



December 10, 2012

US Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Subject: Notice of Failure to Comply Reported Under 10 CFR Part 21.21
PSEG Purchase Order 4500639089

To Whom It May Concern:

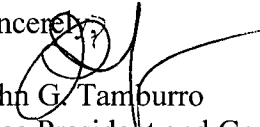
In accordance with 10 CFR 21, this letter is to notify the Nuclear Regulatory Commission of a failure by Canberra Industries, Inc. to comply with certain PSEG specifications as required by a PSEG purchase order.

On October 15, 2012, during review of routine testing of its Model GP 100C Gamma Probe, Canberra identified a failure to comply with certain PSEG specifications as more fully described in the attached Interim Report. Subsequent testing of the probe determined that certain PSEG specifications as specified in the referenced PSEG Nuclear Purchase Order were not met.

Canberra has determined that one power plant, the PSEG Salem Generating Station, is using this product in a safety-related application. On December 7, 2012, Canberra notified PSEG of the results of this test. A copy of this notification is attached.

Questions or concerns may be forwarded to the address below.

Sincerely,


John G. Tamburro
Vice President and General Counsel
Canberra Industries, Inc.
800 Research Parkway
Meriden, CT 06450
jtamburro@canberra.com
203-639-2187

Attachments:

Copy Notification letter to PSEG
Copy of Interim Notice

JE19
MLK

Interim 10 CFR Part 21.21 report

December 7, 2012

1. Name and address of the individual or individuals informing the Commission.

John G. Tamburro
Vice President and General Counsel
Canberra Industries, Inc.
800 Research Parkway
Meriden, CT 06450
203-639-2187

2. Identification of the facility, the activity, or the basic component supplied for such facility or such activity within the United States which fails to comply or contains a defect.

Facility: Salem Unit 2
Basic Component: Area Radiation Monitors 2R2, 2R7, 2R10A and 2R10B

3. Identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect.

Canberra Industries, Inc.
800 Research Parkway
Meriden, CT 06450

4. Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply.

During review of data from updated qualification testing of the GP100 series detectors to IEC 60532:2010 it was determined the GP100 series of probes did not meet the specifications for angular and energy response stated in S-2-RM-CDS-0482 Rev. 1. Specifically:

Section 4.10 states the radiation level reading will not vary more than +/- 10% from the average value when the detector is exposed to a point source from any direction. This criteria exceeds the design parameters of the probe on the axial plane. The probes directional response is limited to +/- 45 Degrees on axial plane from the mid point and +/- 90 degrees on the radial plane. The maximum bias outside of directional window is -20% radially and -80% axially.

Section 4.12 states the detector response must be proportional to the actual gamma radiation level within 20% for energies between 100 KeV and 2.5 MeV. The detector shall have +/-50% accuracy for gamma radiation between 50 KeV and 100 KeV. This criteria exceeds the design parameters of the probe. The GP100 probes high range detector's accuracy is +/- 70% at 65 KeV normalized to Cs-137.

5. The date on which the information of such defect or failure to comply was obtained.

October 15, 2012

6. In the case of a basic component which contains a defect or fails to comply, the number and location of these components in use at, supplied for, being supplied for, or may be supplied for, manufactured, or being manufactured for one or more facilities or activities subject to the regulations in this part.

Area Radiation Monitors 2R2, 2R7, 2R10A and 2R10B

7. The corrective action which has been, is being, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action.

None

8. Any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees.

The licensee should review the installation of the GP100 probes as specified in the technical manual as to the orientation for proper response.

The licensee should review the calibration procedure for the probe to ensure the calibration energies are appropriate given the energy response characteristics described in the technical manual.

9. In the case of an early site permit, the entities to whom an early site permit was transferred.

Not applicable



CANBERRA

December 10, 2012

PSEG Nuclear, LLC
Manager – Regulatory Assurance
Mail Stop S05
PO Box 236
Hancocks Bridge, NJ 08038

Subject: Notice of Failure to Comply as reported under 10 CFR Part 21.21

Re: PSEG Nuclear, LLC Contract / Purchase Order 4500639089

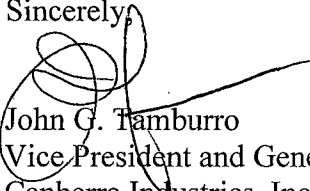
To Whom It May Concern:

In accordance with 10 CFR 21, this letter is to notify PSEG Nuclear, LLC, of a failure to comply with certain PSEG specifications required by the referenced purchase order.

On October 15, 2012, during review of routine testing of its Model GP 100C Gamma Probe, Canberra Industries, Inc. (Canberra) identified a failure to comply with certain PSEG specifications as more fully described in the attached Interim Report. Subsequent testing of the probe determined that certain PSEG Nuclear specifications (as specified in the PSEG Nuclear Purchase Order referenced above), were not met. Please review the attached Interim Report to determine the impact on PSEG Nuclear operations. Canberra has also notified the US NRC of this failure to comply.

Canberra stands ready to support PSEG with any required actions. Questions or concerns may be forwarded to the address below.

Sincerely,



John G. Tamburro
Vice President and General Counsel
Canberra Industries, Inc.
800 Research Parkway
Meriden, CT 06450
jtamburro@canberra.com
203-639-2187

Attachments:
Copy of Interim Report