

Public Service  
Electric and Gas  
Company

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Vice President - Nuclear Operations

JUL 25 1991

NLR-N91127

Reference: LCR 91-01

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

Gentlemen:

REQUEST FOR AMENDMENT  
FACILITY OPERATING LICENSE NPF-57  
HOPE CREEK GENERATING STATION  
DOCKET NO. 50-354

Public Service Electric and Gas Company (PSE&G) hereby transmits an application to amend Appendix A of Facility Operating License No. NPF-57 in accordance with 10CFR50.90. This amendment request would revise Sections 4.0.5, APPLICABILITY, 3.4.3.1, LEAKAGE DETECTION SYSTEMS, and 3.4.3.2, OPERATIONAL LEAKAGE, of the Hope Creek Generating Station (HCGS) Technical Specifications.

A description of the requested amendment, supporting information and analyses for the change, and the basis for a no significant hazards consideration determination are provided in Attachment 1. The Technical Specification pages affected by the proposed change are marked-up in Attachment 2.

Upon NRC approval of this proposed change, PSE&G requests that the amendment be made effective on the date of issuance, but implementable within sixty days to provide sufficient time for associated procedural modifications.

Pursuant to the requirements of 10CFR50.91(b)(1), PSE&G has provided a copy of this amendment request to the State of New Jersey.

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

Sincerely,



Attachments  
Affidavit

C Mr. T. T. Martin, Administrator  
USNRC Region I

Mr. S. Dembek  
USNRC Licensing Project Manager

Mr. T. P. Johnson  
USNRC Senior Resident Inspector

Mr. K. Tosch, Chief,  
Bureau of Nuclear Engineering  
New Jersey Department of Environmental Protection



Ref: LCR 91-01

ATTACHMENT 1

PROPOSED TECHNICAL SPECIFICATIONS AND BASES CHANGE

PROPOSED CHANGE TO THE TECHNICAL SPECIFICATIONS  
FACILITY OPERATING LICENSE NPF-57  
HOPE CREEK GENERATING STATION  
DOCKET NO. 50-354

Ref: LCR 91-01

DESCRIPTION OF THE CHANGE

As shown on the marked-up Technical Specifications (TS) pages in Attachment 2, PSE&G requests that TS Sections 4.0.5, APPLICABILITY, 3.4.3.1, LEAKAGE DETECTION SYSTEMS, 3/4.4.3.2, OPERATIONAL LEAKAGE, and associated BASES, be revised to satisfy comments in the November 8, 1989 NRC letter (Butler to Miltenberger), and in subsequent telephone conversations with NRC staff, regarding PSE&G's response to Generic Letter (GL) 88-01.

REASON FOR THE CHANGE

GL 88-01 proposed certain changes to be incorporated into the TS. Based on NRC review of the PSE&G response to the GL, and ensuing telephone discussions between NRC staff and PSE&G personnel, the changes contained in this request were mutually found to satisfy the intent of the Generic Letter.

JUSTIFICATION FOR THE CHANGE

The inclusion of the GL 88-01 Inservice Inspection Program requirements on schedule, methods, personnel and sample expansion in TS Section 4.0.5, APPLICABILITY, constitutes the addition of a more conservative specification and is in direct conformance with the Generic Letter proposal.

The evaluation of PSE&G's response to the GL, performed by Viking Systems International (VSI) for NRC, found that while PSE&G's interpretation and practices regarding TS 3.4.3.1, LEAKAGE DETECTION SYSTEMS, are acceptable, "...the actual wording in the Technical Specification is confusing and open to interpretation...". Therefore, the proposed changes to TS 3.4.3.1 include separation of the leakage detection systems into three groups. This action permits a clear identification of individual OPERABILITY requirements and ACTIONS for each of the five leakage detection systems, thereby eliminating the confusion and need for interpretation. The three groups are:

The drywell floor and equipment drain sump monitoring system - GL 88-01 Staff Position No.3 on Leak Detection states, "For plants operating with any IGSCC Category D, E, F, or G welds, at least one of the leakage measurement instruments associated with each sump shall be operable, and the outage time for inoperable instruments shall be limited to 24 hours, or immediately initiate an orderly shutdown." This position applies to the drywell floor and equipment drain sump monitoring system and is, accordingly, incorporated in the proposed change for this system. However, a provision for continued operation for up to 30 days is added - provided all other leakage detection systems are OPERABLE and provided that a manual calculation, as described in Operating Department Procedure, HC.OP-ST.SK-001(Q), (see Attachment 3) is performed at least once every four hours. This provision, included in the NRC final draft, NUREG 1433, of the BWR 4 Standard Technical Specifications,

permits time to perform repairs and recognizes that an alternate method of quantifying leakage (performed by licensed control room personnel) is available, but prevents operation for a long period of time with a degraded leakage detection system.

The drywell atmospheric gaseous radioactivity monitoring system - This system, recommended by Regulatory Guide (RG) 1.45, is the only leak detection system that provides actual radiological information to control room operators. As currently required in TS 3.4.3.1, with this system inoperable, operation can continue for up to 30 days provided drywell atmosphere grab sampling and analyses are performed at least once per 24 hours. The TS requirements and actions for this system remain unchanged in this submittal.

The drywell coolers condensate flow rate, drywell temperature and drywell pressure monitoring systems - These systems, in conjunction with the drywell floor and equipment drain sump and drywell atmosphere gaseous radioactivity monitoring systems, were reviewed by NRC staff and, in Section 5.2.5 of the Hope Creek Safety Evaluation Report (NUREG-1048), found acceptable and to satisfy the requirements of General Design Criteria (GDC) 2 and 30, and the guidelines of RG 1.29, Positions C.1 and C.2, and RG 1.45, Positions C.1 through C.9.

The drywell air cooler condensate flow rate, drywell temperature, and drywell pressure monitoring systems do not provide any radiological information to control room operators, yet the current TS 3.4.3.1 ACTION requires grab samples of the drywell atmosphere be obtained and analyzed when any of these systems is inoperable. The proposed change would eliminate the grab sampling requirement as long as the drywell atmosphere gaseous radioactivity monitoring system is OPERABLE. These three systems provide dissimilar, yet somewhat redundant indication (not quantification) of RCS leakage; that is, an RCS leak of significance would likely raise drywell temperature and pressure, and cause increased condensate flow from the drywell coolers. Positive indications on any two of these parameters would be sufficient to substantiate an RCS leak and positive indications on any one system would instigate further evaluation of drywell and RCS conditions. Therefore, continued operation with only two of these three detection systems operable, and further loss of one additional system for up to 30 days, provided that the drywell floor and equipment drain sump and drywell atmosphere gaseous radioactivity monitoring systems are OPERABLE, would not constitute a significant loss of leak detection capabilities. The corresponding Limiting Condition for Operation Section in the final draft, NUREG 1433, of the BWR 4 Standard Technical Specifications, requires only the drywell floor and equipment sump flow monitor, one drywell radiological monitor, and drywell cooler condensate flow monitor. That draft specification reflects the latest thinking on adequate leak detection systems and is supportive of the proposed changes in this request.

The proposed changes to the above TS Sections - which eliminate the current ambiguities and assign more reasonable ACTION requirements to each of the Leakage Detection Systems - are clearer and more appropriate, yet retain the necessary conservatism.

The existing TS 3.4.3.2, OPERATIONAL LEAKAGE, has limits of 5 gpm unidentified leakage and 25 gpm identified leakage. The staff position stated in GL 88-01 would incorporate an additional unidentified leakage limit of "2 gpm increase in any 24 hour period or less". This requirement is part of the proposed changes in this request.

HCGS has an existing procedure (see Attachment 3) that prescribes specific leak location and isolation techniques. PSE&G proposes that a requirement to implement these preplanned leak resolution actions upon detection of any increase in leakage that exceeds the proposed limit and that a 4 hour period in which to identify, isolate or reduce the leakage rate to below the limit be incorporated into the OPERATIONAL LEAKAGE TS. These proposed provisions, as shown in the marked-up TS Pages in Attachment 2, have been modelled upon the final draft, NUREG 1433, of the BWR 4 Standard Technical Specifications. They will meet the intent of the staff's position by providing plant specific, readily implementable, actions regarding the Generic Letter-recommended limit.

TS 3/4.4.3.2, OPERATIONAL LEAKAGE, Surveillance Requirement 4.4.3.2.1.b currently requires monitoring of the drywell floor and equipment drain sump flow rate at least once every 12 hours. In conformance with the NRC staff position, modified in the above mentioned November 8, 1989 NRC letter, this proposed change requires monitoring the flow rate at least once every 8 hours. Since, at HCGS, the drywell floor and equipment drain sump flow rate, as well as the drywell atmospheric gaseous radioactivity, drywell coolers condensate flow rate and drywell pressure (TS 4.4.3.2.1.a, c, and d) have always been monitored on an 8 hour frequency, this proposed change revises the requirement for each of these parameters to the 8 hour frequency for consistency. This change is conservative; in that, it increases the frequency of monitoring.

#### 10CFR50.92 SIGNIFICANT HAZARDS CONSIDERATION ANALYSIS

Pursuant to 10CFR50.92, PSE&G has, in reviewing the proposed amendment to determine whether our request involves a significant hazards consideration, determined the following:

The operation of Hope Creek Generating Station (HCGS) in accordance with the proposed change will not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed amendment does not involve a physical or procedural change to any structure, component or system that has any significant effect on probability or consequences of any accident or malfunction of equipment important to safety previously evaluated in the Updated Final Safety Analysis Report (UFSAR). The proposed changes will add clarifications, alternative actions, and new requirements to the TS that are suggested by NRC staff in Generic Letter 88-01, in their Safety Evaluation of the PSE&G response to that Generic Letter and in the NRC's final draft of NUREG 1433, Standard BWR 4 Technical Specifications.

The operation of Hope Creek Generating Station (HCGS) in accordance with the proposed change will not create the possibility of a new or different kind of accident from any previously evaluated.

There are no physical changes to the plant or to the manner in which the plant is operated involved in the proposed revision. Therefore, no new or different accident is created by the proposed change.

The operation of Hope Creek Generating Station (HCGS) in accordance with the proposed change does not involve a significant reduction in a margin of safety.

The proposed changes provide clarifications and additional, conservative, requirements to the TS, and address the Generic Letter 88-01 issues. Where existing TS requirements would be relaxed or modified, there has been no significant reduction in the information provided to control room operators and existing procedures provide necessary guidance so that manual determinations can be made to quantify leakage rates. Margins of safety are, therefore, not adversely affected by the proposed change.

Conclusion:

Based upon the above, we have determined that this proposed change does not involve a Significant Hazards Consideration.