

Docket No. 50-354

OCT 23 1984

Mr. R. L. Mittl, General Manager  
Nuclear Assurance and Regulation  
Public Service Electric & Gas Company  
80 Park Plaza, T22A  
Newark, New Jersey 07101

Dear Mr. Mittl:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION (RAI) NUMBER 1

Continued staff review of the Hope Creek Operating License Application has resulted in the identification of an area in which more information is needed. The Enclosure to this letter identifies this area.

Please inform the NRC Licensing Project Manager, Dave Wagner, of your schedule for responding to this RAI.

Sincerely,

~~Original signed by:~~

A. Schwencer, Chief  
Licensing Branch No. 2  
Division of Licensing

Enclosure: As stated

cc: See next page

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Hope Creek

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PUBLIC SERVICE ELECTRIC AND GAS COMPANY  
HOPE CREEK UNIT 1  
DOCKET NUMBER 50-354

MATERIALS ENGINEERING BRANCH  
INSERVICE INSPECTION SECTION

Review of the FSAR and PSI Program and Request for Additional Information  
Regarding the Preservice Inspection (PSI) Program

1. Paragraph 10 CFR 50.55a(b)(2)(iv) requires that ASME Code Class 2 piping welds in the RHR systems, ECCS systems, and CHR systems shall be examined. The staff review of the Hope Creek PSI program shows extensive numbers of surface-only examinations for piping welds in such systems. In addition, these systems should not be completely exempted from preservice volumetric examination based on Section XI exclusion criteria contained in IWC-1220. To satisfy the inspection requirements of General Design Criteria 36, 39, 42, and 45, the PSI must include volumetric examination of a representative sample of welds in the RHR, ECCS and CHR systems. The PSI program should be revised to include a volumetric examination of a representative sample of the welds in these systems. At other BWRs, the selection of welds and examination methods contained in Code Section XI Winter 1983 Addenda Paragraph IWC-1220 and Tables IWC-2500 has been determined to be acceptable. This should make the PSI examination methods more compatible with future ISI requirements.
2. The staff review of the PSI plan indicates that the use of cladding on piping welds may interfere with effective ultrasonic examination. Plans for qualification of the volumetric examination procedure to be used on the subject welds should be discussed. Standard, minimum code radiography may not be capable of detecting service-induced

degradation because the detection of cracks is strongly dependent on the angle of the central axis of the radiation beam with respect to the predominant crack plane. If radiography is planned, provide the technical justification, including qualifications and procedure requirements to demonstrate that the radiography procedure is effective for volumetric examinations.

The Applicant should also provide detailed information describing the specific welds with corrosion resistant cladding and typical dimensions of the cladding.

3. The staff review of the PSI plan has not identified any preservice examinations scheduled for the Scram Discharge Volume (SDV) system. NUREG-0803, "Generic Safety Evaluation Report Regarding Integrity of BWR Scram System Piping," recommended that periodic ISI of the SDV system be performed that meets the requirements for ASME Code Class 2 piping. This document was implemented by Generic Letter 81-35 dated August 31, 1981 and was addressed to all BWR holders of CPs and Applicants for OLs. Therefore, the PSI plan should be revised to reflect the appropriate preservice examinations of the SDV system required by Section XI of the ASME Code and recommended by NUREG-0803.