

Public Service
Electric and Gas
Company

Joseph J. Hagan

Public Service Electric and Gas Company P.O. Box 236, Hancocks Bridge, NJ 08038 609-339-1200

Vice President - Nuclear Operations

JAN 20 1995

NLR-N94209

LCR 94-26

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Gentlemen:

**LICENSE AMENDMENT APPLICATION
REMOVAL OF EXPLOSIVE GAS MIXTURE
FROM THE TECHNICAL SPECIFICATIONS
HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NPF-57
DOCKET NO. 50-354**

This letter submits an application for amendment to Appendix A of Facility Operating License NPF-57 for the Hope Creek Generating Station, and is being filed in accordance with 10CFR50.90. Pursuant to the requirements of 10CFR50.91(b)(1), a copy of this request for amendment has been sent to the State of New Jersey.

The proposed Technical Specification changes contained herein represent changes to Section 3/4.11.2.6 "Explosive Gas Mixture," Table 3.3.7.11-1 "Radioactive Gaseous Effluent Monitoring Instrumentation," and Table 4.3.7.11-1 "Radioactive Gaseous Effluent Monitoring Instrumentation Surveillance Requirements." The proposed revision removes this specification from the Technical Specifications and relocates the Bases to the Hope Creek Updated Final Safety Analysis Report (UFSAR) and the Surveillance Requirements to the applicable surveillance procedures. The Limiting Conditions for Operation (LCOs) will be eliminated. While 10CFR50.36 will no longer provide the determination of acceptable functional capability/performance for safe operation of the main condenser offgas treatment explosive gas monitoring system, operation and maintenance of this system will be commensurate with its safety significance.

The proposed changes have been evaluated in accordance with 10CFR50.91(a)(1), using the criteria in 10CFR50.92(c), and it has been determined that this request involves no significant hazards considerations.

A description of the requested amendment, supporting information and analyses for the changes, and the basis for a no significant hazards consideration determination are provided in Attachment 1.

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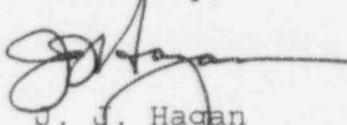
The Technical Specification pages affected by the proposed changes are provided in Attachment 2 with pen and ink changes.

In accordance with the guidance presented in the "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" as published in the Federal Register (58 FR 39132), the proposed changes have received a multidisciplinary review by responsible technical supervisory personnel, including onsite operations personnel.

Upon NRC approval of these proposed changes, PSE&G requests that the amendment be made effective on the date of issuance, but implemented within 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,



J. J. Hagan
Vice President
Nuclear Operations

Affidavit
Attachments (2)

C Mr. T. T. Martin, Administrator - Region I
U. S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. D. Moran, Licensing Project Manager - Hope Creek
U. S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

Mr. R. Summers (S09)
USNRC Senior Resident Inspector

Mr. K. Tosch, Manager IV
NJ Department of Environmental Protection
Division of Environmental Quality
Bureau of Nuclear Engineering
CN 415
Trenton, NJ 08625

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

J. J. Hagan, being duly sworn according to law deposes and says:

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

[Signature]

Subscribed and Sworn to before me
this 20th day of January; 1995

Kimberly J. Brown
Notary Public of New Jersey

My Commission expires on _____

KIMBERLY JO BROWN
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires April 21, 1998

ATTACHMENT 1

PROPOSED CHANGES TO TECHNICAL SPECIFICATIONS

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I. DESCRIPTION OF THE PROPOSED CHANGES

This amendment removes Specification 3/4.11.2.6 "Explosive Gas Mixture" and its associated Bases from the Technical Specifications with corresponding changes to the Table of Contents. References to the main condenser offgas treatment system explosive gas monitoring system made in Tables 3.3.7.11-1 "Radioactive Gaseous Effluent Monitoring Instrumentation" and 4.3.7.11-1 "Radioactive Gaseous Effluent Monitoring Instrumentation Surveillance Requirements" are also deleted along with associated footnotes and required actions.

II. REASONS FOR THE CHANGES

The proposed changes to the Technical Specifications conforms with the NRC's "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors," dated July 22, 1993. During the development of NUREG-1433 "Standard Technical Specifications, General Electric Plants, BWR/4" the NRC issued a letter to the B&W Owners Group, T.E. Murley to W.S. Wilgus dated May 9, 1988, which identified the Explosive Gas Mixture monitoring system for the main condenser as a Limiting Condition for Operation (LCO) which may be relocated to other licensee-controlled documentation contingent upon NRC staff approval of the location of and controls over the relocated requirement.

Through this submittal, PSE&G is requesting implementation of the NRC's recommendation regarding the relocation of the Explosive Gas Mixture specification. Along with the relocation of the Bases to the Hope Creek Updated Final Safety Analysis Report (UFSAR) and the Surveillance Requirements to the applicable surveillance procedures, this submittal eliminates the LCO's. Removal of this specification from the Technical Specifications would reduce regulatory burden, since future changes to the explosive gas mixture monitoring functions would be conducted using the 10CFR50.59 process.

III. JUSTIFICATION FOR CHANGES

The purpose of the explosive gas mixture specification is to ensure that the concentration of potentially explosive gas mixtures contained in the gaseous radwaste treatment system main condenser offgas system is maintained below the flammability limits of hydrogen. The hydrogen is mainly produced by radiolytic disassociation of water and carried over to the main condenser via the main steam lines. The hydrogen is then removed, along with other noncondensable gases, by the Steam Jet Air Ejectors (SJAE) and transferred to the gaseous radwaste treatment system. Any hydrogen not recombined in the feed gas recombiner is exhausted through the north plant vent. The effluent stream is monitored by two thermal conductivity type analyzers to determine the hydrogen concentration.

With the conclusion of the Technical Specification Improvement Program the NRC issued it's final policy statement on technical specification improvements for nuclear power reactors. The NRC concluded that the purpose of the Technical Specifications is to impose those conditions or limitations upon reactor operation necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety. This was achieved by identifying those issues that are of controlling importance to safety and establishing on them certain limiting conditions for operation which cannot be changed without prior NRC approval.

This policy statement included a set of criteria which delineated those constraints on design and operation derived from the UFSAR and that belonged in the Technical Specifications in accordance with 10CFR50.36. Specifically, these criteria are as follows:

- Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary,
- A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident or Transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier,
- A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a Design Basis Accident or Transient that either

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assumes the failure of or presents a challenge to the integrity of a fission product barrier,

- A structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety.

While the explosive gas mixture specification provides guidance for minimizing the possibility of a hydrogen explosion in the main condenser or gaseous radwaste system this system does not fall under any of the above criteria.

Taking into consideration the fact that the main condenser is not a safety related component and that the offgas system is designed to withstand a hydrogen detonation, failure of the explosive gas mixture monitoring instrumentation would not constitute a significant abnormal degradation of the reactor coolant pressure boundary nor would it be a design basis accident or transient.

Therefore, the explosive gas mixture monitoring capability is not installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary nor is it a process variable that is an initial condition of a Design Basis Accident or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The explosive gas mixture monitoring capability is also not a system, component or structure that is part of the primary success path for mitigating a Design Basis Accident or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. A review of the past five years operating history indicates that hydrogen concentrations have not exceeded operating limits.

In accordance with the NRC's criteria for determining those specifications which may be relocated to licensee-controlled documentation, PSE&G believes that this submittal for removing the Explosive Gas Mixture specification from the Technical Specifications is justified. These changes will reduce regulatory burden while maintaining existing levels of plant safety.

IV. DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION

PSE&G has, pursuant to 10CFR50.92, reviewed the proposed amendment to determine whether our request involves a significant hazards consideration. We have determined that

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the operation of the Hope Creek Generating Station in accordance with the proposed changes:

1. Will not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed changes involve no hardware changes, no changes to the operation of any systems or components, and no changes to existing structures. The relocation of this specification to the UFSAR and surveillance procedures will continue to ensure that the entrainment of hydrogen in the main condenser is monitored and controlled. Relocation of this specification's Bases and Surveillance Requirements to the UFSAR and surveillance procedures, respectively, and the deletion of the LCO's represent changes that do not affect plant safety and do not alter existing accident analyses.

2. Will not create the possibility of a new or different kind of accident from any previously evaluated.

The proposed changes are procedural in nature concerning the location of the descriptive information and surveillance requirements for the explosive gas mixture monitoring instrumentation. Removing these specifications from the Technical Specifications and placing them in the UFSAR and surveillance procedures will not alter the operation of the explosive gas monitors or their ability to perform intended functions. Maintenance and testing of these monitors will continue based upon the manufacturers recommendations taking into consideration plant operating experience. Therefore, these changes will not create a new or unevaluated accident or operating condition.

3. Will not involve a significant reduction in a margin of safety.

The proposed changes relocate the Explosive Gas Mixture specifications from the Technical Specifications to the UFSAR and surveillance procedures in accordance with guidance provided by the NRC Final Policy Statement regarding the improvement of Technical Specifications. The requirements that will reside in the UFSAR and surveillance procedures for the explosive gas mixture monitoring instrumentation will ensure that the ability to determine main condenser hydrogen concentrations is properly maintained. Therefore, the proposed changes will not involve a significant reduction in any margins of safety.

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V. CONCLUSIONS

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