Public Service
Electric and Gas
Company

Louis F. Storz
Senior Vice President - Nuclear Operations

Public Service Electric and Gas Company P.O. Box 236, Hancocks Bridge, NJ 08038 609-339-5700

MAY 14 1996
LR-N96127

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

Gentlemen:

REPLY TO A NOTICE OF VIOLATION
PROCEDURE NON-COMPLIANCE AND PROCEDURE INADEQUACY
INSPECTION REPORT NOS. 50-354/96-80,50-354/96-03
HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NPF-57
DOCKET NO. 50-354

Pursuant to the provisions of 10CFR2.201, this letter submits the response of Public Service Electric and Gas Company to the notice of violation issued to the Hope Creek Generating Station (HCGS) in a letter dated April 24, 1996 and the additional example of the violation discussed in a letter dated April 26, 1996.

Should you have any questions or comments on this transmittal, do not hesitate to contact us.

Sincerely,

Attachment

200042

IE01

MAY 14 1996

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

Mr. David Jaffe
Licensing Project Manager - Hope Creek
U. S. Nuclear Regulatory Commission
One White Flint North
Mail Stop 14E21
11555 Rockville Pike
Rockville, MD 20852

Mr. R. Summers
USNRC Senior Resident Inspector (X24)

Mr. K. Tosch, Manager IV
Bureau of Nuclear Engineering
33 Arctic Parkway
CN 415
Trenton, NJ 08625

ATTACHMENT

REPLY TO NOTICE OF VIOLATION
PROCEDURE NON-COMPLIANCE AND PROCEDURE INADEQUACY
INSPECTION REPORT NO. 50-354/96-80
HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NPF-57
DOCKET NO. 50-354 **LR-N96127**

I. INTRODUCTION

During the NRC's Readiness Assessment Team Inspection conducted at Hope Creek Generating Station between February 12, 1996 and February 28, 1996, a violation of NRC requirements was identified. As a result, the NRC issued a notice of violation in a letter dated April 24, 1996. During the NRC's Resident Inspection conducted at Hope Creek Generating Station between February 11, 1996 and March 30, 1996, a second example of this violation was identified. This response also addresses that example of the violation.

In accordance with the provisions of 10CFR2.201, Public Service Electric and Gas Company hereby submits a written response to the notice of violation which includes: (1) the reason for the violation; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken to avoid further violations; and (4) the date when full compliance will be achieved.

II. REPLY TO THE NOTICE OF VIOLATION

1. Description of the Notice of Violation

"Technical Specification 6.8.1 requires, in part, that written procedures shall be established, implemented, and maintained for safety-related activities.

Contrary to the above, as of February 23, 1996, written procedures were not appropriately established or implemented for safety-related maintenance of the Service Water Strainers during the sixth refueling outage. Specifically, maintenance procedure HC.MD-CM.EA-0003(Q) - Rev 9, "Service Water Strainer Overhaul and Repair", dated December 4, 1994, did not contain instructions for the installation of the backwash arm to stub shaft drive pins on the "B" strainer. Further, maintenance personnel did not follow the procedure during repairs to the "A" strainer.

This is a Severity Level IV violation (Supplement 1)."

In addition, a second example of a violation of station

procedures during maintenance was identified. This example also involved a failure to adhere to maintenance procedures for repair of a safety-related Service Water Strainer. "Licensee personnel found during reassembly of the "D" strainer that the procedure did not specify the installation of the lower bearing control ring, as needed, prior to the installation of the backwash arm. The technician had hand written] the appropriate step in the procedure for the "D" strainer reassembly, but did not process an on-the-spot-change (OTSC)."

2. Response to Notice of Violation

PSE&G has reviewed the circumstances described by the NRC and concurs with the facts cited in the violation.

i. Description of Event

First Example of Procedure Non-Compliance/Inadequacy

During Hope Creek's sixth Refueling Outage, work was performed on Station Service Water System (SSWS) Strainers in accordance with corrective maintenance procedure, HC.MD-CM.EA-0003, "Service Water Strainer Overhaul and Repair." On February 21, 1996, during reassembly of the "A" SSWS Strainer, an NRC inspector participating in the Readiness Assessment Team Inspection (RATI) noted that the procedure did not address work activities which had already been performed. Specifically, the work order documentation stated that the strainer cover had been separated from the baskets and the backwash arm removed. Neither of these operations had been described by the procedure. The inspector also noted that the procedure did not provide instructions for complete disassembly of the strainer and that critical settings of strainer components were not described in sufficient detail to allow for consistent maintenance. On February 24, 1996, the "B" SSWS Strainer Motor Breaker tripped on thermal overloads. Subsequent investigation found one of two drive pins fractured and wedged between the rotating shoe and the screen. The root cause was later determined to be, in part, insufficient procedural guidance for pin installation.

The NRC inspector discussed his concern with Maintenance Management, that the procedure could not have been followed considering the extent of work completed during strainer disassembly and that there was an inadequacy in the procedure

in describing proper reassembly. After interviews with Maintenance personnel, Maintenance Management determined that: 1) incorporation of specific steps and dimensions into the procedure was necessary to eliminate potential incorrect strainer reassembly and premature strainer failure; and 2) maintenance personnel had not met management expectations for procedure use. Specifically, the supervisor responsible for the "A" SSWS Strainer repair failed to recognize the need for a procedure change.

On February 23 & 24, 1996, the Maintenance Department conducted stand down meetings with Mechanical, Electrical, and Instrumentation & Controls Maintenance personnel to reinforce management's expectations regarding procedure compliance. The key messages emphasized at these meetings were: (1) the mechanics, electricians, and technicians "own" the procedures, (2) the level of detail in a procedure should be sufficient to allow anyone who is trained and qualified to complete it alone, and (3) contact supervision before proceeding when unsure as to how to continue the work activity.

Second Example of Procedure Non-compliance

On March 1, 1996, the revised corrective maintenance procedure was being used for disassembly of the "D" SSWS strainer. The mechanic found during reassembly of the "D" strainer that the procedure did not specify the installation of the lower bearing control ring prior to the installation of the backwash arm. The mechanic described the appropriate step in the procedure for the "D" strainer reassembly, but did not process an on-the-spot-change.

The mechanic did not fulfill procedure compliance expectations (2) and (3) described above in that upon identification of a missing step in the procedure, the mechanic did not stop work and contact his supervisor, which would have initiated the procedure revision process.

During their investigation into the second cited example, Maintenance personnel identified that the individual involved had not attended any of the stand down meetings.

ii. Reason for the Violation

The principal cause for the procedure non-compliances and procedure inadequacy is attributed to the Mechanical

Maintenance Organization's failure to critically assess and correct the implementation of procedure compliance expectations. This has resulted in the inconsistent work standards applied by maintenance personnel and procedures with insufficient detail controlling maintenance activities.

iii. Corrective Steps That Have Been Taken and Results Achieved

a. Maintenance on the SSWS Strainers was either performed in accordance with the improved corrective maintenance procedure or reviewed to ensure dimensions critical to strainer operation were appropriate.

b. Maintenance Management conducted stand down meetings with Mechanical, Electrical, and Instrumentation & Controls Maintenance personnel regarding procedure compliance expectations.

c. The Maintenance Management's expectations regarding procedure compliance have been communicated to those Mechanical Maintenance personnel who did not attend the original stand down meetings.

d. Maintenance supervisors were surveyed to determine their understanding of procedure compliance. From the survey results and interviews conducted after the stand down meetings, Maintenance Management concluded that mechanics, electricians, and technicians understood management expectations for procedure compliance. The surveys and interviews also revealed that the maintenance supervisors had high expectations for procedure compliance.

e. A weekly check of five work packages has been recently initiated to monitor and enforce procedural compliance until it is demonstrated that Mechanical Maintenance personnel consistently meet management's expectations in the area of procedure compliance.

f. A "Subject Matter Expert" program has been initiated in the Mechanical Maintenance organization. Mechanics have responsibility, accountability, and ownership for the quality of the procedures for which they are designated the "Subject Matter Expert." These Subject Matter Experts are the single point of contact and are

responsible for evaluating concerns raised regarding their procedure. During a "Subject Matter Expert" review, an effort will be made to obtain procedures from other utilities.

g. The identified deficiencies in the corrective maintenance procedure HC.MD-CM.EA-0003(Q) have been corrected.

h. Appropriate counselling was provided to the supervisor involved for failure to recognize the inadequacy of the procedure. Counselling was limited to this supervisor because the survey discussed above indicated that this supervisor was an outlier amongst his peers regarding understanding procedure compliance expectations.

iv. Corrective Steps that Will Be Taken to Avoid Further Violations

a. A "Subject Matter Expert" program will be extended to the Instrumentation & Controls Maintenance organization. This program will be initiated by July 1, 1996.

b. The Corrective Action Program will ensure verification of the effectiveness of the corrective actions.

v. Date When Full Compliance Will Be Achieved

Full compliance was achieved on March 7, 1996, with the completion of procedure revisions correcting the deficiencies previously discussed.