add an additional SR, 4.1.2.1.2, requiring that the operability of the required charging pump be demonstrated per SR 4.5.2.f, which is an SR on the charging pump in the ECCS TS requirements. The addition of the SR ensures operability of the required charging pump in Modes 5 and 6 (Cold Shutdown and Refueling), in view of the proposed deletions discussed subsequently. The proposed additional SR is acceptable.

2. LCO 3.1.2.3 (p. 3/4 1-9) requires that one charging pump in the boron injection flow path required by Specification 3.1.2.1 (discussed in item 1, above) shall be OPERABLE in Modes 5 and 6. The licensee proposes to delete this LCO and the two SRs, 4.1.2.3.1 and 4.1.2.3.2, since the SRs are essentially the same as those in 3/4.5.2 and 3/4.5.3 on the ECCS subsystems and, as discussed subsequently in item 4, below, SR 4.1.2.3.2. is being relocated as a new SR (4.4.9.3.3) on the reactor coolant over pressure protection systems. SR 4.1.2.3.1 specifies that the required charging pump shall be demonstrated OPERABLE by verification, on recirculation flow, a differential pressure across the pump of 2472 psig when tested pursuant to specification 4.0.5. SR 4.5.2.f on the ECCS subsystems requires that each centrifugal charging pump shall be demonstrated OPERABLE by verifying that the pumps develop a differential pressure on recirculation flow of 2472 psi when tested pursuant to specification 4.0.5. The latter SR will assure that the charging pumps will be tested quarterly on minimum flow and each refueling outage at

substantial flow per the Inservice Testing Program. SR 4.1.2.3.2 on page 3/4 1-9, which the licensee proposes to also delete and relocate requires that all charging pumps, excluding the pump that is required to be OPERABLE, shall be demonstrated to be inoperable every 31 days by verifying that the motor circuit breakers are secured in the open position. SR 4.5.3.2 on page 3/4 5-8 on the ECCS subsystems has essentially the same requirement. Thus, deletion of these two surveillance requirements from the reactivity control section of the TSs will not change the frequency or the type of surveillance that must be performed on the pumps. The deletion of TS 3.1.2.3 and the relocation of one of the two SRs to TS 3.4.9.3 is acceptable.

3. LCO 3.1.2.4 (p. 3/4 1-10) requires that two charging pumps shall be OPERABLE in Modes 1, 2, 3 and 4 whenever the temperature of the primary coolant is above 300°F. The licensee proposes to delete TS 3.1.2.4 since there are similar requirements in TS 3.5.2, 3.5.3 and 3.1.2.2. There are two SRs associated with TS 3.1.2.4. SR 4.1.2.4.1 requires that at least two charging pumps shall be demonstrated OPERABLE by verifying, on recirculation flow, a differential pressure across each pump of 2472 psig is developed when tested pursuant to Specification 4.0.5. SR 4.1.2.4.2 requires that all charging pumps, except the above required OPERABLE pumps, shall be demonstrated inoperable every 31 days whenever the temperature of the primary coolant is less than 300°F by verifying that the motor circuit breaker have been secured in the open position. In mode 4, when the temperature of the coolant is less that 300°F, a maximum of one charging pump is to be online to avoid possible overpressurization of a "solid" primary system. Specification 3.5.2. on the ECCS subsystems requires that in MODES 1, 2 and 3 that two ECCS subsystems be OPERABLE with each subsystem comprised of one OPERABLE centrifugal charging pump as well as a residual heat removal (RHR) pump and heat exchanger. Thus, Specification 3.5.2 on the ECCS subsystems requires that there be two OPERABLE charging pumps during power operation, startup and hot standby, the same as presently required by TS 3.1.2.4 on the reactivity control systems. TS 3.5.3 on the ECCS subsystems requires that there be a maximum of one OPERABLE charging pump when the temperature of the primary coolant is less than 300°F, which is the same requirement as TS 3.1.2.4 which the licensee proposes to delete. Since the requirements in TS 3.1.2.4 are repetitive of the requirements in TS 3.5.2 and 3.5.3, deletion of this TS is acceptable.

4. The licensee proposes to add an action statement and footnote to Specification 3.4.9.3 (p. 3/4 4-34) on overpressure protection systems that states:

> In the event that two or more charging pumps are capable of injecting into the RCS, immediately initiate action to insure a maximum of one charging pump is capable of injecting into the RCS#.

The footnote to this action statement is as follows:

> #Two charging pumps may be capable of injecting into the RCS while swapping pumps, $\leq$ 15 minutes.

Specification 3.4.9.3 relates to overpressure protection and is applicable in Mode 4 when the temperature of any RCS cold leg is less than 300°F, in Mode 5 and in Mode 6 with the reactor vessel head on. During shutdown conditions, it is important to limit potential overpressure conditions so as to not exceed the pressure-temperature limits of the RCS. If two charging pumps are aligned and capable of injecting water at high pressure into the system and an inadvertent safety injection signal is generated, the output from two pumps (300 gpm) would exceed the relieving capacity of one residual heat removal (RHR) suction relief valve and could overpressurize the primary system.

The licensee is also proposing an additional SR to Specification 3.4.9.3, SR 4.4.9.3.3 as follows:

> At least two charging pumps shall be verified incapable of injecting into the RCS at least once per 31 days, except when the reactor vessel head is removed, by verifying that the motor circuit breakers are secured in the open position.

In addition, the licensee is proposing to add the following sentence to the BASES on cooldown for the reactor coolant system (p. B3/4 4-14a):

> The limitation for a maximum of one charging pump to be capable of injecting into the RCS, and the Surveillance Requirement to verify at least two charging pumps are demonstrated to be INOPERABLE at least once per 31 days, while the RCS is below 300°F, provides assurance that a mass addition transient can be mitigated by a single RHR suction relief valve.

As discussed in item 2, above, the surveillance requirement being added is the same as the SR 4.1.2.3.2 which is being deleted from the section on reactivity control systems. (SR 4.5.3.2). This relocation of the SR is an administrative change and is acceptable. The addition of the new action statement to make sure that only one charging pump is aligned to inject into the primary system when the plant is in a shutdown condition provides additional assurance that the allowable pressure/temperature limits will not be exceeded. The relief capacity of a single RHR safety relief valve is adequate to relieve any overpressure condition which could occur during shutdown, assuming only one charging pump is injecting into the primary system. The action statement is intended to maintain this design assumption and is acceptable.

The sentence being added to BASES 3/4.4.9 on pressure/temperature limits explains the reason for requiring two of the three charging pumps to be racked out when the primary coolant temperature is less than 300°F. The addition to the BASES is acceptable.

5. Specification 4.5.2 includes multiple surveillance that must be performed to verify operability of each ECCS subsystem. The centrifugal charging pumps and the residual heat removal pumps are included in the inservice testing program. Specification 4.5.2.f presently requires that each centrifugal charging pump and each residual heat removal pump be verified to develop a differential pressure on recirculation flow of $\geq$ 2472 psi and $\geq$ 128 psi, respectively. The licensee proposes to substitute a requirement that the pumps be demonstrated to put out the specified flow "By verifying each ECCS pump's developed head at the test flow point for that pump is greater than or equal to the required developed head in accordance with Specification 4.0.5."

   Periodic testing of the ECCS pumps should detect early signs of pump degradation and is a requirement of the ASME Boiler and Pressure Vessel Code, Section XI, Article IWP. This testing is performed by measuring pump performance at a reference flow point. The surveillance requirements are specified in the Inservice Testing Program which is based on Section XI of the Code and Generic Letter 89-04. The proposed change will not alter or invalidate the surveillance requirements, but will permit testing the pumps at a value more representative of pump parameters required for accident mitigation. Specifically, the RHR pumps will be tested at a substantial flow rate vs. the current TS requirement of minimum flow. The centrifugal charging pumps will continue to be tested at minimum flow during normal plant operation and at a substantial flow rate during each refueling outage compared to the current TS requirement of minimum flow. The ECCS pumps are required to inject a minimum flow rate into the RCS at a specific pressure to mitigate the possible consequences of various postulated accidents. The revised test requirements will provide increased assurance that the pumps can achieve their intended function and are acceptable.

6. The licensee proposes to delete a sentence in the BASES Section B 3/4.1 for the Boration Systems discussing why there is a limit on having no more than one charging pump operable when the RCS temperature is below 275°F to assure that a mass addition pressure transient can be relieved by the operation of a single power operated relief valve. As discussed in item 4 above, this has been relocated with some amplification to the BASES for the RCS. The relocation is administrative and is acceptable.

7. The licensee proposes to delete a sentence in BASES Section 3/4 4.2 on safety valves. The licensee reports that the statement is inaccurate because it indicates that there are diverse methods of mitigating low temperature overpressure transients. The deletion from the BASES is acceptable.

As discussed above, the staff has reviewed each of the proposed changes: All of the changes are consistent with the guidelines in the new Standard Technical Specifications for Westinghouse Plants, NUREG-1431, Rev. 1 dated April 1995. The staff has determined that each of the proposed changes is acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the State of South Carolina official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluent that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (61 FR 1635). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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Date: May 10, 1996