ATTACHMENT 1

VOGTLE ELECTRIC GENERATING PLANT
PROPOSED CHANGE TO TECHNICAL SPECIFICATION 3.4.4

RELIEF VALVES

ATTACHMENT 1

ENCLOSURE 1

VOGTLE ELECTRIC GENERATING PLANT
CHANGE TO TECHNICAL SPECIFICATION 3.4.4

BASIS FOR PROPOSED CHANGE

Proposed Changes

The following changes are proposed for Technical Specification (TS) 3.4.4 to address power-operated relief valve and block valve reliability.

1. Change "All power-operated relief valves (PORVs)" to "Both power-operated relief valves (PORVs)" in the limiting condition for operation (LCO) statement.

2. In action statement a., change "With one or more PORV(s) inoperable" to "With one or both PORV(s) inoperable." Additionally in action statement a., change "or close the associated block valve(s);" to "or close the associated block valve(s) with power maintained to the block valve(s);".

3. In action statement b., change "With one or more PORV(s) inoperable" to "With one or both PORV(s) inoperable."

4. In action statement b.2, change "With no PORVs OPERABLE" to "With both PORVs inoperable".

5. In action statement c. replace the previous statement with the following:

   "With one or both block valve(s) inoperable, within 1 hour restore the block valve(s) to OPERABLE status or place its associated PORV(s) in manual control. Restore at least one block valve to OPERABLE status within the next hour if both block valves are inoperable; restore any remaining inoperable block valve to OPERABLE status within 72 hours; otherwise, be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours."

The following insert is proposed to be added to the bases section of Technical Specification 3/4.4.4.

The PORV(s) are equipped with automatic actuation circuitry and manual control capability. No credit is taken for accident mitigation by automatic PORV operation in the analyses for MODE 1, 2, and 3 transients. The PORV(s) are considered OPERABLE in either the manual or automatic mode. The automatic mode is the preferred configuration since pressure relieving capability is provided without reliance on oper tor action.

ATTACHMENT 1

ENCLOSURE 1 (CONTINUED)

VOGTLE ELECTRIC GENERATING PLANT
CHANGE TO TECHNICAL SPECIFICATION 3.4.4

BASIS FOR PROPOSED CHANGE

Basis

Enclosure A to GL 90-06 discusses the staff positions resulting from the resolution of Generic Issue 70. The technical findings and regulatory analysis are discussed in NUREG-1316. In their discussion, the NRC staff indicated that, over a period of time, the role of power-operated relief valves had changed such that instead of a pressure relieving function, the PORVs performed one, or more, of the following safety-related functions:

1. Mitigation of steam generator tube rupture accident,
2. Low-temperature overpressure protection of the reactor vessel during startup and shutdown, or
3. Plant cooldown.

At Vogtle Electric Generating Plant (VEGP), the PORVs and block valves are safety-grade, while at many plants licensed earlier the valves are not safety-grade. Based upon their studies, the NRC staff proposed changes to Technical Specification 3/4.4.4, "Relief Valves" to make it consistent with the safety-related function of the PORVs. At VEGP, many of these changes had already been incorporated into the Technical Specifications, although the wording was slightly different. To provide a consistent approach to the Technical Specifications, it was decided to incorporate the proposed wording changes, which were editorial, into the VEGP format. Two of the changes proposed by the Generic Letter are more than editorial. The first changes the Technical Specifications to specify that power be maintained to the block valve when the PORV is declared inoperable due to excessive seat leakage. Maintaining power to the block valve makes it easier for the operator to establish feed and bleed operations in a timely manner. The second adds a new requirement to action statement c. which requires that the PORV be placed in manual control when its associated block valve is inoperable. These changes provide the additional level of flexibility and protection recommended by the generic letter and result in requirements that are the same as suggested by it.

ATTACHMENT 1

ENCLOSURE 2

VOGTLE ELECTRIC GENERATING PLANT
CHANGE TO TECHNICAL SPECIFICATION 3.4.4

10 CFR 50.92 EVALUATION

Pursuant to 10 CFR 50.92, Georgia Power Company (GPC) has evaluated the attached proposed amendment and has determined that operation of the facility in accordance with the proposed amendment would not involve significant hazards considerations.

Background

Based on a study of the role of power-operated relief valves, the NRC published Generic Letter 90-06. This generic letter proposed revisions to the Technical Specifications that provide protection from inadvertent opening of power-operated relief valves without precluding their use for manual operation during an emergency. The proposed changes implement the changes recommended by Generic Letter 90-06. Some of the changes, such as the use of the term "all" instead of "both" are purely editorial because only two valves are involved. The editorial changes provide for wording that is consistent with the proposed wording of the generic letter.

Analysis

The design for VEGP has two safety-grade PORVs and two safety-grade block valves. Therefore, changing the wording from "all" to "both" or from "one or more" to "one or both" is purely editorial and has no effect on safety.

The revised action statement a. will specifically add the requirement to maintain power to the closed block valves when the PORVs are experiencing excessive leakage. The current Technical Specification allows the valve to be closed with or without maintaining power to the block valve. By maintaining power to the block valves, the block valves can be readily opened from the control room, and the PORVs can be utilized for controlling reactor pressure. Closure of the block valves establishes reactor coolant pressure boundary (RCPB) integrity for a PORV that has excessive seat leakage. No credit is taken for the PORV for protecting from overpressure events since overpressure protection is provided by the pressurizer code safety valves. The revised action statement allows continued plant operation with the block valves closed and power maintained to the block valves. This permits operation of the plant for a limited period of time not to exceed the next refueling outage (Mode 6) so that maintenance can be performed on the PORVs to eliminate the seat leakage condition. This does not change the effect of the Technical Specification on plant safety, because it specifically requires an action that is currently allowed by the Specification. Since the blocked valve and its associated power supply are safety-grade, inadvertent opening of a block valve is not expected. Therefore, maintaining power to the block valve will not significantly change the probability of any accident.

ATTACHMENT 1

ENCLOSURE 2 (CONTINUED)

VOGTLE ELECTRIC GENERATING PLANT
CHANGE TO TECHNICAL SPECIFICATION 3.4.4

10 CFR 50.92 EVALUATION

The change to action statement c. establishes action requirements consistent with the function of the block valves. The block valves' main function is to isolate a PORV. The current Technical Specification allows the operator to either close and remove power from the inoperable block valve or close and remove power from the PORV and its associated solenoid valve. The revision replaces the previous choice with a requirement to place the PORV in manual. Placing the PORV in manual will prevent PORV opening except by deliberate operator action. This avoids the potential for a stuck-open PORV at a time that the block valves are inoperable. The time allowed to restore the block valves to operable status is the same as in the current Technical Specification and is based upon the time limit for inoperable PORVs in action statements b.1. and b.2., since the PORVs are not capable of performing their automatic function when placed in manual control. The PORVs and their controls are safety-grade components. Placing a PORV in manual rather than closing it and removing power does not significantly affect the probability of inadvertent PORV operation, but it does improve the ability of the operator to use the valve if it is needed. Therefore, the probability or consequences of previously analyzed accidents are not significantly altered by this revision to the Technical Specification.

Placing the PORVs in manual control allows the use of the PORVs in the manual mode to control reactor coolant system pressure or establish feed and bleed operation if the block valves are inoperable. The modified action statement does not specify closure of the block valves, because if such action is taken it may not be possible to reopen the block valves. Likewise, it does not specify either the closure of the PORV, because it would not likely be open, or the removal of power from the PORV. When a block valve is inoperable, placing the PORV in manual control is sufficient to preclude the potential for having a stuck-open PORV that could not be isolated because of an inoperable block valve.

In GL 90-06, a new surveillance requirement 4.4.4.3 was proposed to demonstrate the operability of the emergency power supply for the PORVs and block valves by manually transferring motive and control power from the normal to the emergency power bus. At VEGP, the block valves are powered from safety-related, 480-V busses, which are also tied to the diesel generators. Additionally, the PORVs are electrically solenoid operated, and the solenoids for the PORVs are powered from the Class 1E 125-Vdc system. The normal power supplies are from Class 1E sources, and no emergency power supply transfer is required. Therefore, a new surveillance requirement is not needed.

VOGTLE ELECTRIC GENERATING PLANT
CHANGE TO TECHNICAL SPECIFICATION 3.4.4

10 CFR 50.92 EVALUATION

The change to bases page B 3/4 4-3 clarifies PORV operability requirements. If one PORV is inoperable due to causes other than excessive seat leakage, the PORV must be restored to operable status within 1 hour or the associated block valve must be closed and power removed from the block valve. The accident analyses for VEGP takes no credit for the actuation of PORVs for overpressure protection. The only conditions analyzed are those where the actuation of the PORVs would make operation more severe. The pressurizer code safety valves are assumed to provide overpressure protection. The PORVs can be considered operable in either the manual or automatic mode. By maintaining power to the block valve, the PORV can be manually opened from the control room. This condition was analyzed in NUREG/CR-5230. In this study, feed and bleed cooling of the primary system was evaluated as an alternative measure for removing decay heat. The study indicated that current Technical Specifications which require that the block valves be closed with power removed upon discovering that a PORV has excessive seat leakage make it unlikely that feed and bleed operations could be initiated in a timely manner. It was proposed that the Technical Specifications require that power be maintained to the block valve, thus increasing the likelihood that timely feed and bleed operations could be initiated from the control room. Georgia Power Company has determined that the proposed Technical Specification changes are applicable to VEGP and will increase the likelihood of timely establishment of feed and bleed operation.

Results

1. The proposed Technical Specification changes do not involve a significant increase in the probability or consequences of an accident previously evaluated because maintaining power to the block valve is already allowed by the Technical Specifications and placing PORVs in the manual mode will prevent opening of the PORV, which is equivalent to the action currently allowed by the Technical Specification. This makes it easier for the operator to establish feed and bleed operations if necessary. The remainder of the changes are editorial.

2. The proposed Technical Specification does not create the possibility of a new or different kind of accident from any accident previously evaluated because there are no changes or modifications to the design of the plant. The only changes are operational in nature; e.g., keeping power maintained to the block valve, therefore, the types of accidents previously evaluated have not changed, and no new types of transients or accidents are introduced.

3. The proposed change does not involve a significant reduction in a margin of safety because the revised actions are equivalent or more restrictive than currently allowed by the Technical Specifications. Studies have shown that operating in accordance with the proposed Technical Specifications will result in a reduction in the probability of core melt, thus improving the margin of safety.

ATTACHMENT 1

ENCLOSURE 2 (CONTINUED)

VOGTLE ELECTRIC GENERATING PLANT
CHANGE TO TECHNICAL SPECIFICATION 3.4.4

10 CFR 50.92 EVALUATION

Conclusion

Based on the preceding analyses, GPC has determined that the proposed change to the Technical Specifications does not involve a significant increase in the probability or consequences of an accident previously evaluated, create the possibility of a new or different kind of accident from any accident previously evaluated, or involve a significant reduction in a margin of safety. Therefore, GPC concludes that the proposed change meets the requirements of 10 CFR 50.92(c) and does not involve a significant hazards consideration.

ATTACHMENT 1

ENCLOSURE 3

VOGTLE ELECTRIC GENERATING PLANT
CHANGE TO TECHNICAL SPECIFICATION 3.4.4

INSTRUCTIONS FOR INCORPORATION

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3/4 4-9* and 3/4 4-10	3/4 4-9* and 3/4 4-10
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* Overleaf page containing no change.

3/4.4.4 RELIEF VALVES

LIMITING CONDITION FOR OPERATION

3.4.4 Both ~~All~~ power-operated relief valves (PORVs) and their associated block valves shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

a. With one or both ~~more~~ PORV(s) inoperable, because of excessive seat leakage, within 1 hour either restore the PORV(s) to OPERABLE status or close the associated block valve(s) with power maintained to the block valve(s); otherwise, be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.

b. With one or both ~~more~~ PORV(s) inoperable due to causes other than excessive seat leakage, within 1 hour either restore the PORV(s) to OPERABLE status or close the associated block valve(s) and remove power from the block valve, and

   1. With only one PORV OPERABLE, restore at least a total of two PORVs to OPERABLE status within the following 72 hours or be in HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours, or

   2. With both ~~no~~ PORVs inoperable ~~OPERABLE~~, restore at least one PORV to OPERABLE status within 1 hour or be in HOT STANDBY within the next 6 hours and HOT SHUTDOWN within the following 6 hours.

c. With one or both ~~more~~ block valve(s) inoperable, within 1 hour ~~(1)~~ restore the block valve(s) to OPERABLE status or ~~close the block valve(s) and remove power from the block valve(s) or close the PORV and remove power from its associated solenoid valve; and (2) apply ACTION b above, as appropriate, for the isolated PORV(s).~~ Replace with Insert

d. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.4.4.1 Each PORV shall be demonstrated OPERABLE at least once per 18 months by:

a. Operating the valve through one complete cycle of full travel, and

b. Performing a CHANNEL CALIBRATION.

Insert for Page 3/4 4-10

...place its associated PORV(s) in manual control. Restore at least one block valve to OPERABLE status within the next hour if both block valves are inoperable; restore any remaining inoperable block valve to OPERABLE status within 72 hours; otherwise, be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.

3/4.4.4 RELIEF VALVES

The 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. Operation of the PORVs minimizes the undesirable opening of the spring-loaded pressurizer Code safety valves. Each PORV has a remotely operated block valve to provide a positive shutoff capability should a relief valve become inoperable.

Add insert here

3/4.4.5 STEAM GENERATORS

The Surveillance Requirements for inspection of the steam generator tubes ensure that the structural integrity of this portion of the RCS will be maintained. The program for inservice inspection of steam generator tubes is based on a modification of Regulatory Guide 1.83, Revision 1. Inservice inspection of steam generator tubing is essential in order to maintain surveillance of the conditions of the tubes in the event that there is evidence of mechanical damage or progressive degradation due to design, manufacturing errors, or inservice conditions that lead to corrosion. Inservice inspection of steam generator tubing also provides a means of characterizing the nature and cause of any tube degradation so that corrective measures can be taken.

The plant is expected to be operated in a manner such that the secondary coolant will be maintained within those chemistry limits found to result in negligible corrosion of the steam generator tubes. If the secondary coolant chemistry is not maintained within these limits, localized corrosion may likely result in stress corrosion cracking. The extent of cracking during plant operation would be limited by the limitation of steam generator tube leakage between the Reactor Coolant System and the Secondary Coolant System (primary-to-secondary leakage = 500 gallons per day per steam generator). Cracks having a primary-to-secondary leakage less than this limit during operation will have an adequate margin of safety to withstand the loads imposed during normal operation and by postulated accidents. Operating plants have demonstrated that primary-to-secondary leakage of 500 gallons per day per steam generator can readily be detected by radiation monitors of steam generator blowdown. Leakage in excess of this limit will require plant shutdown and an unscheduled inspection, during which the leaking tubes will be located and plugged.

Wastage-type defects are unlikely with proper chemistry treatment of the secondary coolant. However, even if a defect should develop in service, it will be found during scheduled inservice steam generator tube examinations. Plugging will be required for all tubes with imperfections exceeding the plugging limit of 40% of the tube nominal wall thickness. Steam generator tube inspections of operating plants have demonstrated the capability to reliably detect degradation that has penetrated 20% of the original tube wall thickness.

Insert for Page B 3/4 4-3

The PORVs are equipped with automatic actuation circuitry and manual control capability. No credit is taken for accident mitigation by automatic PORV operation in the analyses for MODE 1, 2, and 3 transients. The PORV(s) are considered OPERABLE in either the manual or automatic mode. The automatic mode is the preferred configuration, since pressure relieving capability is provided without reliance on operator action.

ATTACHMENT 2

VOGTLE ELECTRIC GENERATING PLANT
PROPOSED CHANGE TO TECHNICAL SPECIFICATION 3.4.9.3

COLD OVERPRESSURE PROTECTION SYSTEMS

ATTACHMENT 2

ENCLOSURE 1

VOGTLE ELECTRIC GENERATING PLANT
CHANGE TO TECHNICAL SPECIFICATION 3.4.9.3

BASIS FOR PROPOSED CHANGE

Proposed Changes

The following changes are proposed for Technical Specification (TS) 3.4.9.3 to address cold overpressure protection devices.

1. In the LCO statement change "At least one of the following Cold Overpressure Protection Systems shall be OPERABLE" to "At least one of the following groups of Cold Overpresssure Protection Devices shall be OPERABLE when the reactor coolant system (RCS) is not depressurized through a vent path capable of relieving at least 670 gpm water flow at 470 psig." This constitutes an editorial change since the statement for the vent path was relocated from LCO statement c.

2. Change LCO statement c. from "The Reactor Coolant System (RCS) depressurized with an RCS vent capable of relieving at least 670 gpm water flow at 470 psig." to "One RHR SRV and one PORV with setpoints as described above."

3. Change action statement a. from "With one PORV and one RHR suction relief valve inoperable, either restore two PORVs or two RHR suction relief valves to OPERABLE status within 7 days or depressurize and vent the RCS as specified in Specification 3.4.9.3.c above, within the next 8 hours." to "In MODE 4, with only one PORV or one RHR SRV OPERABLE, restore one additional valve to OPERABLE status within the next 7 days or depressurize and vent the RCS, as specified in 3.4.9.3 above, within the next 8 hours."

4. Add a new action statement b. which states, "In MODES 5 and 6, with only one PORV or one RHR SRV OPERABLE, restore one additional valve to OPERABLE status within the next 24 hours or depressurize and vent the RCS, as specified in 3.4.9.3 above, within the next 8 hours.

5. Move the current action statement b. to action statement c. Change "With both PORVs and both RHR suction relief valves inoperable, depressurize and vent the RCS as specified in Specification 3.4.9.3.c, above, within 8 hours." to "In MODES 4, 5, or 6 with none of the PORVs or RHR SRVs OPERABLE, depressurize and vent the RCS as specified in 3.4.9.3 above, within the next 8 hours."

6. Change action statement c. to action statement d. and change "In the event either the PORVs, the RHR suction relief valves, or the RCS vent(s) are used" to "In the event that the PORVs and/or RHR SRVs, or the RCS vent(s) are used".

7. Change action statement d. to action statement e.

ATTACHMENT 2

ENCLOSURE 1 (CONTINUED)

VOGTLE ELECTRIC GENERATING PLANT
CHANGE TO TECHNICAL SPECIFICATION 3.4.9.3

BASIS FOR PROPOSED CHANGE

Additionally, the bases for the cold overpressure protection systems on page B 3/4 4-16 is being changed by replacing the first paragraph with the following:

> The OPERABILITY of two PORVs, two RHR suction relief valves, a PORV and RHR SRV, or an RCS vent capable of relieving at least 670 gpm water flow at 470 psig 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 350°F. The PORVs have 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 all three charging pumps and subsequent injection into a water-solid RCS. The RHR SRVs have 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 to primary water temperature difference of the steam generator less than or equal to 25°F at an RCS temperature of 350°F and varies linearly to 50°F at an RCS temperature of 200°F or less, or (2) the start of all three charging pumps and subsequent injection into a water-solid RCS. A combination of a PORV and a RHR SRV also provides overpressure protection for the RCS.

The second paragraph of the bases is also being revised by changing "Operation with a PORV setpoint less than or equal to the maximum setpoint ensures that the nominal 16 EFPY Appendix G reactor vessel NDT limits" to "Operation with a PORV setpoint less than or equal to the maximum setpoint ensures that the nominal 13 EFPY for Unit 1 and 16 EFPY for Unit 2 Appendix G reactor vessel NDT limits"

Basis

The proposed change will relocate the depressurizing of the reactor coolant system (RCS) through a RCS vent from statement c. of the limiting condition for operation (LCO) to the initial LCO statement, which is an editorial change. A new action statement c. will allow the combination of one residual heat removal (RHR) safety relief valve (SRV) and one PORV to be used for cold overpressure protection. An action statement is proposed for Modes 5 and 6 that decreases the allowed out-of-service time (AOT) from 7 days to 24 hours with only one valve available to provide cold overpressure protection. This is consistent with the guidance of GL 90-06.

The revision to the bases restates the current Technical Specification limits for starting reactor coolant pumps. The addition of 13 EFPY for Unit 1 is an editorial revision unrelated to the changes proposed for Generic Letter 90-06. This change to the bases simply reflects the values that are already in the Technical Specifications.

ATTACHMENT 2

ENCLOSURE 2

VOGTLE ELECTRIC GENERATING PLANT
CHANGE TO TECHNICAL SPECIFICATION 3.4.9.3

10 CFR 50.92 EVALUATION

Pursuant to 10 CFR 50.92, Georgia Power Company (GPC) has evaluated the attached proposed amendment and has determined that operation of the facility in accordance with the proposed amendment would not involve significant hazards considerations.

Background

Generic Letter 90-06 notes that with the exception of a few plants, the low-temperature overpressure protection (LTOP) systems consist of either redundant PORVs or redundant safety relief valves in the residual heat removal system.

One of the exceptions noted was that newer Westinghouse plants (such as VEGP) have LTOP systems that consist of both redundant PORVs and redundant SRVs. This allows two PORVs or two RHR SRVs or a combination of one PORV and one SRV to provide redundant overpressure protection in Modes 4, 5, and 6. The Technical Specification in enclosure B to GL 90-06 does not address plants such as VEGP that have four redundant LTOP channels. Generic Letter 90-06 requested GPC to inform the NRC if it intended to follow the staff positions in enclosures A and B or if it intended to propose alternative measures. This is the proposed alternative Technical Specification for VEGP.

Analysis

The purpose of this Technical Specification is to assure that two trains of LTOP protection are in service in Modes 4, 5, and 6 unless the reactor coolant system is properly vented. The proposed Technical Specifications are consistent with the cold overpressure analyses that indicate that either one RHR SRV or one PORV is capable of providing LTOP protection.

The proposed TS in GL 90-06 reduced the allowed out-of-service time to 24 hours when only one channel is available for cold overpressure protection in Modes 5 and 6. The proposed VEGP Technical Specification also allows only 24 hours out-of-service time when only one channel is available for cold overpressure protection in Modes 5 and 6.

The current VEGP Technical Specification allows the use of either two PORVs, two RHR SRVs, or an RCS vent to provide LTOP protection. The proposed revised Technical Specification also allows the use of one PORV and one RHR SRV. One PORV and one RHR SRV is capable of providing redundant LTOP protection.

With only one channel of LTOP protection available in Mode 4, the revised specification will allow 7 days to provide a redundant operable channel of LTOP protection. With only one channel of LTOP protection available in Modes 5 or 6, the allowed operation time is reduced to 24 hours. This is consistent with the guidelines in GL 90-06.

VOGTLE ELECTRIC GENERATING PLANT
CHANGE TO TECHNICAL SPECIFICATION 3.4.9.3

10 CFR 50.92 EVALUATION

Results

1. The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated because it will continue to provide redundant channels of LTOP protection and allows the additional use of one RHR SRV and one PORV for cold overpressure protection. The allowed out-of-service time in Modes 5 and 6 is reduced to 24 hours from 7 days when only one channel is available. These changes do not affect the probability of any initiating event. Therefore, the probability of any previously evaluated accident is not affected. Furthermore, cold overpressure protection will continue to be maintained in accordance with 10 CFR 50, Appendix G. Therefore, there is no effect on the consequences of any accident previously evaluated.

2. The proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated because cold overpressure protection is maintained. No new modes of operation are involved, and no new failure modes will be created by the proposed change.

3. The proposed changes do not involve a significant reduction in a margin of safety because the limits of 10 CFR 50, Appendix G will continue to be met, as before, under the existing requirements. The allowed out-of-service time for the case where only one PORV or RHR SRV is available will be more restrictive under the proposed change, requiring corrective action or compensatory measures in 24 hours rather than 7 days. Therefore, there will be no reduction in any margin of safety.

Conclusion

Based on the preceding analyses, GPC has determined that the proposed change to the Technical Specifications does not involve a significant increase in the probability or consequences of accidents previously evaluated, create the possibility of a new or different kind of accident from any previously evaluated, or involve a significant reduction in a margin of safety. Therefore, GPC concludes that the proposed change meets the requirements of 10 CFR 50.92(c) and does not involve a significant hazards consideration.

ATTACHMENT 2

ENCLOSURE 3

VOGTLE ELECTRIC GENERATING PLANT
CHANGE TO TECHNICAL SPECIFICATION 3.4.9.3

INSTRUCTION FOR INCORPORATION

Remove Page	Insert Page
3/4 4-33* and 3/4 4-34	3/4 4-33* and 3/4 4-34
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* Overleaf page containing no change.

REACTOR COOLANT SYSTEM

COLD OVERPRESSURE PROTECTION SYSTEMS

LIMITING CONDITION FOR OPERATION

3.4.9.3 At least one of the following groups of Cold Overpressure Protection ~~Systems~~ Devices shall be OPERABLE when:

a. Two power-operated relief valves (PORVs) with lift settings which vary with RCS temperature and which do not exceed the limits established in Figure 3.4-4a (Unit 1), Figure 3.4-4b (Unit 2), or

b. Two residual heat removal (RHR) suction relief valves each with a setpoint of 450 psig ± 3%, or

c. The Reactor Coolant System (RCS) is not depressurized ~~with an RCS~~ through a 6 vent path capable of relieving at least 670 gpm water flow at 470 psig.

One RHR SRV and one PORV with setpoints as described above

APPLICABILITY: MODES 4, 5, and 6 with the reactor vessel head on.

ACTION:

Replace with insert

~~a. With one PORV and one RHR suction relief valve inoperable, either restore two PORVs or two RHR suction relief valves to OPERABLE status within 7 days or depressurize and vent the RCS as specified in Specification 3.4.9.3.c, above, within the next 8 hours.~~

In MODES 4, 5, or 6

c. ~~b.~~ With ~~both~~ none of the PORVs ~~and both~~ or RHR ~~suction relief valves inoperable,~~ SRVs OPERABLE, depressurize and vent the RCS as specified in Specification 3.4.9.3.d, above, within the next 8 hours.

d. ~~c.~~ In the event ~~either~~ that the PORVs~~, the~~ and/or RHR ~~suction relief valves,~~ SRV's or the RCS vent(s) are used to mitigate an RCS pressure transient, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.8.2 within 30 days. The report shall describe the circumstances initiating the transient, the effect of the PORVs, the RHR suction relief valves or RCS vent(s) on the transient, and any corrective action necessary to prevent recurrence.

e. ~~d.~~ The provisions of Specification 3.0.4 are not applicable.

Insert Page 3/4 4-34

a. In MODE 4, with only one PORV or one RHR SRV OPERABLE, restore one additional valve to OPERABLE status within the next 7 days or depressurize and vent the RCS, as specified in 3.4.9.3 above, within the next 8 hours.

b. In MODES 5 and 6, with only one PORV or one RHR SRV OPERABLE, restore one additional valve to OPERABLE status within the next 24 hours or depressurize and vent the RCS, as specified in 3.4.9.3 above, within the next 8 hours.

PRESSURE/TEMPERATURE LIMITS (Continued)

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

COLD OVERPRESSURE PROTECTION SYSTEMS

Replace with insert

~~The OPERABILITY of two PORVs, two RHR suction relief valves or an RCS vent capable of relieving at least 670 gpm water flow at 470 psig 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 350°F. Either PORV or either RHR suction relief valve 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 all three charging pumps and subsequent injection into a water-solid RCS.~~

The Maximum Allowed PORV Setpoint for the Cold Overpressure Protection System (COPS) is derived by analysis which models the performance of the COPS assuming various mass input and heat input transients. Operation with a PORV Setpoint less than or equal to the maximum Setpoint ensures that the nominal 13 EFPY, for unit 1 and 16 EFPY for unit 2 Appendix G reactor vessel NDT limits criteria will not be violated with consideration for a maximum pressure overshoot beyond the PORV setpoint which can occur as a result of time delays in signal processing and valve opening, instrument uncertainties, and single failure. To ensure that mass and heat input transients more severe than those assumed cannot occur, Technical Specifications require lockout of all safety injection pumps while in MODES 4, 5, and 6 with the reactor vessel head installed and disallow start of an RCP if secondary temperature is more than 50°F above primary temperature. Additional temperature limitations are placed on the starting of a Reactor Coolant Pump in Specification 3.4.1.3. These limitations assure that the RHR system remains within its ASME design limits when the RHR relief valves are used to prevent RCS overpressurization.

The Maximum Allowed PORV Setpoint for the COPS will be updated based on the results of examinations of reactor vessel material irradiation surveillance specimens performed as required by 10 CFR Part 50, Appendix H, and in accordance with the schedule in Table 16.3-3 of the VEGP FSAR.

3/4.4.10 STRUCTURAL INTEGRITY

The inservice inspection and testing programs for ASME Code Class 1, 2, and 3 components ensure that the structural integrity and operational readiness of these components will be maintained at an acceptable level throughout the life of the plant. These programs are in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a(g) except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i).

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The OPERABILITY of two PORVs, two RHR suction relief valves, a PORV and RHR SRV, or an RCS vent capable of relieving at least 670 gpm water flow at 470 psig 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 350°F. The PORVs have 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 all three charging pumps and subsequent injection into a water-solid RCS. The RHR SRVs have 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 to primary water temperature difference of the steam generator less than or equal to 25°F at an RCS temperature of 350°F and varies linearly to 50°F at an RCS temperature of 200°F or less, or (2) the start of all three charging pumps and subsequent injection into a water-solid RCS. A combination of a PORV and a RHR SRV also provides overpressure protection for the RCS.