

UNITED STATES NUCLEAR REGULATORY COMMISSION

475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

NOV 1 8 1991

Dear

I am responding to the Millstone Unit 2 concerns that you provided to the NRC on August 21 and 22, 1991. You were concerned that: (1) some radiation monitors did not have check sources; (2) PORC reviews were superficial; (3) the licensee was not responsive to employee concerns; (4) valves were not labeled and associated drawings were not accurate; (5) a Technical Specification Action Statement was not entered when required; and, (6) technicians incorrectly operated a radiation monitoring system.

We have initiated action to refer concerns (2), (4), and (6) to Northeast Utilities (NU) for their evaluation. Attached are the concerns as we intend to characterize them to NU. We will inform you of the findings from their review and our assessment thereof.

Concern (1) was inspected by the NRC and the results documented in NRC report 50-336/91-19. The inspector's conclusions were that "the licensee's calibration technique for radiation monitors was excellent" and "the licensee conducted an excellent program to calibrate the effluent/process radiation monitors." The specific radiation monitors listed in your concern were included in the inspection. A copy of the appropriate pages of the report are enclosed for your information. The NRC considers this concern resolved and plans no further action in this matter.

Concern (3) regarding responsiveness is the subject of an ongoing evaluation by the NRC. As you are aware, NU has addressed the larger issue of their responsiveness to employee concerns, raised in the most recent SALP report, by conducting a special Task Force effort, whose findings and recommendations were recently discussed in a September 3, 1991, meeting with the NRC. The responsiveness of NU to employee concerns will be assessed as part of our more global evaluation.

Concern (5) was inspected by the NRC and the results documented in NRC report 50-336/91-27. The portion of the report which is pertinent to this concern is attached. The inspector concluded that this concern was not substantiated. The NRC considers this concern resolved and plans no further action in this matter.

information in this record was deleted in accordance with the Freedom of Information Act, exemptions

FOIA. 92-162

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9503020083 940809 PDR FOIA HUBBARD92-162 PDR We appreciate you informing us of your concerns, and feel that we have been responsive. Should you have any additional questions, regarding these matters, please call me collect at (215) 337-5225

Sincerely,

Reactor Projects Branch 4

Attachments: (1)

Summary of Concerns as presented to NU Excerpts from NRC Inspection Report 50-336/91-19 (2)

Excerpts from NRC Inspection Report 50-336/91-27 (3)

We appreciate you informing us of your concerns, and feel that we have been responsive. Should you have any additional questions, regarding these matters, please call me collect at (215) 337-5225

Sincerely,

Original Signed By

Edward Wenzinger, Chief Reactor Projects Branch 4

Attachments: (1) Summary of Concerns as presented to NU

(2) Excerpts from NRC Inspection Report 50-336/91-19

(3) Excerpts from NRC Inspection Report 50-336/91-27

bcc /w encl:

Allegation file: RI-91-A-231 & RI-91-A-210(Related)

E. Conner

W. Raymond/T. Shedlosky Contractor's Office (Roberts)

concurrences:

Barkley 11/13/14/

FOR Kelly

Wenzinger

SUMMARY OF CONCERNS AS PRESENTED TO NU

Issue 231-2:

Plant Operation Review Committee (PORC) actions are superficial. There are different calibration accuracy requirements between the Steam Generator radiation monitor functional test procedure (SP 2404A1), recently reviewed by the PORC, and a referenced source. Procedural problems also exist in the RBCCW radiation monitor calibration procedure, which was also recently reviewed.

Issue 231-4:

The RBCCW radiation monitor (RM 6083) sample valves are not labeled.

Additionally, the piping and instrumentation drawing (P&ID) 25203-26022, Sheet No.

1, does not reflect the actual installed configuration of the sample lines. (This concern is similar to issue 210-1 referred to you by letter under File Number RI-91-A-0210, dated August 22, 1991.)

Issue 231-6:

I&C technicians incorrectly started the Steam Jet Air Ejector (SJAE) radiation monitor (RM 5099) with the sample pump inlet valve shut. Subsequently, the motor failed to re-start. The sample pump was started by I&C Department personnel. It should have been operated by Operations Department personnel.

U.S. NUCLEAR REGULATORY COMMISSION REGION I

Report Number

50-336/91-19

Docket Number

50-336

License Number

DPR-65

Licensee:

Northeast Nuclear Energy Company

P.O. Box 270

Hartford, Connecticut 06141-0270

Facility Name:

Millstone Nuclear Generating Station. Unit 2

Inspection At:

Waterford, Connecticut

Inspection Conducted:

July 22-24, 1991

Inspector

J. L. Jang, Sr. Radiation Specialist

Effluents Radiation Protection Section (ERPS)

Facilities Radiological Safety and Safeguards Branch (FRS&SB) 7-26-91

Date

Approved by:

R. J. Bores, Chief, ERPS, FRS&SB

Division of Radiation Safety and Safeguards

Date

Inspection Summary: Special, announced inspection of the licensee's radioactive liquid and gaseous effluent control programs including: calibration and functional test of radioactive liquid and gaseous effluent/process radiation monitoring systems (RMS), and implementation of the Offsite Dose Calculation Manual.

Results: Very good routine radioactive liquid and gaseous effluent control programs were implemented by the Chemistry Department. A very good program to calibrate the effluent/process radiation monitors was also implemented by the I&C Department. Excellent management support to maintain the radiation monitoring system integrity and operability was also noted during this inspection. Within the areas inspected, no violations or deviations were identified.

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DETAILS

1.0 Individuals Contacted

1.1 Licensee Personnel

* J. Becker, I&C Manager

R. Crandall, Supervisor, Radiological Assessment Branch

T. Itteilag, Unit 2 Chemistry Supervisor

. J. Kangley, Senior Engineer, Chemistry Department

* J. Keenan, Unit 2 Director

P. Smith, Unit 2 I&C Supervisor

1.2 NRC Personnel

- * P. Habighorst, Resident Inspector W. Raymond, Senior Resident Inspector
- Denotes personnel who attended that exit meeting on July 24, 1991.
 Other licensee employees were also contacted or interviewed during this inspection.

2.0 Purpose

The purpose of this special inspection was to review the licensee's programs for the areas of liquid and gaseous effluent controls, including calibration of the effluent and process radiation monitoring systems (RMS); implementation of the Offsite Dose Calculation Manual (ODCM); and assessment of environmental impact and public health and safety.

3.0 Calibration of Effluent/Process Radiation Monitoring Systems

The inspector reviewed the licensee's most recent calibration and functional test results for the following liquid and gaseous effluent/process radiation monitors, and for the following effluent flow instrumentation to determine the implementation of the Technical Specification (TS) requirements.

- o High Range Stack Gas Radiation Monitor (RM-8186)
- o Normal Range Stack Gas Radiation Monitor (RM-8132B)

o Waste Gas Process Radiation Monitor (RM-9095)

- o Containment Gaseous Process Radiation Monitor (RM-8123B)
- o Steam Jet Air Ejector Gaseous Radiation Monitor (RM-5099)
- o Aerated Liquid Radwaste Process Radiation Monitor (RM-9116)

- o Clean Liquid Radwaste Process Radiation Monitor (RM-9094)
- o Steam Generator Blowdown Liquid Process Radiation Monitor (RM-4262)
- o Waste Neutralization Sump Radiation Monitor (RM-245)
- o Reactor Building Closed Cooling Water Liquid Process Radiation Monitor (RM-6038)
- o Effluent Flow Instrumentation
 - Stack Flow Instrumentation (F-8412)
 - Aerated Liquid Flow Instrumentation (F-9118)
 - Clean Liquid Flow Instrumentation (F-9050)
 - Waste Neutralization Sump Flow Instrumentation (F-246)

The I&C Department had the responsibility to perform electronic and radiological calibrations for the above monitors, and to perform calibrations of the above effluent flow instrumentation. All reviewed results were within the licensee's acceptance criteria. The licensee performed calibrations and functional testss for the above radiation monitors more frequently than required by the TS as shown the following table.

RMS/Flow Inst. TS Requirement			Licensee's Performance	
	Calibration	Functional Test	Calibration	Functional Test
RM-8186	Refueling	Monthly	Refueling	Monthly
RM-8132B	Refueling	Quarterly	Quarterly	Monthly
RM-9095	Refueling	Quarterly	Quarterly	Monthly
RM-8123B	Refueling	Quarterly	Annually	Monthly
RM-5099	Refueling	Quarterly	Quarterly	Monthly
RM-9116	Refueling	Quarterly	Quarterly	Monthly
RM-9094	Refueling	Quarterly	Quarterly	Monthly
RM-4246	Refueling	Quarterly	Quarterly	Monthly
RM-245	Refueling	Quarterly	Quarterly	Quarterly
RM-6038	Refueling	Quarterly	Quarterly	Monthly
F-8412	Refueling	Not Required	Quarterly	Quarterly
F-9118	Refueling	Quarterly	Quarterly	Quarterly
F-9050	Refueling	Quarterly	Quarterly	Quarterly
F-246	Refueling	Quarterly	Quarterly	Quarterly

During the review of the high range stack gas radiation monitor calibration results, the inspector noted that the licensee upgraded Procedure SP 2404AR, "Unit 2

Stack Gaseous High Range Radiation Monitor, RM-8186, Functional Test" on July 12, 1991. Therefore, the licensee will determine the accuracy between meter, computer, and chart recorder rather than chart recorder during the monthly functional test. This item was recommended by the Radiological Assessment Branch (RAB), Nuclear Engineering Department during the RMS Phases I and II Audits conducted in December 1988 and November 1989, respectively. Based on these audits, the RAB and the licensee issued the Radiation Monitor Manual (see combined Inspection Report Nos. 50-245/90-18, 50-336/90-20, and 50-423/90-18 for details). The inspector noted that calibration (performed on January 12, 1990) and functional test (perform on June 26, 1991) results for the high range stack gas radiation monitor were within the licensee's acceptance criteria. The inspector stated that the determination of the accuracy between meter, computer and chart recorder will be reviewed during a subsequent inspection. The inspector also noted that this monitor was out of service as of July 16, 1991 due to failure of the power supply. The licensee stated that the replacement power supply was delivered on July 23, 1991 and will be installed within a week. The licensee also stated that the reliability and operability of the high range stack gas radiation monitor will be followed closely. It should be noted that this high range stack radiation monitor was installed to monitor potential releases in the event of an accident. All Unit 2 gaseous effluents are released through the Unit 1 stack during any accident.

The inspector noted that the licensee's calibration technique for the above radiation monitors was excellent. Radiological calibrations of these monitors were performed as the primary calibration (same monitoring geometry with National Institute of Standards and Technology traceable radionuclides: Cs-137 for the liquid monitors and Kr-85 for the gaseous monitors). The inspector discussed with the licensee the benefit of the current calibration technique versus using solid sources (button sources), because the primary calibration technique requires many extra steps during the calibration. The inspector stated that using button sources is very common after the primary calibration (See ANSI N13.10-1974, "Specification and Performance of On-site Instrumentation for Continuously Monitoring Radioactivity in Effluents" for details) and is acceptable to the NRC.

Based on the above review, the inspector determined that the licensee conducted an excellent program to calibrate the effluent/process radiation monitors.



NUCLEAR REGULATORY COMMISSION

475 ALLENDALE ROAD KING OF PRUSSIA, PENNSYLVANIA 19406 1415

NOV 1 8 1991

Docket Nos. 50-245, -336

John F. Opeka
Executive Vice President - Nuclear
Northeast Nuclear Energy Company
P.O. Box 270
Hartford, Connecticut 06141-0270

Dear Mr. Opeka:

Subject: NRC Region I Inspection Report Nos. 50-245/91-23 and 50-336/91-27

A special safety inspection was conducted by Mr. J. T. Shedlosky and others of this office on August 15 through September 30, 1991, at the Millstone Nuclear Station Units 1 and 2, Waterford, Connecticut. The inspection results are documented in the enclosed report; they were discussed with Mr. S. Scace and other members of your staff at the conclusion of the inspection.

The inspection focused on issues brought to you by the NRC. Our independent review evaluated your performance in complying with regulatory requirements important to public health and safety. This review consisted of performance observations of ongoing activities, independent verification of safety system status and design configuration, interviews with personnel, and review of records.

Our overall assessment is that your performance in resolving these issues is acceptable; however, evaluation of several of these concerns still indicates certain areas in need of improvement. Examples include drawing controls, incorporation of vendor information in procedures and drawings, and the procedure validation process. No violations of NRC requirements were identified.

No response to this report is required. Your cooperation with us is appreciated.

Sincerely,

Edward C. Wenzinger, Chief

Projects Branch No. 4

Division of Reactor Projects

Enclosure: NRC Region I Inspection Report Nos. 50-245/91-23 and 50-336/91-27

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U.S. NUCLEAR REGULATORY COMMISSION REGION I

Report

Docket No.:

50-245/91-23

50-336/91-27

License No.:

DPR-21 & DPR-65

Licensee:

Northeast Nuclear Energy Company

P. O. Box 270

Hartford, CT 06141-0270

Facility Name:

Millstone Nuclear Power Station, Units 1 & 2

Inspection At:

Waterford, CT

Dates:

August 15 through September 30, 1991

Inspectors:

T. G. Humphrey, Consultant, SG&G, INEL

T. H. Hunt, Consultant, EG&G, INEL C. Kido, Consultant, EG&G, INEL D. R. Lasher, Consultant, EG&G, INEL A. D. Trusty, Consultant, EG&G, INEL

L. E. Briggs, Senior Operations Engineer, PWRS, OB, DRS
E. L. Conner, Reactor Licensing/Risk Engineer, TSS, DRP
J. T. Shedlosky, Senior Allegation Coordinator, RPS 4A, DRP

Approved by:

for Eugene M. Kelly, Chief

Reactor Projects Section 4A

11/18/91 Date

Scope: Special inspection of concerns brought to the licensee by the NRC. These included the areas of compliance with operating license requirements, drawing control, surveillance and calibration programs, electrical workmanship on environmentally qualified equipment, and personnel safety equipment control.

Results: See Executive Summary, Report Section 1.0

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Assessment

The inspector discussed with a Unit 2 Electrical Maintenance engineer whether or not the installation of Raychem material over braided jackets is covered in licensee procedures. The engineer stated that it was covered as documented by Change 2 to Revision 2 of the Raychem Installation and Removal (EQ) procedure, dated March 31, 1987. This change is quoted below:

MP 2720R Rev. 2 Change 2 RAYCHEM SPLICE INSTALLATION AND REMOVAL (EQ)

CHANGE

- 1. Change Precaution 4.3 to read:
 - 4.3 Use of woven jackets or braids as the cable environmental sealing surface is not acceptable. When removal is necessary use care not to nick or damage insulation.
- 2. Change the Note following step 5.1 to read:
 - NOTE: Raychem products are designed to provide an environmental seal on smooth, non-woven surfaces.
- 3. Change step 5.1.3 to read:
 - 5.1.3 If Raychem is to be used to provide an EQ seal to remove all non-qualified or braided jacketing material from splice area.
- 4. Add the following Note to step 5.3.6
 - Note: Raychem products will provide phase to phase and phase to ground isolation when used over braided or woven materials, but will not provide an environmental seal.

REASON FOR CHANGE

1 THRU 4. To allow this procedure to be used when Raychem products are being used for purposes other than to provide an environmental seal over electrical connections. In accordance with Raychem letter, Milo Anderson to Jeffery Scheeler dated November 4, 1986, Raychem products may be used as an insulating material even when applied to unqualified cable jacketing material.

Conclusion

Based on the discussion with the Electrical Maintenance Engineer and review of the Raychem Installation and Removal (EQ) procedure, the inspector concludes that the engineering disposition of NCR 291-173 is justified. The inspector also agrees that the licensee's procedure allows the installation of Raychem material over braided jackets in certain instances.

13.0 FAILURE TO ENTER A TECHNICAL SPECIFICATION LIMITING CONDITION FOR OPERATION ACTION STATEMENT

A concern was identified that Unit 2 Operations personnel failed to enter a technical specification limiting condition for operation action statement during the time the Reactor Building Closed Cooling Water (RBCCW) radiation monitor RM-6038 was out of service for calibration on August 19, 1991.

The RBCCW radiation monitor is under the regulatory requirements of Technical Specification 3/4.3.3.9 - Tables 3.3-12 and 4.3-12.

Assessment

The inspector discussed this concern with the Unit 2 Operations Manager who, after discussions with cognizant personnel provided the following information:

At 0837 on 8/19/91 Operations logged "in TSAS 3.3.9b Table 3.3-12 Action 2a" after being informed by I&C that the RBCCW Radiation Monitor (RM-6038) would be taken out of service. Operations notified Chemistry to began taking the required samples.

At approximately 0930 on 8/19/91 I&C notified Operations that RM-6038 would not be taken out of service since non-essential personnel were leaving the plant because of Hurricane Bob. Operations then informed Chemistry that the RBCCW system would not have to be sampled. Operations did not, however, log out of TSAS 3.3.9b.

At 0945 on 8/20/91 I&C took RM-6038 out of service and Operations logged "In TSAS 3.3.9b Table 3.3-12 Action 2a." Chemistry took the required RBCCW samples until RM-6038 was restored at 0900 on 9/11/91. At that time Operations logged "Out of TSAS 3.3.9b.

Conclusion

Based on the information provided by the Unit 2 Operations Manager, the inspector concludes that this concern is not substantiated.