

MAR 03 1997

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LR-N97113
LCR H97-01

United States Nuclear Regulatory Commission
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Washington, DC 20555

**REQUEST FOR CHANGE TO TECHNICAL SPECIFICATIONS
HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NPF-57
DOCKET NO. 50-354**

Gentlemen:

In accordance with 10CFR50.90, Public Service Electric & Gas (PSE&G) Company hereby requests a revision to the Technical Specifications (TS) for the Hope Creek Generating Station (HC). In accordance with 10CFR50.91(b)(1), a copy of this submittal has been sent to the State of New Jersey.

The proposed revisions contained in this submittal resolve TS related issues documented in Hope Creek's Corrective Action Program. Implementation of these proposed changes will: 1) result in a more clearly defined licensing basis for Hope Creek; 2) improve the consistency between the TS and the plant configuration; and 3) complete required corrective actions to resolve TS discrepancies identified in the Corrective Action Program. Specifically, the proposed changes are being made to: 1) provide additional information pertaining to instrument loop response time testing; 2) update references to 10CFR50 requirements; 3) reflect plant modifications to containment isolation valves; 4) provide appropriate guidance for the main turbine bypass system; and 5) incorporate Bases changes associated with implementation of Hope Creek TS Amendment No. 75. NRC approval of these changes is requested prior to initiation of the next refueling outage.

The proposed changes affect the following sections of the Hope Creek TS: 1) 3/4.3.1, "Reactor Protection System Instrumentation"; 2) 3/4.3.2, "Isolation Actuation Instrumentation"; 3) 3/4.3.3, "Emergency Core Cooling System Actuation Instrumentation"; 4) Surveillance Requirement 4.0.5; 5) 3/4.6.1, "Primary Containment" and associated Bases; 6) 3/4.7.7, "Main Turbine Bypass System"; and 7) the Bases for 3/4.8, "Electrical Power Systems".

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The proposed changes have been evaluated in accordance with 10CFR50.91(a)(1), using the criteria in 10CFR50.92(c), and a determination has been made that this request involves no significant hazards considerations. The basis for the requested change is provided in Attachment 1 to this letter. A 10CFR50.92 evaluation, with a determination of no significant hazards consideration, is provided in Attachment 2. The marked up Technical Specification pages affected by the proposed changes are provided in Attachment 3.

Upon NRC approval of this proposed change, PSE&G requests that the amendment be made effective on the date of issuance, but allow an implementation period of sixty days to provide sufficient time for associated administrative activities.

Should you have any questions regarding this request, we will be pleased to discuss them with you.

Sincerely,

EC Simpson

Affidavit
Attachments (3)

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Files Nos. 1.2.1 (Hope Creek), 2.3 (LCR H97-01)

REF: LR-N97113
LCR H97-01

STATE OF NEW JERSEY)
) SS.
COUNTY OF SALEM)

E. C. Simpson, being duly sworn according to law deposes and says:

I am Senior Vice President - Nuclear Engineering of Public Service Electric and Gas Company, and as such, I find the matters set forth in the above referenced letter, concerning Hope Creek Generating Station, Unit 1, are true to the best of my knowledge, information and belief.

E. C. Simpson

Subscribed and Sworn to before me
this 3RD day of March, 1997

Deloris D. Hadden
Notary Public of New Jersey

DELORIS D. HADDEN
Notary Public of New Jersey
My Commission Expires
03-29-2000

My Commission expires on _____

HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NPF-57
DOCKET NO. 50-354
REVISIONS TO THE TECHNICAL SPECIFICATIONS (TS)

BASIS FOR REQUESTED CHANGE:

The changes proposed in this request: 1) provide additional information pertaining to instrument loop response time testing; 2) update references to 10CFR50 requirements; 3) reflect plant modifications to containment isolation valves as described in NRC Notice of Violation 50-354/96-10-01; 4) provide appropriate guidance for the main turbine bypass system; and 5) revise the TS bases for the emergency diesel generators. These changes are being made to: 1) provide a more clearly defined licensing basis for Hope Creek; 2) improve the consistency between the TS and the plant configuration; and 3) complete required corrective actions to resolve TS discrepancies identified in the Corrective Action Program.

REQUESTED CHANGE AND PURPOSE:

Response Time Testing Requirement Clarification

As shown in Attachment 3 of this letter, Surveillance Requirements 4.3.1.3, 4.3.2.3 and 4.3.3.3 will be revised to include additional information concerning response time testing. The proposed additions specify which portions of the instrumentation are not subject to response time testing. These changes reflect information already contained in UFSAR Tables 7.2-3, 7.3-16 and 7.3-17. Elimination of response time testing for this equipment was approved by the NRC in a Safety Evaluation Report, dated 10/24/95, for Hope Creek TS Amendment No. 85. This information is being added to address potential conflicts concerning current Surveillance Requirement 4.3.1.3 and the TS definition for REACTOR PROTECTION SYSTEM RESPONSE TIME. Surveillance Requirements 4.3.2.3 and 4.3.3.3 are also being revised for similar reasons to provide a consistent level of information in the TS. These proposed changes do not alter the method (as described in Amendment No. 85) in which response time testing is performed at Hope Creek.

Surveillance Requirement 4.0.5 Clarification

Currently, Surveillance Requirement 4.0.5 includes a reference to the requirements of 10CFR50.55a(g) for both the inservice inspection and inservice testing programs. As indicated in

Attachment 3 of this letter, a new reference to 10CFR50.55a(f) for inservice testing and 10CFR50.55a(g) for inservice inspection is proposed. The purpose of this change is to provide an accurate reference to 10CFR50 requirements in the TS. This proposed change does not alter the manner in which inservice testing and inservice inspection activities are performed at Hope Creek.

Drywell and Suppression Chamber Purge System Modifications

As shown in Attachment 3 of this letter, LCO ACTION Statement 3.6.1.8 b, Surveillance Requirement 4.6.1.8.2, Surveillance Requirement 4.6.1.2.d, Surveillance Requirement 4.6.1.2.i and the associated TS Bases are being revised to reflect a design modification that has been installed at Hope Creek. This design modification replaced the: 1) drywell purge supply and exhaust isolation valves; and 2) suppression chamber purge supply and exhaust isolation valves, containing resilient material seals with metal seated valves. These proposed changes implement corrective actions being taken to address NRC Notice of Violation 50-354/96-10-01.

Main Turbine Bypass Valve Applicability and Action Statements

As shown in Attachment 3 of this letter, the APPLICABILITY statement for LCO 3.7.7 will be revised to specify a new requirement for main turbine bypass system operability. Specifically, the main turbine bypass system will be required to be operable during OPERATIONAL CONDITION 1 at or above 25% of RATED THERMAL POWER as opposed to OPERATIONAL CONDITION 1 as currently stated. This change is being made to appropriately link the operability requirements contained in the APPLICABILITY and ACTION Statement of LCO 3.7.7.

TS Bases Changes

As indicated in Attachment 3 of this letter, the HC TS Bases will be revised to include information contained in the Safety Evaluation Report, dated 8/1/95, for Technical Specification Amendment No. 75. This information concerns the Bases for the allowed-outage-time (AOT) for the C and D emergency diesel generators (EDGs). In addition, a clarification concerning the monitoring of unavailability of the EDGs is being made with this submittal. Specifically, Hope Creek will be implementing 10CFR50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants", to monitor and control EDG unavailability limits as described in NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at

Nuclear Power Plants", as endorsed by Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants", June 1993. This will replace the probabilistic risk analysis (PRA) result for a 30 day per year value of EDG inoperability referenced in the Safety Evaluation Report for TS Amendment No. 75. These changes are being made to complete the implementation of Amendment No. 75 commitments and to establish a more clearly defined and appropriate method for monitoring and limiting unavailability of the EDGs.

BACKGROUND:

The proposed TS revisions will be discussed separately as indicated below:

Response Time Testing Requirements Clarification

Elimination of response time testing for certain classes of safety-related instrumentation was approved by the NRC in a Safety Evaluation Report, dated 10/24/95, for Hope Creek TS Amendment No. 85. As stated in that Safety Evaluation Report, TS Tables 3.3.1-2, 3.3.2-3 and 3.3.3-3 were removed from the TS and relocated to the UFSAR. UFSAR Change Notice 95-54 was generated to incorporate this information as Tables 7.2-3, 7.3-16 and 7.3-17. Subsequently, Licensing personnel determined that this TS could cause potential confusion since the definition of REACTOR PROTECTION SYSTEM RESPONSE TIME contained in the TS no longer aligned with the manner in which Surveillance Requirement 4.3.1.3 was being performed (as justified in TS Amendment No. 85 and as described in the UFSAR). Although PSE&G concluded that the response time testing was to be performed in accordance with TS Amendment No. 85, the changes proposed in this submittal are being made to clearly define the licensing basis for performing these tests. Equivalent information from the UFSAR tables is also being incorporated into Surveillance Requirements 4.3.2.3 and 4.3.3.3 to maintain a consistent level of information in the TS.

Surveillance Requirement 4.0.5 Changes

On September 8, 1992, 10CFR50.55a(g) was revised to separate the inservice inspection and inservice testing program requirements. The NRC stated that the separation clarified and emphasized the inservice testing requirements and inservice inspection requirements (see the Federal Register published 8/6/92, Volume 57, No. 152). However, the change to the Code of Federal Regulations caused the references contained in Surveillance

Requirement 4.0.5 to become out of date. When making the change to 10CFR50.55a(g), the NRC recognized the introduction of administrative inconsistencies with licensee documents such as TS and recommended that they be updated to incorporate the reference to 10CFR50.55a(f). The Hope Creek inservice inspection program and inservice testing program were not affected by these changes and the changes to the TS are considered to be editorial in nature.

Drywell and Suppression Chamber Purge System Modifications

In October, 1984, the NRC issued NUREG-1048, the Safety Evaluation Report for the Hope Creek Generating Station. In Section 6.2.4.1 of that document, the NRC provided the basis for the surveillance frequency for the containment isolation valves with resilient seal material referenced in Surveillance Requirement 4.6.1.8.2. This basis stated, in part, that the numerous reports of unsatisfactory performance of the resilient seals for isolation valves in containment purge supply and vent lines required an increased testing frequency. This unsatisfactory performance was attributed to severe environmental conditions and/or frequent use.

In 1990, as a result of poor valve performance, a design change was initiated to replace the 26-inch drywell purge supply and exhaust isolation valves, the 24-inch suppression chamber purge supply and exhaust isolation valves and the 6-inch nitrogen supply valves containing resilient material seals with new valves containing metal seats. This design change was implemented at Hope Creek in a series of six packages from 1991 to 1994. Although plant procedures and the UFSAR were updated to reflect the modifications made by this design change, a Technical Specification change, required to keep the plant in conformance with its licensing basis, was not appropriately processed. When the 10CFR50.59 safety evaluation was completed for this design change, PSE&G personnel concluded that the replacement metal seat valves would not have to be subjected to the testing frequency established for the valves with resilient material seals, and would revert to the 24 month testing frequency imposed by Surveillance Requirement 4.6.1.2.d (which is applicable to other containment isolation valves in Table 3.6.3-1). A TS change to "clean-up" the specifications was all that was considered necessary. As a result, the current Hope Creek TS reference valves with resilient material seals that are not installed in the plant.

On January 27, 1997, the NRC issued Hope Creek Inspection Report No. 354/96-10, which included a Notice of Violation for these

events. This proposed change is a corrective action for that violation.

Main Turbine Bypass Valve Applicability and Action Statements

In the early 1980's, the General Electric Standard Technical Specifications for BWR/4 plants (STS) was utilized by PSE&G to develop the current Hope Creek TS. The LCO for the main turbine bypass system in the STS contained an APPLICABILITY statement specifying system operability requirements in OPERATIONAL CONDITION 1 above 25% of RATED THERMAL POWER (similar to the changes proposed in this submittal). However, the Hope Creek TS incorporated an APPLICABILITY statement that requires main turbine bypass system operability during OPERATIONAL CONDITION 1. As a result of this deviation from the STS, the Hope Creek TS contain an LCO ACTION statement which permits indefinite continued operation below 25% of RATED THERMAL POWER (with no compensatory measures), although the APPLICABILITY statement requires system operability at the same time. The changes proposed in this submittal are similar to the APPLICABILITY statement for the main turbine bypass valve system contained in NUREG-1433, the Improved STS.

TS Bases Changes

On August 1, 1995, the NRC issued a Safety Evaluation Report for Technical Specification Amendment No. 75. In that Safety Evaluation Report, the NRC referenced a July 25, 1995 letter from PSE&G which stated that the Hope Creek TS Bases would be revised to include information relative to seven conditions associated with granting a 14 day allowed-outage-time (AOT) for the C and D emergency diesel generators (EDGs). However, the Hope Creek TS Bases were revised to only include condition (d.) associated with that TS Amendment. The proposed changes contained in this submittal complete the revision to the Hope Creek TS Bases described in the Safety Evaluation Report for TS Amendment No. 75.

JUSTIFICATION OF REQUESTED CHANGES:

The proposed TS revisions will be discussed separately as follows:

Response Time Testing Requirements Clarification

Surveillance Requirements 4.3.1.3, 4.3.2.3 and 4.3.3.3 are being revised with this submittal to include additional information

concerning response time testing. The revision provides additional information specifying which portions of the instrumentation channel that are not subject to response time testing. These changes are consistent with the information already contained in UFSAR Tables 7.2-3, 7.3-16 and 7.3-17, and reflects the changes already approved by the NRC in the Safety Evaluation Report for Hope Creek TS Amendment No. 85. This information is being added to clarify the licensing basis for the performance of response time testing and does not alter the method (as described in Amendment No. 85) in which the response time testing is performed at Hope Creek. Therefore, PSE&G considers these changes to be editorial in nature.

Surveillance Requirement 4.0.5 Changes

Surveillance Requirement 4.0.5 is being revised to update a reference to the requirements of 10CFR50.55a. This proposed change does not alter the manner in which the inservice testing and inservice inspection activities are performed at Hope Creek nor does it modify any existing inservice inspection or inservice testing commitments. Therefore, PSE&G considers this change to be editorial in nature.

Drywell and Suppression Chamber Purge System Modifications

LCO ACTION Statement 3.6.1.8 b, Surveillance Requirement 4.6.1.8.2, Surveillance Requirement 4.6.1.2.d, Surveillance Requirement 4.6.1.2.i and the associated Bases are being revised to reflect a design modification that has been installed at Hope Creek. This design modification replaced isolation valves containing resilient material seals with metal seated valves. PSE&G has concluded that the 24 month frequency is appropriate for the new valves since: 1) this frequency is imposed by Surveillance Requirement 4.6.1.2.d, which is applicable to the other containment isolation valves in Table 3.6.3-1; and 2) the concerns raised about severe environment-induced degradation and frequent use for the resilient seal material valves are not applicable to the replacement metal seat valves.

Main Turbine Bypass Valve Applicability and Action Statements

The main turbine bypass system is designed to control reactor vessel pressure when reactor steam generation exceeds turbine control demand. The system allows excess steam flow from the reactor to go directly to the condenser without going through the turbine. Failure of the main turbine bypass system to perform its design functions has been analyzed in the UFSAR for: 1) a generator load rejection with failure of bypass; and 2) turbine

trip with bypass valve failure. The changes proposed in this submittal do not impact the assumptions contained in these UFSAR analyses since they do not change the manner in which Hope Creek is currently permitted to operate. As stated previously, the ACTION Statement for LCO 3.7.7 already allows indefinite continued operation below 25% of RATED THERMAL POWER with an inoperable main turbine bypass valve system.

The proposed change provides consistent requirements for main turbine bypass valve system operability in the LCO 3.7.7 APPLICABILITY and ACTION Statements. Since plant operation is not impacted by these changes, they are considered to be editorial in nature with no additional justification required.

TS Bases Changes

The HC TS Bases will be revised to include information contained in the Safety Evaluation Report for Technical Specification Amendment No. 75. This information concerns the bases for the 14 day allowed-outage-time (AOT) for the C and D emergency diesel generators (EDGs). However, a change concerning the unavailability of the EDGs is being made with this submittal. Specifically, Hope Creek will be implementing 10CFR50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants", to monitor and control EDG unavailability limits as described in NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants", as endorsed by Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants", June 1993.

PSE&G believes that implementation of the "Maintenance Rule" will provide an acceptable and more clearly defined method for maintaining EDG availability within acceptable limits. The intent of the current probabilistic risk analysis (PRA) limit for a 30 day per year value of EDG inoperability referenced in the Safety Evaluation Report for TS Amendment No. 75 was to place some type of upper limit on EDG unavailability. However, the basis for this limit is not clearly defined nor is appropriate guidance provided for implementation of corrective measures if those limits are exceeded. With the implementation of the proposed changes, PSE&G will complete the implementation of Amendment No. 75 commitments and establish a more appropriate method for monitoring and limiting unavailability of the EDGs.

CONCLUSIONS:

The changes proposed in this request are being made to resolve compliance related issues involving Hope Creek's licensing basis. PSE&G concludes that these proposed changes are adequately justified and result in No Significant Hazards Considerations as described in Attachment 2 of this letter.

HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NPF-57
DOCKET NO. 50-354
REVISIONS TO THE TECHNICAL SPECIFICATIONS (TS)

10CFR50.92 EVALUATION

Public Service Electric & Gas (PSE&G) has concluded that the proposed changes to the Hope Creek Generating Station (HC) Technical Specifications do not involve a significant hazards consideration. In support of this determination, an evaluation of each of the three standards set forth in 10CFR50.92 is provided below.

REQUESTED CHANGE

The proposed changes affect the following sections of the Hope Creek TS: 1) 3/4.3.1, "Reactor Protection System Instrumentation"; 2) 3/4.3.2, "Isolation Actuation Instrumentation"; 3) 3/4.3.3, "Emergency Core Cooling System Actuation Instrumentation"; 4) Surveillance Requirement 4.0.5; 5) 3/4.6.1, "Primary Containment" and associated Bases; 6) 3/4.7.7, "Main Turbine Bypass System"; and 7) the Bases for 3/4.8, "Electrical Power Systems". Specifically, these changes are being made to: 1) provide additional information pertaining to response time testing; 2) update references to 10CFR50 requirements; 3) reflect plant modifications to containment isolation valves; 4) provide appropriate guidance for the main turbine bypass system and 5) incorporate Bases changes associated with implementation of Hope Creek TS Amendment No. 75.

BASIS

1. *The proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.*

The proposed TS revisions involve: 1) no significant hardware changes; 2) no significant changes to the operation of any systems or components in normal or accident operating conditions; and 3) no changes to existing structures, systems or components. Therefore these changes will not increase the probability of an accident previously evaluated. Since the plant systems associated with these proposed changes will still be capable of: 1) meeting all applicable design basis requirements; and 2) retain the capability to mitigate the consequences of accidents described in the HC UFSAR, the proposed changes were determined to be justified. As a result, these changes will not involve a

significant increase in the consequences of an accident previously evaluated.

2. *The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.*

The proposed changes are essentially editorial in nature. These changes: 1) clarify the licensing basis for response time testing, inservice inspection requirements and inservice testing requirements; 2) clarify main turbine bypass valve operability requirements; 3) incorporate TS Bases changes associated with TS Amendment No. 75; and 4) reflect changes made to the drywell and suppression chamber purge system isolation valves. The proposed changes will not adversely impact the operation of any safety related component or equipment. Since the proposed changes involve: 1) no significant hardware changes; 2) no significant changes to the operation of any systems or components; and 3) no changes to existing structures, systems or components, there can be no impact on the occurrence of any accident. Furthermore, there is no change in plant testing proposed in this change request which could initiate an event. Therefore, these changes will not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. *The proposed change does not involve a significant reduction in a margin of safety.*

The proposed changes for the TS related to response time testing reflect testing methodologies that were approved by the NRC in Amendment No. 85 to the Hope Creek TS. No changes are being made to methodologies with this proposal. Therefore, the changes contained in this request do not result in a significant reduction in a margin of safety.

The proposed changes to Surveillance Requirement 4.0.5 do not alter the current requirements for the Hope Creek inservice inspection and inservice testing programs and are considered to be editorial in nature. Therefore, the changes contained in this request do not result in a significant reduction in a margin of safety.

The proposed changes to the drywell and suppression chamber purge system are being made to reflect design modifications that have been installed. This design modification replaced isolation valves containing resilient material seals with metal seated valves under 10CFR50.59. PSE&G has concluded that the 24 month frequency is appropriate for the new valves since: 1) this

frequency is imposed by Surveillance Requirement 4.6.1.2.d, which is applicable to other containment isolation valves in Table 3.6.3-1 that penetrate the primary containment; and 2) concerns raised about severe environment-induced degradation and frequent use for the previously installed resilient seal material valves are not applicable to the replacement metal seat valves. The valve modification was an enhancement to the Hope Creek design that did not impact the isolation capability of the drywell and suppression chamber purge system, and does not result in a significant reduction in a margin of safety.

The proposed changes to LCO 3.7.7 establish consistent and appropriate requirements for main turbine bypass valve operability requirements. These changes do not impact the assumptions contained in these UFSAR analyses since they do not change the manner in which Hope Creek is currently permitted to operate. Since the ACTION Statement for LCO 3.7.7 already allows indefinite continued operation below 25% of RATED THERMAL POWER with an inoperable main turbine bypass valve system, the proposed modification to the APPLICABILITY statement for this LCO would be editorial in nature. Therefore, the changes contained in this request do not result in a significant reduction in a margin of safety.

The HC TS Bases will be revised to include information contained in the Safety Evaluation Report for Technical Specification Amendment No. 75. This information concerns the bases for the allowed-outage-time (AOT) for the C and D emergency diesel generators (EDGs). PSE&G believes that implementation of 10CFR50.65 requirements to monitor and control EDG unavailability limits will provide an acceptable and more clearly defined method for maintaining EDG availability within acceptable limits and not result in a significant reduction in a margin of safety.

CONCLUSION

Based on the above, PSE&G has determined that the proposed changes do not involve a significant hazards consideration.