

New England Power Company
Brayton Point Station
P. O. Box 440
Somerset, Massachusetts 02726-0440

May 25, 1994

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

RE: Docket No. 030-04666

Dear Sir or Madam:

Pursuant to the provisions of 10 CFR 2.201, enclosed is our written statement replying to the Notice of Violation which we received on May 2, 1994.

If there are any questions regarding this statement, or if you require additional information, please contact our Radiation Safety Officer, Mr. Gregory F. Salamon, at (508)678-8321 x-213.

Respectfully,

A handwritten signature in cursive script, appearing to read "D. A. Riley".

David A. Riley
Plant Manager

cc: Regional Administrator, Region I, w/ attachments

310056

9406020236 940525
PDR ADOCK 03004666
C PDR

A New England Electric System company

JE07

REPLY TO A NOTICE OF VIOLATION

Docket No.: 030-04666

Licensee: New England Power Company
Brayton Point Station
Somerset, MA 02726-0440

License No.: 20-07227-02

Date of Report: May 25, 1994

(1) Reason For Violation

Physical inventories are conducted on a semi-annual basis, as per our NRC license and our Radiation Safety Manual. This inventory consists of visual verification of the sources in their mounted locations. For the large Cs-137 sources, this process is adequate. However, for the Sr-90 check sources that were installed, a visual inspection did not provide appropriate evidence of the source location. On March 18, 1994, it was determined that one 1.22 μ Ci Sr-90 source was missing from its normal location, and that the missing source is the result of this inadequate inventory.

The source is part of a gauge detector. The detector may be used with any of Texas Nuclear point level gauges, and contains a small Sr-90 source used for calibration and checking the detector. The source is mounted to a printed circuit board located in the detector assembly. The detector assembly consists of a 3½" pipe, approximately 12½" in length, and sealed on each end with a standard pipe cap. The detector assembly is not routinely or casually opened. The source is not visible without disassembly of the detector assembly housing.

Three scenarios are presented that may explain the missing source. First, it is possible that the source was never installed. This source is not required for the level measurement system to operate; it is only a check source. Where the source is not visible without the disassembly of the detector assembly housing, it may have never been present.

The other scenarios involve the removal of the source by New England Power (NEPCo) personnel, or by personnel employed by a company that is licensed to perform maintenance on radioactive sources. Apparently, this type of source is a convenient device to check the operation of a level measurement system, whereby this Sr-90 source may be used to expose a detector to check for proper detector operation without actually operating the main gamma source.

(2) Corrective Steps That Have Been Taken

The following actions were taken in an attempt to locate the source.

- 1) A physical search was conducted in the plant, with search efforts centered on the locations adjacent to the area where the sources were installed.
- 2) A physical search was conducted within the I&C shop, including work bench areas, drawers, and cabinets where the source could be located.
- 3) A review of all records associated with this source was conducted to determine if any past maintenance activity may have involved this source. This review included New England Power Company as well as TN Technology records. No evidence of past maintenance was found.
- 4) Interviews were conducted with members of the New England Power I&C Department to inquire about any activities associated with the source. Pictures of the source obtained from TN Technology were distributed to aid in recall of any activities. This effort did not produce any information concerning the whereabouts of the source.
- 5) Past RSO's of the Brayton Point Station were contacted to inquire if they remember any maintenance or other activities regarding this source. No information was obtained regarding the source location.

<u>Name</u>	<u>Date Contacted</u>
David Lundquist	3/24/94
William Freddo	3/24/94

- 6) Letters were sent to any company who may have had the opportunity to perform maintenance or other activity regarding the source. Letters were sent to the following companies:

KayRay / Sensall, Inc

Nuclear Research Corporation

Accuray Corporation

The Ohmart Corporation

To date, none of the efforts described above were successful in locating the source.

(3) Corrective Steps To Avoid Further Violations

The following sections of our Radiation Safety Manual have been revised. Copies of the affected sections are enclosed. A brief description of the changes is provided here:

Section III - Nuclear Source Control Measures

This section was revised to include a requirement for postings by each source, informing workers that no maintenance is to be performed on the radioactive sources, and to contact the RSO for additional information. This posting will be in addition to the required postings for access to bins and hoppers where radiation fields may be present.

Section VI - Nuclear Source Testing and Inventory


This section was revised to include shutter testing and to provide a more detailed description of the physical inventory process. The inventory process now requires that, if licensed material is installed in such a manner that a visual verification is not possible, the source shall be verified as present and accounted for by the actuation of the source and resulting detector response.

Section VII - Maintenance of Nuclear Sources and Detectors

This section was revised to provide details on the information that is required following any maintenance on the licensed sources. It also includes a requirement that all work on any licensed source shall be verified by the Radiation Safety Officer, or his designated alternate.

(4) Full Compliance Date

All revisions have been made, and are effective now.


Gregory F. Salamon, Radiation Safety Officer

5/25/94
Date