

Public Service
Electric and Gas
Company

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United States Nuclear Regulatory Commission
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**REQUEST FOR CHANGE TO TECHNICAL SPECIFICATIONS
IMPROVEMENTS TO THE EMERGENCY DIESEL GENERATOR
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 revision represents changes to Technical Specification sections 3/4.8.1 "A.C. Sources", 6.8 "Procedures and Programs", and the Bases for section 3/4.8, "Electrical Power Systems." Specifically, the changes include: 1) the relocation of existing surveillance requirements related to diesel fuel oil chemistry; 2) the introduction of a new program under TS 6.8.4.e, "Diesel Fuel Oil Testing Program"; 3) revisions to the TS Bases for section 3/4.8 to incorporate information associated with the TS changes; and 4) editorial changes to implement required corrections. The proposed TS changes are consistent with the intent of the related specifications in the improved "Standard Technical Specifications General Electric Plants, BWR/4", NUREG-1433 (STS).

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 TS pages affected by the proposed changes are

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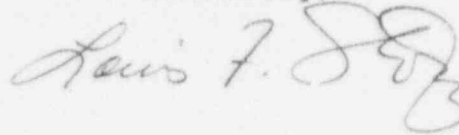
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provided in Attachment 3.

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,



Affidavit
Attachments (3)

C Mr. H. Miller, Administrator - Region I
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BC Senior Vice President - Nuclear Engineering (N19)
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Manager - Nuclear Business Relations (N28)
Manager - Hope Creek Operations (H01)
Manager - System Engineering - Hope Creek (H18)
Manager - Nuclear Safety Review (N38)
Manager - Licensing & Regulation (X09)
Supervisor - Hope Creek Licensing (X09)
Onsite Safety Review Engineer - Hope Creek (X15)
Station Licensing Engineer - Hope Creek (X09)
General Solicitor, R. Selover (Newark, 5G)
Perry Robinson, Esq.
Records Management (N21)
Microfilm Copy
Files Nos. 1.2.1 (Hope Creek), 2.3 (LCR H96-05)

REF: LR-N96249
LCR H96-05

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

L. F. Storz, being duly sworn according to law deposes and says:

I am Senior 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 Hope Creek
Generating Station, Unit 1, are true to the best of my knowledge,
information and belief.

Louis F. Storz

Subscribed and Sworn to before me
this 11th day of February 1997

Deloris D. Hadden
Notary Public of New Jersey

My Commission expires on _____

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

HOPE CREEK GENERATING STATION
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IMPROVEMENTS TO THE EMERGENCY DIESEL GENERATOR
TECHNICAL SPECIFICATIONS (TS)

BASIS FOR REQUESTED CHANGE:

The changes proposed in this request include: 1) the relocation of existing surveillance requirements related to diesel fuel oil chemistry; 2) the introduction of a new TS section for the EDG fuel oil testing program; 3) revisions to the EDG TS Bases to incorporate information from the proposed TS changes; and 4) editorial modifications to implement required corrections. These changes complete the alignment of the HC diesel fuel oil testing program to the improved STS initiated with Amendment 74. The proposed TS are consistent with the intent of the related specifications in NUREG-1433, "Standard Technical Specifications General Electric Plants, BWR/4 (STS)", to the extent practical.

REQUESTED CHANGE AND PURPOSE:

EDG Fuel Oil Chemistry Surveillances and TS 6.8.4.e

As shown in Attachment 3 of this letter, Surveillance Requirements 4.8.1.1.2.f will be revised to include a reference to TS 6.8.4.e in the Administrative Controls Section of the TS. The proposed requirements contained in TS 6.8.4.e for EDG fuel oil chemistry sampling are consistent with the EDG fuel oil testing requirements contained in STS Specification 5.5.10. With the exception of particulate testing (which is being added), no changes are being proposed to any existing fuel oil acceptance criteria. These changes complete the alignment of the HC diesel fuel oil testing program to the improved STS initiated with HC TS Amendment No. 74 and make the HC TS consistent with the requirements contained in the improved STS.

TS Bases Changes

As indicated in Attachment 3 of this letter, the HC TS Bases will be revised to include the pertinent information from the improved STS that support the proposed TS revisions.

Additional Changes

An editorial correction is also proposed for LCO 3.8.1.1. Specifically, the portion of ACTION c. for LCO 3.8.1.1 on TS page

3/4 8-1 will be deleted since the entire ACTION Statement already appears on TS page 3/4 8-2. This change corrects an error that was made when HC TS Amendment No. 79 was issued.

BACKGROUND:

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

EDG Fuel Oil Chemistry Surveillances and TS 6.8.4.e

On July 28, 1994, PSE&G submitted License Change Request (LCR) 94-16 to relocate the details of the EDG fuel oil testing requirements from TS 3/4.8 to a Diesel Fuel Oil Testing Program. That LCR was approved in HC TS Amendment No. 74 on June 29, 1995. Although the LCR used terminology from the STS, certain elements of the STS pertaining to EDG fuel oil testing and the associated program were not incorporated. Specifically, a new EDG fuel oil testing program would need to be established in the Administrative Controls Section of the HC TS (Section 6.0) and additional requirements for particulate testing would need to be added to make the HC EDG Fuel Oil Testing Program consistent with STS Specification 5.5.10. Approval of the proposed changes contained in this submittal would complete HC's implementation of the improved STS requirements for EDG fuel oil testing.

TS Bases Changes

The proposed changes discussed in the previous paragraph also include revisions to the Bases of the EDG-related TS to provide additional information relative to the requirements being implemented by the proposed changes. The revisions to the TS Bases, as indicated in Attachment 3 of this submittal, incorporate these changes.

Additional Changes

When HC TS Amendment No. 79 was issued, page 3/4 8-1 contained a portion of LCO 3.8.1.1, ACTION Statement c., which was previously moved to page 3/4 8-2 via HC TS Amendment No. 75. This error remained uncorrected through the issuance of HC TS Amendment No. 96. The changes indicated in Attachment 3 of this letter correct this deficiency and are considered to be editorial in nature.

JUSTIFICATION OF REQUESTED CHANGES:

The proposed TS revisions will be discussed separately as follows:

EDG Fuel Oil Chemistry Surveillances and TS 6.8.4.e

The revision to Surveillance Requirement 4.8.1.1.2.f, which will now include a reference to a new specification 6.8.4.e in the Administrative Controls section of the TS, is consistent with the changes made in the improved STS. The presentation of the EDG fuel oil surveillance requirements was revised to reflect the latest NRC supported methodologies as published in the improved STS. The details of methods for performing these surveillances are not included in the TS and are adequately controlled by procedures, with their revisions controlled by the provisions of 10CFR50.59.

The requirements delineated in Specification 5.5.10 of the improved STS have been incorporated into HC TS 6.8.4.e. However, the following exceptions to these requirements are being proposed:

1. For testing of new fuel oil prior to introduction to the EDG fuel oil storage tanks, bulk water and sediment testing replaces "a clear and bright appearance with proper color" in STS Specification 5.5.10.a.3. The intent of the "clear and bright..." is to provide a rapid, qualitative assessment that there is no visible water or other foreign material in the fuel oil. The bulk water and sediment criteria, specified in ASTM D1796 for fuel oil, provides a quantitative assessment that is more objective over the subjective standard of "clear and bright..." specified in the STS.

HC purchases dyed fuel for the EDGs. With the dyed fuel, the clear and bright criteria would be difficult, if not impossible, to meet. HC has onsite capability to test for bulk water and sediment. Tests for water and sediment content are already performed on the EDG fuel oil. PSE&G believes that the proposed TS criteria satisfies the need for an assessment prior to adding the new fuel to the EDG fuel oil storage tanks.

2. Particulate testing, which is currently not required by the HC TS, of the stored fuel would be done once per 92 days instead of once per 31 days as specified in the improved STS. The frequency of once per 92 days is acceptable on the

basis of several years (1992-1996) of test data that indicate the HC stored fuel has not exhibited a particulate problem based upon sediment % determined by the bulk water and sediment tests.

In the Safety Evaluation Report for HC TS Amendment No. 74, the NRC stated, "The Commission's position on surveillance frequencies, established in the STS, is to take into consideration fuel oil degradation trends which indicate that particulate concentration is unlikely to change significantly between frequency intervals." To ensure particulate contamination of the fuel does not occur, PSE&G proposes that a revision to the station controlled diesel fuel oil testing program be implemented to monitor particulate analysis results and increase particulate sampling, if required, to ensure that limits would not be exceeded prior to the next normal sample period. The increased frequency of testing would be based on identified adverse trends. This change would represent an increase in the testing currently required for the EDG fuel oil.

3. The ASTM D-2276 particulate analysis method has been modified to use a 3.0 micron membrane filter instead of a 0.8 micron membrane filter. This is based on the fact that ASTM D-2276 is intended for aircraft fuel and not EDG fuel oil. As stated in HC UFSAR Section 9.5.4.2.5, the closest tolerance fuel filter in the HC EDGs is a five micron particle retention duplex filter on the engine driven fuel oil pump discharge header. Based upon past EDG performance, a five micron fuel filter does not have any adverse impact on the operation of the EDGs.

With the exception of the above, no other EDG fuel oil acceptance criteria are being modified. In addition, the test for flash point will now be conducted prior to the addition of the new fuel to the storage tank. Therefore, the HC EDG fuel oil testing will meet all of the requirements for diesel fuel oil specified in the improved STS.

TS Bases Changes

As part of the changes described in the previous section, the HC TS Bases will also be enhanced to provide information consistent with that found in the Bases for the improved STS. The Bases changes essentially include the information contained in the previous section, which justifies the incorporation of those proposed changes into the HC TS. With approval of the proposed

changes to the TS, the associated Bases changes would be editorial in nature, requiring no additional justification.

Additional Changes

When HC TS Amendment No. 79 was issued, page 3/4 8-1 contained a portion of LCO 3.8.1.1, ACTION Statement c., which was previously moved to page 3/4 8-2 via HC TS Amendment No. 75. This error remained uncorrected through the issuance of HC TS Amendment No. 96. The changes indicated in Attachment 3 of this letter correct this deficiency and are considered to be editorial in nature.

CONCLUSIONS:

The changes proposed in this request include revisions to the HC EDG TS and associated Bases to become more consistent with the improved STS. 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.

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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 revisions to TS represent changes to Specifications 3/4.8.1 "A.C. Sources", and its associated TS Bases as well as to Specification 6.8 "Procedures and Programs." These changes: 1) revise the HC Emergency Diesel Generator (EDG) TS and associated Bases to become more consistent with the improved "Standard Technical Specifications General Electric Plants", NUREG 1433 (STS); 2) revise the EDG TS Bases to incorporate information from the proposed TS changes; and 3) incorporate editorial modifications to implement required corrections.

BASIS

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

The proposed changes involve: 1) no 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.

Establishment of EDG fuel oil testing requirements in TS 6.8.4.e is a change that is consistent with changes made in the improved STS as contained in Specification 5.5.10 of that document. These changes establish a new requirement to test for particulates in the EDG fuel oil, but establish a 92 day test frequency (as opposed to 31 days in the improved STS) and a 3.0 micron

acceptance criteria (as opposed to 0.8 micron in the improved STS) for particulate testing. PSE&G concludes that these changes are acceptable based upon past EDG fuel oil tests for particulates and acceptable performance of the EDG with 5.0 micron filters. In addition, PSE&G will utilize more objective test criteria for water and sediment in the EDG fuel oil than established by the "clear and bright" acceptance criteria contained in the improved STS.

Since the EDG fuel oil will still: 1) meet all of the requirements established for fuel oil specified in the improved STS; and 2) retain the capability to mitigate the consequences of accidents described in the HC Safety Analysis Report, the proposed changes were determined to be justified. Based on established fuel oil quality history, the proposed testing methods and frequencies will not significantly decrease confidence in fuel oil quality and EDG operability, nor will they have any negative effect on established plant practices in regards to the testing of EDG fuel oil. Therefore, these changes will not involve a significant increase in the consequences of an accident previously evaluated.

The revisions proposed to the TS Bases are being made to provide additional information supporting the proposed EDG TS. With the approval of the proposed TS changes, the associated Bases changes would be editorial in nature. Therefore, these changes will not involve a significant increase in the consequences of an accident previously evaluated.

In addition, the proposed change to LCO 3.8.1.1, ACTION c., is considered to be editorial in nature and will not result in 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 HC EDGs are designed to mitigate the consequences of accidents by providing electrical power to safety-related equipment. Failure of the EDGs are not considered to initiate any of the accidents described in the HC Safety Analysis Report. The proposed changes concern fuel oil system surveillances and testing frequency. The proposed changes will not adversely impact the operation of any safety related component or equipment. Since the proposed changes involve: 1) no 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.

In addition, the proposed change to LCO 3.8.1.1, ACTION c., is considered to be editorial in nature and will not result in a new or different kind of accident from any previously evaluated.

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

Establishment of EDG fuel oil testing requirements in TS 6.8.4.e is a change that is consistent with changes made in the improved STS. The proposed changes address: 1) how EDG fuel oil quality is to be determined; 2) how frequently this determination is to be performed; and 3) how to control the process for determining fuel oil acceptability and resultant EDG operability. With the exception of particulate testing (which is being added) all acceptance criteria for fuel oil testing remain unchanged. Based on historical data, EDG fuel oil quality will not be adversely affected or impacted by the proposed changes. Therefore, the proposed amendment does not involve any significant reduction in a safety margin.

The revisions proposed to the TS Bases are being made to provide additional information supporting the proposed EDG TS. With the approval of the proposed TS changes, the associated Bases changes would be editorial in nature. Therefore, these changes will not involve a significant reduction in a safety margin.

In addition, the proposed change to LCO 3.8.1.1, ACTION c., is considered to be editorial in nature and will not involve a significant reduction in a safety margin.

CONCLUSION

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

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TECHNICAL SPECIFICATION PAGES WITH PROPOSED CHANGES

The following Technical Specifications for Facility Operating License No. NPF-57 are affected by this change request:

<u>Technical Specification</u>	<u>Page</u>
3.8.1.1, ACTION c.	3/4 8-1
4.8.1.1.2.f	3/4 8-5
New 6.8.4.e	6-16a
Bases 5/4.8	B 3/4 8-1