

Public Service
Electric and Gas
Company

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Senior Vice President - Nuclear Operations

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United States Nuclear Regulatory Commission
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Washington, DC 20555

Gentlemen:

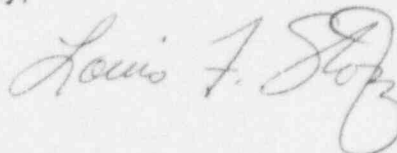
**INTERIM RESPONSE TO NRC BULLETIN 96-03
POTENTIAL PLUGGING OF ECCS SUCTION STRAINERS BY DEBRIS
HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NPF-57
DOCKET NO. 50-354**

This letter provides an interim response to NRC Bulletin 96-03 for the Hope Creek Generating Station. A response that includes all of the information required to be in the 180 day report cannot be provided at this time due to uncertainty in several key technical assumptions. A more detailed response will be provided after NRC approval of the BWR Owners Group utility resolution guidance (URG) document that provides the technical basis for resolving ECCS strainer plugging concerns.

PSE&G intends to comply with the requested actions of NRC Bulletin 96-03; however, a finalized description of planned actions and mitigative strategies cannot be provided at this time due to lack of an approved technical basis. The attachment to this letter provides the details of the interim response.

Should there be any questions concerning this response, please do not hesitate to contact us.

Sincerely,



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Affidavit
Attachment

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REF: LR-N96333

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

Louis 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 the Hope Creek Generating Station, are true to the best of my knowledge, information and belief.

Louis F Storz

Subscribed and Sworn to before me
this 4th day of November, 1996

Kimberly Jo Brown
Notary Public of New Jersey

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

My Commission expires on _____

ATTACHMENT

INTERIM RESPONSE TO NRC BULLETIN 96-03 POTENTIAL PLUGGING OF ECCS SUCTION STRAINERS BY DEBRIS HOPE CREEK GENERATING STATION FACILITY OPERATING LICENSE NPF-57 DOCKET NO. 50-354 LR-N96333

I. INTRODUCTION

NRC Bulletin 93-03 requests that addressees implement appropriate procedural measures and plant modifications to minimize the potential for clogging of ECCS suction strainers by debris during a loss-of-coolant accident (LOCA). The specific actions identified in the requested action section of the bulletin include the following:

1. Implement one of the three potential resolution options to ensure the capability of ECCS to perform its safety function or propose another option that provides an equivalent level of assurance. Installed components should be designed, fabricated and tested to the same standards as the ECCS and installed strainers must be supported by test data that demonstrates their performance characteristics and ability to handle the worst case scenario for debris deposition.
2. Maintain procedures and actions implemented in response to Bulletin 93-02 until final corrective actions have been implemented.
3. Propose Technical Specifications (TSs) to support surveillances for components and systems installed with success criteria defined in the Bases.
4. Implement actions by the end of the first refueling outage starting after January 1, 1997 (for Hope Creek, the seventh refueling outage scheduled to begin in September 1997).

II. PSE&G POSITION

All of the information requested in Item (1) of NRC Bulletin 96-03 cannot be provided at the present time. A response that provides the information required to be included in the 180 day report will be provided following NRC approval of the Boiling Water Reactor Owners Group (BWROG) URG document. The following is PSE&G's interim response to the bulletin.

Interim Response to NRC Bulletin 96-03

PSE&G intends to comply with the requested actions of Bulletin 96-03. Current evaluations indicate that replacement of the existing strainers with larger capacity, alternate-geometry passive strainers coupled with replacement of selected insulation appears to be the best method of resolution for Hope Creek.

The BWROG is completing a utility resolution guidance (URG) document that provides a technical basis for resolving strainer plugging issues; however, the final version of this document cannot be provided to the NRC until November 1996. Accordingly, final acceptance of the methodology by all concerned is not projected until early 1997. Therefore, a detailed description of planned actions and mitigative strategies cannot be provided at the present time due to uncertainty in several key technical assumptions. However, based on current plans, PSE&G intends to implement a design which mitigates the effects of ECCS strainer plugging during design basis high energy line breaks within the containment.

Insulation debris zones of destruction and transport to the suppression pool will be based on postulated pipe break locations described in the current Hope Creek Licensing Basis. Information concerning pipe break and crack locations and methods of analysis is contained in Hope Creek Updated Final Safety Analysis Report (UFSAR) section 3.6.2. Postulated pipe rupture locations inside the containment are based upon Branch Technical Position MEB 3-1 with clarifications as discussed in UFSAR section 3.6.2.7.

Installed components will be designed, fabricated and tested to the same standards as the ECCS. Acceptability of the strainers will be supported by test data that demonstrates their performance characteristics and ability to handle the worst case scenario for debris deposition based upon the postulated pipe break locations described in the current Hope Creek Licensing Basis and the URG calculational methodology. Procedures and actions implemented in response to Bulletin 93-02 and its supplement will be maintained until final corrective actions have been implemented.

Replacement strainer size would be limited by hydrodynamic loadings in the suppression pool. A replacement strainer designed for the existing structural acceptance criteria may not by itself be sufficient to mitigate the effects of the post-LOCA strainer plugging scenario. We are currently evaluating options to optimize the replacement strainer design. Vulnerable insulation in target areas of the drywell may be replaced with alternate insulation systems such that the volume of debris that could ultimately foul the strainers is reduced.

Interim Response to NRC Bulletin 96-03

The actions taken by PSE&G to comply with the bulletin will be based on the BWROG URG document. PSE&G's final resolution and any required strainer or insulation redesign and installation will follow NRC approval of the URG calculational methodology, which is currently anticipated to be January 1997. The detailed design activity will subsequently require several months to complete. The PSE&G strainer and insulation vendors have estimated that up to four to six months is required from receipt of an order to delivery.

The need to propose new TS requirements or surveillances will be addressed in PSE&G's final response to the bulletin provided following NRC approval of the URG document.

III. SUMMARY AND CONCLUSION

In summary, given the significant uncertainty in several key technical assumptions, PSE&G cannot provide a final response as requested by Item (1) under the required responses section of NRC Bulletin 96-03 at this time. A more detailed response to NRC Bulletin 96-03 will be provided after NRC approval of the BWROG URG.

Please note that PSE&G has been working with the BWROG since 1993 to address this concern. Our efforts to understand and mitigate this potential problem have been a priority. This interim response does not, in any way, change our level of commitment to resolving this issue; rather, it reflects our intent to develop a final solution that is technically sound.