

Public Service
Electric and Gas
Company

Stanley LaBruna

Public Service Electric and Gas Company

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Vice President - Nuclear Engineering

NOV 25 1994

NLR-N94202

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

Gentlemen:

REPLY TO A NOTICE OF VIOLATION
INSPECTION REPORT NO. 50-354/94-20
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 in a letter dated October 14, 1994. Per discussion between John White (NRC) and Dave Smith (PSE&G) on November 4, 1994, agreement was reached that this reply could be submitted within 30 days of receipt of the transmitting letter (October 25, 1994). The additional information requested in your letter has been provided in the enclosed violation response.

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

Sincerely,



Attachment

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C Mr. T. T. Martin, Administrator - Region I
U. S. Nuclear Regulatory Commission
475 Allendale Road
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Mr. D. Moran, Licensing Project Manager - Hope Creek
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Mr. R. Summers (SC5)
USNRC Senior Resident Inspector

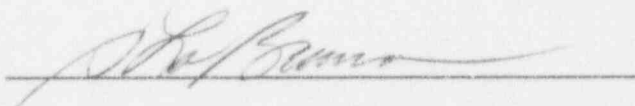
Mr. K. Tosch, Manager, IV
NJ Department of Environmental Protection
Division of Environmental Quality
Bureau of Nuclear Engineering
CN 415
Trenton, NJ 08625

REF: NLR-N94202


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

S. LaBruna, being duly sworn according to law deposes and says:

I am Vice President - Nuclear Engineering 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.



Subscribed and Sworn to before me
this 25th day of November, 1994


Notary Public of New Jersey

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

ATTACHMENT

REPLY TO A NOTICE OF VIOLATION
INSPECTION REPORT NO. 50-354/94-20
HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NPF-57
DOCKET NO. 50-354

NLR-N94202

I. INTRODUCTION

As a result of an inspection conducted between August 29 and September 2, 1994, the NRC identified a violation of NRC requirements at Hope Creek which was subsequently documented and cited as part of a notice of violation issued in Inspection Report 354/94-20 dated October 14, 1994. Our response to the notice of violation is provided below.

II. REPLY TO NOTICE OF VIOLATION

1. Description of Violation

"10 CFR 20.1801 requires the licensee to secure from unauthorized removal or access licensed materials that are stored in controlled or unrestricted areas.

Contrary to the above, licensed material (in the form of contamination on a ladder) stored in a controlled or unrestricted area was not secured from unauthorized removal and was released from a radiologically controlled area. Specifically, on July 15, 1994, a ladder contaminated with licensed material was discovered in an uncontrolled area of the fire water pump house."

2. Response to Violation

PSE&G does not dispute this violation.

A. Description of Events

On July 14, 1994, an individual passing through the portal monitor at the guardhouse while exiting the site initiated a radiological contamination alarm. Subsequent assessment determined that the dose to the individual caused by the contamination was minimal. The investigation by the Radiation Protection Department traced the source of the contamination to a step ladder used by the individual during his work activities. The ladder had been used by the individual in the firewater pump house and had been obtained from the sea van storage area outside the maintenance shop. These vans contain equipment used inside the Radiological Controlled Area (RCA) and released for clean area use.

B. Conclusions from the Root Cause Investigation

The root causes for the unauthorized removal of the ladder from the RCA were not able to be determined with certainty; however, the results of our investigation are provided below.

Although the contaminated ladder was never positively traced to the RCA, given the contamination levels and age of the contamination (Cobalt to Zinc ratio), it is probable that the ladder was used for refuel floor or Hydraulic Control Unit (HCU) work during the fifth refueling outage. More than likely, it was later removed through the reactor building truck bay without being properly surveyed.

It has been determined that the ladder was stored in a large container used for clean equipment storage in the sea van storage area. An individual removed the ladder the afternoon of July 14, 1994 and took it to the fire pump house for use in performing work. This individual later passed through the portal monitors while leaving the site and caused an alarm.

The potential causes of the release of the ladder from the RCA include:

1. inadequate procedural guidance
2. faulty surveying equipment
3. weaknesses in the training of personnel
4. personnel performance issues
 - a. an inadequate survey was performed by a Radiation Protection technician
 - b. the ladder was inadvertently removed from the RCA without being surveyed

PSE&G has addressed each of these potential causes.

Existing Radiation Protection implementing procedures were reviewed and determined to be adequate. Removal of contaminated material from the RCA is thoroughly addressed in these procedures. These procedures stipulate that contaminated material can be removed from the RCA only under very controlled conditions.

Faulty equipment is not considered a potential cause since survey equipment is checked daily and no documented failures exist for the time period when the ladder is believed to have been released from the RCA.

The radiation worker training was reviewed in light of this incident and determined to be adequate.

As for the possibility of an inadequate survey, the contamination level on the ladder would be extremely difficult to miss, and it is highly unlikely that the ladder was released from the RCA as a result of this type of error.

The ladder was most likely removed from the RCA by an individual radiation worker during the outage without going through the proper control process. It is possible that this occurred as a result of lack of knowledge on the part of the worker but most likely occurred as a result of inattention to detail.

C. Corrective Actions Taken and Results Achieved

The following corrective actions have been completed. It should be noted that this is the first occurrence of this type at Hope Creek since July 12, 1991.

1. Areas and equipment known to be associated with the event were surveyed and no additional contamination was located.
2. An investigation was conducted to determine the causes and to recommend corrective actions.
3. The original investigation was re-examined and the results are discussed in Section F below.
4. The Radiation Protection Department has conducted meetings with appropriate Hope Creek bargaining unit personnel to discuss the subject incident. The Radiological Occurrence Reports (RORs) and the incident report were discussed and the importance of ensuring that equipment is surveyed prior to release was stressed at these meetings.
5. Copies of the RORs have been forwarded to the Site Access Administrator and to the Salem Radiation Protection Department.
6. Ladders in the RCA have been labeled with the statement "RCA USE ONLY" and their use has been accordingly restricted.
7. Use of a new RCA equipment storage area on the turbine building 77-foot elevation has decreased the need to release equipment from the RCA.

D. Corrective Actions to Be Taken

The following corrective actions will be taken.

1. The Radiation Protection Department will communicate with Nuclear Engineering Department personnel and the remaining Hope Creek personnel to discuss the subject incident. The RORs and the incident report will be conveyed and the importance of ensuring that equipment is surveyed prior to release will be stressed. This will be completed by January 1995.

E. Date When Full Compliance Will Be Achieved

Full compliance has been achieved.

F. Re-Examination of Root Cause Investigation

An independent review of the subject incident was performed by a member of the Hope Creek Radiation Protection Department staff who had not been involved in the original investigation. The following provides a description of the review, its associated findings and recommendations, and a discussion of the additional corrective and preventive actions planned to prevent recurrence.

The independent reviewer focused his efforts on reviewing the adequacy of the root cause determination of the original investigation. He reviewed corrective actions prescribed in the original investigation and analyzed the barriers in place to prevent removal or release of contaminated material from the RCA.

The reviewer's conclusions generally agreed with the conclusions of the original investigation. The reviewer determined that weaknesses existed in the first barrier (the individual radiation worker) and identified the need to ensure that this barrier was strengthened. The other barriers, including the oversight provided by Radiation Protection Department personnel, were considered to be good. The reviewer identified an additional causal factor and recommended two additional corrective actions.

The additional causal factor was a weakness in upper tier, administrative procedures. The reviewer noted that these procedures contain too much detail relative to specific implementation activities and too little general guidance to the individual radiation worker.

The additional corrective actions are as follows:

1. The existing requirements contained in upper tier radiation protection related administrative procedures will be consolidated in one procedure and the remaining procedure will be strengthened with additional guidance. This effort will be completed and Radiation Worker Training will be updated to reflect the revised procedural information in sufficient time to conduct the pre-outage training for the next Hope Creek refueling outage scheduled for Fall 1995.
2. In preparation for the next refueling outage, Hope Creek has established high impact teams (HIT) which have been chartered to develop innovative ways to perform various required outage activities. Thus far, nineteen HIT teams have been established and assigned a specific portion of the outage plan. These multi-disciplinary teams have been challenged to improve work practices, processes, and procedures relative to their assigned area. The task to address tool and equipment control issues will be included in the charter of one or more of the HIT teams.