

(51)



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PENNSYLVANIA 19406

JUN 2 1991

[ ]

Dear [ ]

This letter refers to concerns that you provided to us on May 22nd, 28th, and June 3rd, 4th, and 8th, 1991, alleging: (1) Northeast Utilities failed to promptly enter a technical specification action statement on a radiation monitor; (2) inadequate calibration procedures for the Unit 3 Accumulator level transmitter; (3) an inadequate PWP may have resulted in the ingestion of radioactive material by a worker; (4) inadequate supervisory training for technicians serving as job supervisors; (5) inadequate work control which resulted in the Unit 2 Vent Stack Monitor being off-line for 10-15 minutes; (6) no Instrument and Control Technician E-Plan coverage from the morning of May 30th through the morning of May 31st, 1991; (7) lack of attention to detail which resulted in an improper valve line up while refilling the Volume Control Tank reference leg; (8) work being assigned without verification of equipment condition; and (9) apparent repetitive failures of the Unit 2 Vent Stack High Range Radiation Monitor.

We have initiated action to have the Northeast Utilities staff review the concerns listed above. Attached are the issues as we intend to characterize them to the licensee. We will inform you of their review findings.

Should you have any further questions, or if I can be of further assistance in these regards, please call me collect at (215) 389-3225.

Sincerely,  
*Edward Henzinger*  
Edward Henzinger, Chief  
Reactor Projects Branch

Attachments: As stated

Records maintained  
in accordance with the provisions of  
Act. exemptions 6  
FOIA-92-162

- cc: Allegation files (8), RI-91-A-113, 114, 116, 122, 128, 129, 130, 136
- J. Stewart
- T. Sheddsky
- X. Raymond
- E. Kelly

9501180333 931208  
PDR FOIA  
HUBBARD92-162 PDR

Q/S

~~LIMITED DISTRIBUTION - NOT FOR PUBLIC DISCLOSURE~~

Issue 113

On May 20, 1991, an operator observed an abnormal indication on the Unit 2 stack radiation monitor (RM 8168). The abnormal indication was no variation on the meter. The operators secured and immediately reinstated power to the monitor and the meter response was noted to have returned. On May 21, operators again observed no variation in the monitor output. A trouble report was initiated and the technical specification action statement was entered for an inoperable monitor. The one day delay is an example of operators failing to promptly initiate a corrective action request and failing to enter the technical specification action statements when required.

Request 113

Please discuss the validity of the above assertions. If any deficiencies are identified, please provide us with the corrective actions you have taken to prevent recurrence and assess the significance with regard to safety of the identified deficiencies.

~~LIMITED DISTRIBUTION - NOT FOR PUBLIC DISCLOSURE~~

~~LIMITED DISTRIBUTION - NOT FOR PUBLIC DISCLOSURE~~

Issue 114-1 (Unit 3)

On May 22, 1991 during the MP-3 refuel outage a calibration error of the accumulator tank level transmitters was identified. The error was in the range of 25% due to static fluid between the transmitter and the instrument taps. The calibration procedure did not address the error due to the level instrumentation piping configuration; therefore, the procedure was inadequate. Further, if the present instrument indication is correct, then it was achieved by using zero span adjustments without adhering to the calibration procedure.

Request 114-1 (Unit 3)

Please discuss the validity of the above assertions. If any deficiencies in calibration procedures or procedural compliance are identified, please provide us with the corrective actions you have taken to prevent recurrence. Please provide us with an assessment of the significance with regard to safety of any identified deficiencies.

Issue 114-2 (Unit 1)

On May 22, 1991 during the installation of the IRM cable detector assemblies under the reactor vessel, the RWP/HP controls were inadequate and resulted in the possible ingestion of radioactive material by a worker. The cable was identified as "5K smearable" on May 22, 1991 and the RWP required workers to wear respirators. However, on May 21, 1991, the RWP did not require respirators to do the same job.

Request 114-2 (Unit 1)

Please discuss the validity of the above assertions. If any deficiencies are identified, please provide us with the corrective actions you have taken to prevent recurrence. Please provide us with an assessment of the significance with regard to safety of any identified deficiencies.

~~LIMITED DISTRIBUTION - NOT FOR PUBLIC DISCLOSURE~~

~~LIMITED DISTRIBUTION - NOT FOR PUBLIC DISCLOSURE~~

Issue 116

Recently, a tagging error occurred during preparations for maintenance on the Clean Liquid Radioactive Waste Effluent Monitor (RM 9049). The solenoid valve isolation valves that needed to be tagged in accordance with prerequisites for the job were not tagged. Specifically, the valves designated to be traced by procedures IC2404AA and IC 2404AC were not traced because the operations tag form was used to verify the tagging. The root cause of the error can be attributed to the I&C technician (who verified the tagging) not being trained and qualified as a "job supervisor". Although there was a qualified job supervisor associated with the work, this individual was allowed to leave the work area while an unqualified individual continued the job.

Request 116

Please discuss the validity of the above assertions. If any deficiencies in work control are identified, please provide us with the corrective actions you have taken to prevent recurrence and assess the significance of the deficiencies with respect to safety.

~~LIMITED DISTRIBUTION - NOT FOR PUBLIC DISCLOSURE~~

Issue 122

On or about May 29, 1991 workmen were dispatched to troubleshoot a flow problem with the plant vent stack monitor (RM 8032AB). At the time, the "A" sample pump was running, pump "B" was off and flow was as expected. The pumps were switched to permit the workers to investigate the flow problem. Pump "A" was stopped, but "B" did not start due to a preventive maintenance action that was still in progress. As a result, the stack monitor was out of service for 10-15 minutes.

Request 122

Please discuss the validity of the above assertions. If any deficiencies in work control are identified, please provide us with the corrective actions you have taken to prevent recurrence and assess the significance of the deficiencies with respect to safety.

~~LIMITED DISTRIBUTION - NOT FOR PUBLIC DISCLOSURE~~

Issue 128

On June 1, 1991 a worker learned that he had been assigned duty as the on-call I&C technician (Unit 2 Emergency plan) for a 24 hour period from the morning of May 30 through the morning of May 31, 1991. The worker was unaware of this assignment on May 29 when he informed his supervisor that he would not be at work on May 30 for personal reasons. The worker did not pick up the department radio paging device and no one else was assigned as his replacement. Lapses in on-call coverage such as this example occur on a routine frequency.

Request 128

Please discuss the validity of the above assertions. If any deficiencies in the on-call coverage for emergency planning are identified, please provide us with the corrective actions you have taken to prevent recurrence. In addition, please assess the frequency and significance with respect to safety of lapses in on-call coverage by the Instrument and Controls and Maintenance technical staffs.

~~LIMITED DISTRIBUTION - NOT FOR PUBLIC DISCLOSURE~~

Issue 129

On June 3, 1991, the periodic evolution of refilling the volume control tank (VCT) level instrument reference leg was performed in accordance with procedure IC-2428F. During the reference leg fill, a worker noted an unexpected increase in VCT level. Because of this unexpected increase, it was suspected that the evolution actually drained the VCT reference leg. This observation was reported to supervision. Pressure in the primary makeup water supply was checked, and it was discovered that valve 2CH-195 in the supply path was red tagged closed instead of being in the open position as specified by step 6.2 of procedure IC-2428F. The valve alignment check had been performed by a Plant Equipment Operator. At that time the PEO did not perform a hands-on position check of valve 2CH-195 and failed to notice the red tag indicating the valve was closed. There was a conflict between the work procedure IC-2428F, which required valve 2CH-195 to be open, and the requirement to prevent boron dilution during reactor shutdown, which required the valve to be closed.

Request 129

Please discuss the validity of the above assertions. If any deficiencies in work control, attention to detail, or work procedures are identified, please provide us with the corrective actions you have taken to prevent recurrence and provide an assessment of the significance of the deficiency with respect to safety.

LIMITED DISTRIBUTION - NOT FOR PUBLIC DISCLOSURE

Issue 130

On May 31, 1991, during the replacement of a local pressure indication gage PI8167 in the condensate recovery system a worker was issued the wrong part (diaphragm isolated liquid filled gage) to replace a conventional gage that was already in service. Instrument and Controls supervision is responsible to verify plant and equipment conditions, such as replacement part suitability before authorizing work on a system.

Request 130

Please discuss the validity of the above assertions. If any deficiencies are identified, please provide us with the corrective actions you have taken to prevent recurrence and provide an assessment with respect to safety of the deficiency.

LIMITED DISTRIBUTION - NOT FOR PUBLIC DISCLOSURE

~~LIMITED DISTRIBUTION - NOT FOR PUBLIC DISCLOSURE~~

Issue 136

From June 3 to June 5, 1991 repetitive failures were noted in the control room indication for the Unit 2 vent stack high range radiation monitor RM8168A/P. On June 3 the "failure" lamp was lit, and on June 5, 1991 a "Trouble Tag" was found to be in place. The required technical specification action statements were not complied with during these repetitive failures.

Request 136

Please verify the validity of the above assertions. If any deficiencies in equipment availability or procedure compliance are identified, please provide us with the corrective actions you have taken to prevent recurrence and provide an assessment of the significance of the deficiencies with respect to safety.

~~LIMITED DISTRIBUTION - NOT FOR PUBLIC DISCLOSURE~~

ALLEGATION RECEIPT REPORT

Updates of:  
RI-91-A-0114 (open)

Date/Time Received: AUGUST 16, 1991 9:00AM

Allegation No. RI-91-A-0046 (closed)  
(leave blank)  
0049 (closed)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Confidentiality:

- Was it requested? Yes \_\_\_ No
- Was it initially granted? Yes \_\_\_ No
- Was it finally granted by the allegation panel? Yes \_\_\_ No \_\_\_
- Does a confidentiality agreement need to be sent to allegor? Yes \_\_\_ No \_\_\_
- Has a confidentiality agreement been signed? Yes \_\_\_ No \_\_\_
- Memo documenting why it was granted is attached? Yes \_\_\_ No \_\_\_

Allegor's Employer: Northeast Utilities

Position/Title: [ ]

Facility: Millstone 2

Docket No.: 50-336

(Allegation Summary (brief description of concern(s): ① Disagreement with NU response to previous concerns.

Number of Concerns: 2

Employee Receiving Allegation: PJ Habighorst / T Shredlosky  
(first two initials and last name)

Type of Regulated Activity (a)  Reactor (d) \_\_\_ Safeguards  
(b) \_\_\_ Vendor (e) \_\_\_ Other: \_\_\_\_\_  
(c) \_\_\_ Materials (Specify)

Materials License No. (if applicable): \_\_\_\_\_

Functional Area(s): (a)  Operations (e)  Emergency Preparedness  
(b) \_\_\_ Construction (f) \_\_\_ Onsite Health and Safety  
(c) \_\_\_ Safeguards (g) \_\_\_ Offsite Health and Safety  
(d) \_\_\_ Transportation (h) \_\_\_ Other: \_\_\_\_\_

2/52

description of allegation:

1. Memorandum ( ) Allegor has become aware of third hand that the HPI safety coordinator ( ) told a Unit 1 IC tech in February, 1991 ( ) if "he was pulling a ( )

Inspector actions: The inspector informed the allegor of his rights with the Department of Labor on August 16, if he felt that he had been harassed, or discriminated against. Allegor stated that he was unsure if he would file with DOL.

1 ( )

Inspector Assessment: Review of past allegations indicated that the unit 3 safety injection tank level concern was documented in allegation RI-91-a-114. HRC Region I documented a letter to NJ on July 8, 1991 requesting a 30 day response. Further, the technical issue was inspected in routine inspection report 90-423/91-12 under section 3.1. The inspection concluded NHECO action were adequate to correct the level indicator inaccuracies.

2. ( ) Allegor displeasure with HPI response of July 1, 1991 concerning allegation RI-91-a-0046. Allegor dissatisfied with July 19, 1991 HRC response to previous concern. Specifics were not provided. The allegor also provided a complaint about ( )

Enclosed are associated memorandums and supporting information.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

RI-91-A-046  
-049

JUL 22 1991

This letter refers to several concerns that you provided to us, the first set on March 2, 1991, alleged that I&C technicians were required to work excessive hours in support of the Unit 2 startup on February 17, 1991, and that a technician was insufficiently trained on a surveillance procedure. Your second concern, on March 5, 1991, alleged that the procedures used to calibrate the replacement feedwater and charging flow transmitters were not appropriate for use with the newer Foxboro "smart" transmitters.

These concerns were referred to the licensee for their evaluation. Attached for your information are their responses to these concerns. The licensee has made changes to improve the procedure review process and the on-the-job training program to address your concern about technician training when procedures undergo significant change. The licensee also plans additional training for I&C technicians in the calibration process for the "smart" transmitters. The other concerns were not substantiated.

The NRC plans no further action in any of these matters. Please advise us if you wish to pursue further any of these issues. Thank you for informing us of your concerns.

Sincerely,

*Edward Wenzinger*  
Edward Wenzinger, Chief  
Reactor Projects Branch 4

Enclosures:

- 1. NU letter A09557, dated 7/1/91
- 2. NU letter A09558, dated 7/1/91

*9303300182*

**NORTHEAST UTILITIES**



THE CONNECTICUT LIGHT AND POWER COMPANY  
WESTERN MASSACHUSETTS ELECTRIC COMPANY  
HOLYoke WATER POWER COMPANY  
NORTHEAST UTILITIES SERVICE COMPANY  
NORTHEAST NUCLEAR ENERGY COMPANY

General Offices • Selden Street, Berlin, Connecticut

P.O. BOX 270  
HARTFORD, CONNECTICUT 06141-0270  
(203) 665-9000

July 1, 1991

Docket No. 50-336  
A09557

Mr. Charles W. Behl, Director  
Division of Reactor Projects  
U. S. Nuclear Regulatory Commission  
Region I  
475 Allendale Road  
King of Prussia, Pennsylvania 19406

Dear Mr. Behl:

Millstone Nuclear Power Station, Unit No. 2  
RI-91-A-0046

We have completed our review of identified issues concerning activities at Millstone Unit No. 2 (RI-91-A-0046). As requested in your transmittal letter, our response does not contain any personal privacy, proprietary, or safeguards information. The material contained in this response may be released to the public and placed in the NRC Public Document Room at your discretion. The NRC letter and our response have received controlled and limited distribution on a "need to know" basis during the preparation of this response. Based upon our request on June 25, 1991 with Region I personnel, a four-day extension to this letter was granted to allow for routine and proper administrative processing.

Issue:

An Instrument and Controls technician worked on RPS matrix and NI calibrations to support the Millstone 2 startup following a scram on February 16, 1991. The surveillance procedure had undergone extensive changes recently and the technician was not adequately trained on the recent revisions to the procedure. Special assistance was required for the technician to understand and complete the procedure.

Please discuss the validity of the above assertion. Please discuss any corrective actions being taken to train technicians on revisions to procedures prior to implementation.

9107300134

# NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY  
WESTERN MASSACHUSETTS ELECTRIC COMPANY  
MOLSON WATER WORKS COMPANY  
NORTHEAST UTILITIES SERVICE COMPANY  
NORTHEAST NUCLEAR ENERGY COMPANY

General Offices • Selden Street, Berlin, Connecticut

P.O. BOX 270  
HARTFORD, CONNECTICUT 06141-0270  
(203) 665-5000

July 1, 1991

Docket No. 50-336  
A09558

Mr. Charles W. Behl, Director  
Division of Reactor Projects  
U. S. Nuclear Regulatory Commission  
Region I  
475 Allendale Road  
King of Prussia, Pennsylvania 19406

Dear Mr. Behl:

Millstone Nuclear Power Station, Unit No. 2  
RI-91-A-0049

We have completed our review of identified issues concerning activities at Millstone Unit No. 2 (RI-91-A-0049). As requested in your transmittal letter, our response does not contain any personal privacy, proprietary, or safeguards information. The material contained in this response may be released to the public and placed in the NRC Public Document Room at your discretion. The NRC letter and our response have received controlled and limited distribution on a "need to know" basis during the preparation of this response. Based upon our request on June 25, 1991 with Region I personnel, a four-day extension to this letter was granted to allow for routine and proper administrative processing.

### Issue:

Foxboro "smart" or "intelligent" transmitters were installed approximately one fuel cycle ago to be utilized during the calibration of feedwater flow transmitters FT-5269A, FT-5269B and charging flow transmitter FT-212. The use of these "smart" transmitters is not in the controlling calibration procedures, IC-2426B for feed flow and IC-2429A for charging flow. The controlling modification work (PDCE/PDCR) did not address the need for the calibration procedure changes. In addition, training on the "smart" transmitter was limited to a Foxboro vendor representative presentation to the I&C technicians.

Please discuss the validity of the above assertions. Please discuss actions taken to determine whether the above mentioned flow transmitters have been properly calibrated subsequent to the installation and use of the Foxboro "smart" transmitters.

*9107306149*

ALLEGATION RECEIPT REPORT

RI-91-A-0114 update

Date/Time Received: AUGUST 16, 1991 9:00AM

Allegation No. RI-91-A-0046 disagreed  
(leave blank)

Name: [ ]

Address: [ ]

Phone: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Confidentiality:

- Was it requested? Yes \_\_\_\_\_ No
- Was it initially granted? Yes \_\_\_\_\_ No
- Was it finally granted by the allegation panel? Yes \_\_\_\_\_ No \_\_\_\_\_
- Does a confidentiality agreement need to be sent to allegor? Yes \_\_\_\_\_ No \_\_\_\_\_
- Has a confidentiality agreement been signed? Yes \_\_\_\_\_ No \_\_\_\_\_
- Memo documenting why it was granted is attached? Yes \_\_\_\_\_ No \_\_\_\_\_

Allegor's Employer: Northeast Utilities

Position/Title: [ ]

Facility: Millstone 2

Docket No.: 50-336

(Allegation Summary (brief description of concern(s): Disagreement with NU response to previous concerns.)

Number of Concerns: 2

Employee Receiving Allegation: PJ Habighorst / T Shredlosky  
(first two initials and last name)

- Type of Regulated Activity
- (a)  Reactor
  - (b)  Vendor
  - (c)  Materials
  - (d)  Safeguards
  - (e)  Other: \_\_\_\_\_ (Specify)

Materials License No. (if applicable): \_\_\_\_\_

- Functional Area(s):
- (a) Operations
  - (b) Construction
  - (c) Safeguards
  - (d) Transportation
  - (e) Emergency Preparedness
  - (f) Onsite Health and Safety
  - (g) Offsite Health and Safety
  - (h) Other: \_\_\_\_\_

Q154



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

JUL 19 1991

Dear [ ]

The NRC Region I office has completed its followup of the concerns that you brought to our attention on July 5, 1991, asserting the following: (1) two electricians were assigned surveillance Procedures SP- 2401R "CWP High Power" without previously performing the task; (2) the NNECO Task Force is interviewing employees to address safety concerns because of lack of confidence with NU management; and (3) based on the interviews with the NNECO Task Force, potential harassment exists.

In regard to your first concern, the Integrated Performance Assessment Team (IPAT) is presently reviewing this issue from a generic perspective. The appropriate action will be taken based on the team's findings and therefore, we intend no additional action at this time. In regard to your second concern, since no specific safety concerns were identified, this issue is closed. If you have specific safety concerns, please provide them for our review. In regard to harassment, the inspector has advised you to take such concerns to the Department of Labor (DOL) and you have been provided with the necessary materials in previous correspondence.

Should you have any further questions, or if I can be of further assistance in these regards, please call me collect at (215) 337-5225.

Sincerely,

*Edward B. Wenzinger*  
Edward Wenzinger, Chief  
Reactor Projects Branch

9305206120



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

JUL 22 1991

[redacted]

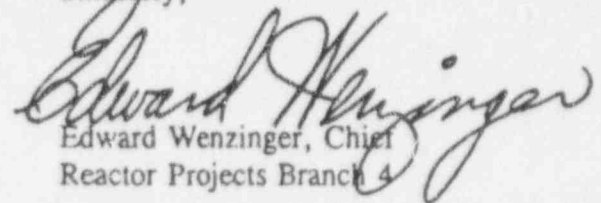
Dear [redacted]

This letter refers to several concerns that you provided to us, the first set on March 2, 1991, alleged that I&C technicians were required to work excessive hours in support of the Unit 2 startup on February 17, 1991, and that a technician was insufficiently trained on a surveillance procedure. Your second concern, on March 5, 1991, alleged that the procedures used to calibrate the replacement feedwater and charging flow transmitters were not appropriate for use with the newer Foxboro "smart" transmitters.

These concerns were referred to the licensee for their evaluation. Attached for your information are their responses to these concerns. The licensee has made changes to improve the procedure review process and the on-the-job training program to address your concern about technician training when procedures undergo significant change. The licensee also plans additional training for I&C technicians in the calibration process for the "smart" transmitters. The other concerns were not substantiated.

The NRC plans no further action in any of these matters. Please advise us if you wish to pursue further any of these issues. Thank you for informing us of your concerns.

Sincerely,

  
Edward Wenzinger, Chief  
Reactor Projects Branch 4

Enclosures:

1. NU letter A09557, dated 7/1/91
2. NU letter A09558, dated 7/1/91

# NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY  
WESTERN MASSACHUSETTS ELECTRIC COMPANY  
NEW YORK WATER POWER COMPANY  
NORTHEAST UTILITIES SERVICE COMPANY  
NORTHEAST NUCLEAR ENERGY COMPANY

General Offices • Seiden Street, Berlin, Connecticut

P.O. BOX 275  
HARTFORD, CONNECTICUT 06141-0270  
(203) 665-5000

July 1, 1991

Docket No. 50-336  
A09557

Mr. Charles W. Behl, Director  
Division of Reactor Projects  
U. S. Nuclear Regulatory Commission  
Region I  
475 Allendale Road  
King of Prussia, Pennsylvania 19406

Dear Mr. Behl:

Millstone Nuclear Power Station, Unit No. 2  
RI-91-A-0046

We have completed our review of identified issues concerning activities at Millstone Unit No. 2 (RI-91-A-0046). As requested in your transmittal letter, our response does not contain any personal privacy, proprietary, or safeguards information. The material contained in this response may be released to the public and placed in the NRC Public Document Room at your discretion. The NRC letter and our response have received controlled and limited distribution on a "need to know" basis during the preparation of this response. Based upon our request on June 25, 1991 with Region I personnel, a four-day extension to this letter was granted to allow for routine and proper administrative processing.

### Issue:

An Instrument and Controls technician worked on RPS matrix and NI calibrations to support the Millstone 2 startup following a scram on February 16, 1991. The surveillance procedure had undergone extensive changes recently and the technician was not adequately trained on the recent revisions to the procedure. Special assistance was required for the technician to understand and complete the procedure.

Please discuss the validity of the above assertion. Please discuss any corrective actions being taken to train technicians on revisions to procedures prior to implementation.

910-300134

Mr. Charles W. Behl, Director  
U. S. Nuclear Regulatory Commission  
A09557/Page 2  
July 1, 1991

Background:

The need for specific training on a station procedure change or revision is considered at the time of its implementation. A prompt to consider the need for training prior to procedure change implementation has been added to the Millstone Unit No. 2 Instrument and Control (I&C) procedure routing sheets. This was done as an enhancement to the procedure review process and will accelerate any necessary immediate modifications to the on-the-job program. Unless the procedure changes are significant in nature and beyond the skills of the personnel performing the work, training does not typically take place prior to change implementation. Procedures, changes and revisions are written to a level of detail which is sufficient to ensure that the technician has the level of detail needed to perform the task.

All revisions to I&C procedures are reviewed by the Technical Training Department for the need to modify training materials or to conduct additional training.

Response:

The assertion that the personnel who performed startup support activities were not adequately trained is not accurate. The surveillance was performed correctly by the personnel assigned, without the need for special assistance to understand the procedure. The surveillance data sheets have been reviewed and the results found acceptable.

This issue had not been addressed to department management. The NRC Resident Inspector has reviewed this issue and concluded that the surveillances were properly completed as documented in NRC Resident Inspection Report 91-04 Section 7.5. Furthermore, our technicians are instructed to return instruments to a safe condition and to seek assistance if they have any difficulty understanding the action requested by procedure.

Issue 2:

Hours in excess of overtime limitations, were worked by Instrument and Controls technicians in support of the Millstone Unit No. 2 startup on February 17, 1991. One individual was "on-call" for plant support activities and was in the dual role of being "on-call" as an emergency responder. This technician worked a 10 hour shift on Millstone Unit No. 3 on February 16 and remained on duty for 24 hours keeping the pager until 0730 on February 17. This individual was overworked and could not perform his duties in support of the unit startup.

Please discuss the validity of the above assertions. Please discuss any actions taken to ensure overtime restrictions are not exceeded in cases such as that described above.

Mr. Charles W. Behl, Director  
U. S. Nuclear Regulatory Commission  
A09557/Page 3  
July 1, 1991

Background:

One person who had worked a 10 hour day was on call the night of February 16th. He was called in at 2030 to conduct instrument surveillance by the shift supervisor. Additional personnel were called in to relieve him later that same evening. There were no personnel that worked total hours in excess of established station overtime guidelines. The on-call individual was fully capable of fulfilling his emergency plan responsibilities at all times.

This issue was evaluated by the NRC Resident Inspector and concluded that the surveillances were properly completed as documented in NRC Resident Inspection Report 91-04.

This issue had not been addressed to department management.

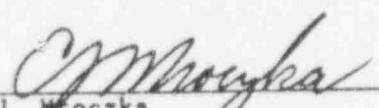
Response:

No overtime limits were exceeded by this individual. Established station on-call personnel performed their duties as required by procedures. Overtime limits do not apply to personnel when they are performing on-call responsibilities and are at home. The on-call person who was called in was relieved prior to being overworked and prior to exceeding any overtime guideline restrictions. If the emergency plan had been activated in this same interval, back-up resources would have been available in the event that the individual had not been able to perform his duties. It is the responsibility of all emergency plan responders to identify if at any time they are not capable of performing their assigned duties. No additional actions are required.

After our review and evaluation, we find that neither of these issues taken either singularly or collectively present any indication of a compromise of nuclear safety. We appreciate the opportunity to respond and explain the basis for our actions. Please contact my staff if there are any further questions on any of these matters.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

  
E. J. Mroczka  
Senior Vice President

cc: W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2, and 3  
E. C. Wenzinger, Chief, Projects Branch No. 4, Division of Reactor Projects

# NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY  
WESTERN MASSACHUSETTS ELECTRIC COMPANY  
WOLUKE VALLEY POWER COMPANY  
NORTHEAST UTILITIES SERVICE COMPANY  
NORTHEAST NUCLEAR ENERGY COMPANY

P.O. BOX 270  
HARTFORD, CONNECTICUT 06141-0270  
(203) 665-5217

EDWARD J. MROCZKA  
SENIOR VICE PRESIDENT -  
NUCLEAR ENGINEERING AND OPERATIONS

October 24, 1990  
NEO-90-G-292

TO: Nuclear Emergency On-Call Organization and  
their Supervisors

FROM: E. J. Mroczka *EM*  
(Ext. 5217)

SUBJECT: NUCLEAR EMERGENCY RESPONSE ON-CALL  
RESPONSIBILITIES AND UNANNOUNCED DRILLS

In your daily work, you are expected to design, operate, and maintain our nuclear plants in a safe condition so as to minimize the probability of an accident. However, nuclear power plant events can occur. They have occurred in the U.S. at a frequency of about ten or more declared events per year. At NU, we have in our operating history experienced five events at the ALERT and higher levels.

NRC regulations require an Emergency Response Organization to provide appropriate resources to handle such events. In addition, NU executive management firmly believes it is our responsibility to have an effective Emergency Response Plan to ensure we protect the health and safety of the public which we serve. This includes the On-Call Emergency Response Organization designed to be ready and available to augment the on-shift staff and assist site management at the time of a nuclear accident to mitigate plant damage and off-site consequences. On-call functions are an important part of the job requirements for employment in the Nuclear Engineering and Operations Group. Thus, there is a significant obligation and responsibility carried by the individuals who are selected to be part of the On-Call Emergency Response Organization and those who supervise them. A major commitment to this operation has been made by NU and a similar commitment is expected from those who are part of the on-call response organization.

The Supervisors and Management of On-Call Individuals are responsible to ensure and continually verify that the individuals you select to be part of the emergency on-call organization are suitable and able to fulfill their obligation and responsibility. This includes the issues of qualification, training, ability to respond within the prescribed time period and being cautious about the assignment of extended or conflicting work schedules during on-call weeks. Your planning should rotate the on-call responsibility such that an individual has the on-call responsibility at a frequency of no greater than once per four weeks, an optimum of once per five weeks is preferred.

On-Call Individuals are responsible to ensure that when you are on-call, you will respond within the prescribed time period and be fully alert and cognizant of your duties. You should recognize that when called in, you could be expected to work at a fairly intensive pace for a period of eight to twelve hours prior to being relieved. You should be knowledgeable of the radiopager range and its effectiveness in notifying you. Avoid large, steel-shell buildings and distances that diminish or prevent the radiopager signal from reaching you. Keep the radiopager either on or close to you so you are able to hear the radiopager. Ensure your radiopager is operable at all times (check operation by depressing top bar, carry a spare battery). Be aware of social or other occasions that compromise your ability to hear and/or respond in time. Follow the NU Fitness For Duty Program for employees with unescorted access to nuclear facilities, in particular, the total abstinence from alcohol during all on-call periods and for five hours prior to assuming the on-call responsibility. Turn your on-call responsibility over to another qualified person if you feel your on-call responsibility will be compromised. Exercise discretion at all times - DO NOT take chances and play the probability game. Discuss your concerns about fulfilling your obligation with your on-call supervisor/manager. When you are on-call, you should be oriented towards being able to respond on time. If you feel the need, take the time to refamiliarize yourself with your on-call function procedures. I expect this of you. Failure to comply with your on-call responsibilities will result in appropriate disciplinary action.

In order to ensure that NU can meet its moral and legal commitments to have an effective on-call response that can be relied on, it is prudent that we periodically evaluate our on-call response capability. There will be periodic unannounced drills of this important function. These drills can occur at any time and can require response, not just call-in.

Follow the guidance provided above. You cannot place yourself in a situation which will prevent you from responding within the required time when you are on-call. I am counting on each and every one of you to be there when called, and to be able to perform your duties safely, efficiently, and in accordance with the public trust that has been placed on us.

EJM/RCR/jha

cc: W. D. Romberg  
C. F. Sears  
E. A. DeBarba

# NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY  
WESTERN MASSACHUSETTS ELECTRIC COMPANY  
MIDDLESEX WATER POWER COMPANY  
NORTHEAST UTILITIES SERVICE COMPANY  
NORTHEAST NUCLEAR ENERGY COMPANY



November 7, 1990  
MP-90-1197

TO: All On-Call SEO Members

FROM:

*Stephen E. Scace*  
Stephen E. Scace  
Director Millstone Station  
(Millstone, Extension 4300)

SUBJECT: EMERGENCY RESPONSE ON-CALL  
RESPONSIBILITIES AND UNANNOUNCED DRILLS

The purpose of this memo is to re-emphasize your responsibilities and obligations as an on-call member of the Emergency Plan Station Emergency Organization (SEO).

NRC regulations require an Emergency Response Organization to provide appropriate resources to handle a Nuclear Power Plant event. In addition, Station Management firmly believes that it is our responsibility to have an effective emergency plan to ensure the health and safety of the public. This includes an on-call Emergency Response Organization, designed to be ready and available, to augment the on-shift staff and assist site management at the time of a nuclear event to mitigate plant damage and off-site consequences.

There is an obligation and responsibility carried by the individuals who are assigned to the on-call Emergency Response Organization. Assignment of on-call functions is an important part of your job requirements at Millstone Station.

As an on-call individual, you are responsible for ensuring that when carrying the beeper, you:

- Are able to respond within the prescribed time period.
- Are fully alert and cognizant of your duties.
- Are knowledgeable of the radiopager range and its effectiveness in notifying you.
- Ensure that your radiopager is in a location where you can hear it at all times and that it is operable.
- Follow the NU Fitness for Duty Program for employees with unescorted access, in particular, the total abstinence from alcohol during all on-call periods and for five hours prior to assuming the on-call responsibility.

If changes to the daily / weekly schedule are necessary, the scheduled on-call individual must complete the "Station Emergency Organization On-Call Change Request", SF 107B, and forward it to the Unit I Shift Supervisor Staff Assistant (SSSA). The person listed on the on-call program is responsible for the position coverage. If a standby is obtained and the change is not listed on the schedule, the accountability for the position remains with the scheduled individual.

Failure to comply with your on-call responsibilities will result in the appropriate disciplinary action.

In order to ensure that NU can meet its legal commitments to have an effective on-call response, there will be periodic unannounced drills to evaluate our on-call response capabilities. These drills can occur at any time and could require a response to not only call-in, but also to come in to the station.

When you are on-call, you should follow the guidance provided above. I trust that you will be there when called upon and perform your duties safely and efficiently.

\bat

Distribution

SF 150-1

c:

List D  
E. J. Molloy  
R. C. Rodgers  
W. H. Buch



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
476 ALLENDALE ROAD  
KING OF PRUSSIA, PENNSYLVANIA 19406

Docket No. 50-336  
File No. RI-88-A-0040

JUL 18 1991

Dear: [redacted]

The NRC Region I office has completed its review of concerns that you brought to our attention on January 25, 1990, regarding Millstone 2 control of radiation monitoring alarms. In particular, you alleged that: 1) operations did not follow procedures for control of radiation monitor keys on January 24 and 25; and, 2) operations were leaving local SJAE radiation monitoring horns in the bypass condition while these monitors were in service. Our resolutions of these concerns are as follows.

Your concerns were addressed in the special team inspection, IR 89-13, issued October 11, 1989. The two issues, found to be substantiated, were combined into a single unresolved item (50-336/89-13-13) to be resolved by the licensee. A follow-up inspection by the resident inspectors found that Station Procedures OP-2383A and Op-2383B were revised to require special controls of alarm bypassing. This inspection, IR 50-336/90-11, issued August 1, 1990, closed Open Item 50-336/89-13-13 and, therefore, your concerns on this subject. The pertinent pages of these reports are enclosed.

We appreciate you informing us of your concerns and feel that our actions in this matter have been responsive to those concerns. Should you have any additional questions, or if I can be of further assistance in this matter, please call me collect at (215) 337-5225.

Sincerely,

Edward C. Wenzinger, Chief  
Projects Branch 4  
Division of Reactor Projects  
NRC Region I

Attachments: As Stated

430526089



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
476 ALLENDALE ROAD  
KING OF PRUSSIA, PENNSYLVANIA 19408  
OCT 11 1989

Docket No. 50-336

Northeast Nuclear Energy Company  
ATTN: Mr. E. J. Mroccka  
Senior Vice President - Nuclear  
Engineering and Operations Group  
P. O. Box 270  
Hartford, Connecticut 06141-0270

Gentlemen:

Subject: Inspection Report No. 50-336/89-13

This letter refers to the special allegation team inspection conducted during the period July 10 through 21, 1989, by Mr. J. P. Durr and other members of the regional and headquarters staff. The inspection was conducted at the Millstone Nuclear Generating Station, Unit No. 2 and consisted of document reviews, personnel interviews and observation of ongoing activities including equipment installations. The results of the inspection are documented in the enclosed inspection report. The preliminary results were discussed with you and members of your staff on July 21, 1989.

Several of the activities inspected were apparent violations of NRC requirements and your operating license. These are set forth in the Notices of Violation enclosed as Appendix A to this letter. The violations have been categorized by severity level in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" 10 CFR Part 2, Appendix C (Enforcement Policy). You are required to respond to this letter following the instructions in Appendix A.

The foregoing referenced violations are symptomatic of other underlying problems that need your attention. Your employees should be trained in and encouraged to utilize your existing formal corrective action systems or your allegation processing program to resolve nuclear safety issues such as those that are addressed in this report. We have found that Northeast Utilities has generally used reasonable efforts and a conservative approach to resolve identified safety issues. However, the inspection results indicate a need for more aggressive actions on your part to identify potential employee concerns and create an atmosphere conducive to the reporting and discussion of those concerns. Therefore, in your response to this letter, you should address the actions that you have taken and plan to take to improve the two way communications between your employees and management. In the future, we plan to direct allegations of the kind discussed in this report to you for resolution. We will monitor your allegation processing program to assure ourselves that it is responsive and thorough.

In accordance with Section 2.790 of the NRCs "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

*8/10/3016*

A.6.17 and A.7.4 Disconnection of Radiation Monitor HornsAllegation

"The problem that we're dealing with here is the disconnecting of the horns by the people in the area because they don't want to listen to the horn chirp. You can go to the control room and you can check out a key and you can go down and shut the horn off. By procedure, when an alarm comes in, the control room operations people acknowledge it. They generally log it in their log, and they're required to go down and research what's going on with that alarm. They're also required to take a key, check it out, go down and bypass it. The horns have physically been pulled out of their housing so they won't blast. The control room has an alarm cut out switch in the back of the radiation monitor. You can put that thing in alarm defeat. What you do then is allow other radiation monitor alarms from the other area or process monitors to come in and alert you to the fact that there is one out of spec. When you put the unit in alarm defeat it really basically inops the alarm feature. So as a feature of that, when you put in through the alarm defeat position, it blows the horn in the area where the monitor's local indication is and the red light and the horn come on. What happens is whoever's down in that area doesn't like to listen to it. He has to go all the way to the control room, check out a key, and come all the way back and put a key in. So they pull it off the wall."

Discussion

PDCR 2-19-75, dated February 19, 1975, which authorized the installation of the horn bypass keys, stated as a reason for the change that area and process radiation monitor horns presented themselves as a nuisance during calibration and prolonged alarm conditions. It further stated that plant operational experience has seen units physically removed or tampered with as a means of eliminating the nuisance.

This allegation was previously investigated and documented in Regional Inspection Report (IR) 50-336/88-24 as unsubstantiated. In IR 50-366/88-24, two instances of disconnected horns (other than units that had been retired in place) were noted. These were RM-7892, "Solid Waste Drumming and Decontamination Room" area monitor (the allegation) and RM-9813, "Resin Drum Filling Operations" area monitor. The inspection report stated that RM-9813 had an outstanding trouble report to correct a low off scale indication. The inspection report assumed that the horn problem was addressed by the trouble report; however, it did not address the fact that the horn was found disconnected on RM-7892 (the original allegation).

When radioactive material in the vicinity of RM-9813 was removed, the general area radiation levels dropped below a predetermined low setpoint causing the unit to alarm. The control room has two annunciators (panel alarms), one for process monitors and one for area radiation monitors. Once an alarm (high or low) for one monitor comes in and is acknowledged, the control room is incapable of detecting further alarms of that type from related monitors. If the alarm cannot be reset in a reasonable period of time, standard practice is to place the module for that specific radiation monitor into an "alarm defeat" position; thereby, allowing the control room to clear the alarm and properly monitor the

remaining detectors. In placing a module in the alarm defeat mode, the horn located in the area of the monitor, is automatically activated as a precautionary measure. In the case of RM-9813, the horn bypass keys, located in the control room, would have been used to silence the horn until such time that a new low setpoint could be determined, appropriately set, the module reset and placed back into operation.

When alarms are received in the control room, OPS Form 2387E, "CRAB Annunciator Form", Rev. 4, provides the operator a concise chart referencing the appropriate operating procedures and sections for responding to the alarm. For area and process radiation monitors, it directs the operators to operating procedures OP2383B and OP2383A, respectively. Procedure OP2383B, "Area Radiation Monitoring Operation", Rev. 3, dated April 12, 1984, is inconsistent in that it requires bypassing the horn on a high radiation alarm, but not for an instrument failure (low) alarm. Procedure OP2383A, "Process Radiation Monitors Operation", Rev. 6, dated March 27, 1986, also does not require horn bypassing on an instrument fail alarm and further directs the reader to other monitor specific procedures when addressing a high radiation alarm. Of the 13 monitors listed, the inspector noted that the listed references for 6 monitors did not exist. This was due to failure to update these references when the associated procedures underwent extensive format changes. The inspector noted further inconsistencies in that, of the remaining references, two addressed the bypass keys whereas four did not.

During a review of completed surveillances, the inspector noted that on January 10, 1989, technicians performing procedure SP2404AQ noted that the local horn was missing. However, the technicians did not initiate a trouble report or use any other method to cause the problem to be addressed other than a note on the surveillance document. Subsequent to the surveillance, operations personnel rediscovered the missing horn, initiated the proper documentation and the horn was eventually replaced.

The inspector examined 26 process and area monitors for indications of horn tampering. None were observed although a few had horns that were loose but not to the point where it was felt that horn operation was compromised.

#### Conclusion

This allegation is substantiated. The licensee previously acknowledged a problem with horn tampering as a justification for installing the horn bypass keys. IR 50-336/88-24 documented two instances of such tampering and an additional example was documented by the licensee in a surveillance report. Procedural guidance to operations personnel for use of the bypass keys is spotty and inconsistent which may lead to an activated horn not being bypassed in a timely fashion and prompting a worker to use an alternate method to silence a nuisance horn. However, the problem with horn tampering appears to be a few isolated instances and does not seem to be pervasive. The inadequate procedural guidance to operations personnel regarding the use of the bypass keys is an unresolved item pending licensee corrective action and NRC review (50-336/89-13-13).

AUG 01 1990

Docket No. 50-336

Northeast Nuclear Energy Company  
ATTN: Mr. Edward J. Mroczka  
Senior Vice President - Nuclear  
Engineering and Operations  
P.O. Box 270  
Hartford, Connecticut 06141-0270

Gentlemen:

Subject: NRC Region I Inspection No. 50-336/90-11

This letter transmits the report of the routine resident safety inspection conducted by Mr. P. Habighorst of this office on May 30 - July 11, 1990 at Millstone Nuclear Power Station, Unit 2, Waterford, Connecticut. The report covers activities authorized by NRC License No. DPR-65. The inspection findings were discussed by Mr. Habighorst with Mr. J. Keenan of your staff at the conclusion of the inspection.

Areas examined during this inspection are described in the NRC Region I inspection report which is enclosed with this letter. Within these areas, the inspection consisted of observation of activities, interviews with personnel, measurements, and document reviews.

Also, this refers to your letter dated April 30, 1990, in response to our letter dated April 4, 1990, concerning NRC Region I Inspection Report No. 50-336/90-01. Thank you for informing us of the corrective and preventive actions documented in your letter regarding a violation that involved failure to document a Licensee Event Report for a condition prohibited by the plant's Technical Specifications. Your actions were examined and found acceptable as documented in Inspection Report No. 50-336/90-09, Section 7.4.1. We have no further questions in this matter.

Your cooperation with us is appreciated.

Sincerely,  
ORIGINAL SIGNED BY  
EDWARD C. WENZINGER

Edward C. Wenzinger, Chief  
Projects Branch No. 4  
Division of Reactor Projects

Enclosure:  
NRC Region I Inspection Report No. 50-336/90-11

~~4008090035~~

OFFICIAL RECORD COPY

IR MILL2 90-11 - 0001.0.0  
11/29/80

IEO!

drain system. The RCS water entered the aerated waste drain tank and degassed. The radioactive gas was subsequently transported to the control room air conditioning (CRAC) room through three floor drains. The gas transport occurred as a result of a small negative differential pressure (.08 inch water gauge) between the aerated waste drain tank room and the CRAC room.

Licensee action to prevent recurrence of this event included installation of loop seals in the floor drains in the CRAC room and repair of the control room ventilation system duct work. The corrective maintenance work on the associated duct work eliminated the differential pressure between rooms (aerated waste drain tank and CRAC). The inspector verified loop seals were installed in the CRAC room and that differential pressure between the two affected auxiliary and control building areas remained within intended limits through periodic inspection of the traps during plant tours.

Inspector review of the licensee's assessment of control room habitability during the October 30, 1987, event identified that all license conditions were satisfied; specifically, 10CFR20 and emergency procedure EPIP 4701-6 offsite release limits were met, technical specification air inleakage limits were satisfied, and radiation exposure to control room operators was much lower than regulatory limits. This item is closed.

2.4.2 (Closed) Unresolved Item 50-336/89-13-13: Inadequate Procedural Guidance to Operations Personnel Regarding Use of Radiation Monitor Alarm Bypass Keys

This item concerned inadequate procedural guidance to operations personnel regarding the use of bypass keys to bypass local area radiation monitor alarms.

Station procedures OP-2383A and OP-2383B have been revised to require that local radiation alarms, when placed in bypass to silence the alarm, must be returned to service when the alarm condition clears. This procedural requirement applies whenever an operator has used the bypass key to respond to a local alarm. This item is closed.

2.5 Non-Intent Procedure Change Timeliness

On June 21, the licensee identified a non-intent procedure change that was not reviewed by the plant operations review committee (PORC) within fourteen days of issuance. The deficiency was documented by the licensee in plant incident report (PIR) 90-54. Procedure EN-21132 Change 3, Revision 5, "Service Water Operational Test" was approved by senior reactor operators on June 5, 1990, and approved by the PORC on June 21.

# WORK PRACTICES

**"Measure it TWICE! Cut it ONCE!"**

## The Millstone Worker's Contribution to Effective Work Practices

I recognize that my work ethic and my work practices are critical to the operational success of Millstone! I do my part by:

- Accepting responsibility for the quality of my work.
- Doing each of my assigned tasks to the best of my ability.
- Working as a contributing member of my team.
- Performing and documenting each of my assigned tasks in accordance with approved work order packages and associated procedures.
- Reporting problems with plant equipment, procedures, drawings, or repair activities, and initiating appropriate corrective actions as soon as practicable.
- Being aware of potential hazardous situations (heat stress, tank entry, etc.) and taking appropriate precautions.
- Making all of my concerns, suggestions and recommendations known to my job leader or supervisor.
- Operating only the equipment that I am trained and authorized to operate.
- Avoiding surprises by anticipating the potential plant or equipment response that will occur for each step of my task. Also, I anticipate the unexpected and consider what my actions would be.
- Reviewing my assigned task and making up a list of tools and materials that will be required. I identify only what is needed to efficiently accomplish the task.
- Obtaining all parts, materials, tools, and test equipment as assigned by my job leader, and properly completing any special documentation or checkout procedures.
- Reviewing the work order and associated procedures for each task I am assigned to do. I also verify the procedures are the current revision.

Worker  
**WORK PRACTICES**

- Verifying the required safety tagging is completed.
- Taking the appropriate work instructions (work order, procedures, drawings, etc.) I need to perform my task(s) to the job site.
- **STOPPING WORK**, and informing my job leader of any conflicts, inadequacies, or violations.
- Informing my job leader if I am approaching any station or regulatory limits (exposure, overtime, etc.), or if I believe my actions might compromise safety or quality.
- **STOPPING WORK** and informing my job leader when I reach hold points.
- Keeping my job leader informed of my task status.
- Reporting changing conditions or conditions that are not expected to my job leader.
- Documenting completion of my task steps in accordance with work order and procedural requirements.
- Trying to restore my job site to better than its original condition. Additionally, I return job tools, unused parts, materials, and test equipment as assigned by my job leader.
- Carrying out work assigned by the Unit Shift Supervisor during emergencies.

### **The Job Leader's Contribution to Effective Work Practices**

As a qualified Millstone worker, I may be assigned to coordinate and/or lead a work crew to accomplish a job. An assignment of this type carries added responsibilities. When I am assigned to be a "job leader," I become responsible for overseeing and ensuring the overall job is performed in accordance with station procedures and policies.

I carry out these added responsibilities by:

- Reviewing the work order and associated references (procedures, technical manuals, etc.) for my assigned job.
- Identifying special job site/job conditions, such as a high radiation area work, enclosed volume entry, heat stress conditions, etc.
- Discussing my assigned job with my first line supervisor. I make suggestions and/or resolve any items I do not understand.

Worker/Job Leader  
**WORK PRACTICES**

- Identifying the proper tools, parts, materials, and test equipment necessary to perform my job and ensuring they are available.
- Coordinating required support efforts from other work groups or departments. I also initiate and coordinate activities needed to meet special job requirements, such as, scaffolding erection, Radiation Work Permits, ALARA reviews, Restrictive Atmosphere Permits, fire protection, etc.
- Consulting with applicable departments and establishing tagging boundaries for my job.
- Reviewing the work order and associated documents to verify all approvals and signatures have been obtained.
- Verifying that systems and components are correctly aligned and safety tags have been hung for my job. And then, taking appropriate precautions and proceeding as if the systems or components remain operational.
- Briefing all members of my assigned work crew and ensuring they understand their contribution to the overall job as well as the specifics of their assigned tasks.
- Providing a brief overview of the work my crew will be performing to other people working in or around my job site.
- Verifying the appropriate work instructions are at my job site and are being followed.
- Maintaining a clear and concise written log of major work events for all jobs that are greater than one shift in duration.
- Ensuring my supervisor and the control room are aware of the exact equipment condition and status at the end of my work shift.
- Notifying my supervisor, the control room, and other interested parties of any significant problems and/or changes in job status.
- **STOPPING WORK** and immediately informing the control room and my supervisor if any job or station requirements were violated at my job site.
- Coordinating hold point inspections and verifying results are acceptable prior to allowing my job to proceed.
- Resolving or initiating action to resolve problems identified at my job site, including work order or procedural discrepancies/ inadequacies. I **STOP WORK** until the problems are addressed and authorization to proceed has been granted by my supervisor or the control room.

Job Leader  
WORK PRACTICES

- Coordinating necessary system lineup changes, equipment manipulation, equipment restoration, and testing with the control room.
- Overseeing the clean up and close out of my job site to at least its original condition. If required, I contact my supervisor to help obtain the necessary resources to clean up items which do not fall under my direct control.
- Reviewing and verifying all job documentation required by the work order is completed.
- Reviewing the completed job, reflecting on what went well, and identifying areas where improvements might be beneficial. Then, I document these items and pass them along to my supervisor.

### The Millstone Supervisor's Contribution to Effective Work Practices

As a Millstone supervisor, it is my job to schedule, oversee, and monitor all work activities performed under my cognizance. I fulfill this responsibility by:

- Scheduling my work group's activities considering safety, station philosophies, and manpower and material resources.
- Providing my worker group with the proper parts, tools, materials, and test equipment needed to perform the work I assign.
- Enforcing station policies and procedures for work performed under my cognizance.
- Helping people resolve or report problems encountered during work activities.
- Scheduling surveillance activities assigned to my group and ensuring the work is performed at the required intervals.
- Establishing contacts, arranging for approvals, and coordinating interdepartmental support needed to complete work assigned to my work group.
- Assigning job leaders and work crews who are **trained, qualified, and able** to perform their specific assignments.
- Reviewing qualification records for contractors working on my jobs. I ensure their qualification criteria is adequate and their documentation is complete.

Job Leader/Supervisor  
WORK PRACTICES

- Discussing work assignments with my job leaders, and helping them identify job requirements, prepare job plans, and coordinate job preparation activities.
- Arranging for, and scheduling my workers and my contractors to attend any specific training they need to qualify for their assigned tasks.
- Verifying approved procedures exist or, if needed, overseeing the development of new ones.
- Monitoring the status of all my jobs.
- Keeping all interested parties informed of progress and/or schedule changes.
- Performing frequent job site inspections.
- Helping my job leaders coordinate job-site clean up activities with other work groups.
- Reviewing all job paperwork to ensure job results are acceptable and properly documented. If required, I review non-conformance items and initiate Non-conformance Reports and/or additional work orders.
- Evaluating post job suggestions and initiating actions, as appropriate, to enhance the effectiveness of similar work in the future.

Supervisor  
**WORK PRACTICES**

---

## PROCEDURES

**“Procedures are yours; not management’s, not PORC’s, the author’s. They belong to you the user!”**

---

### The Millstone Worker’s Contribution to Procedures and Procedural Compliance

Procedures define the standards for doing work at Millstone! To help meet these standards, I must be committed to performing my assigned work in accordance with all of the station’s policies and procedures, as well as, providing expert input that will contribute to their (procedures) development or enhancement.

I demonstrate my commitment by always:

- Understanding each procedural action step and anticipating the possible consequences before I take it. Then, I verify the proper response or take appropriate corrective action before continuing.
- Intelligently using procedures.
- Knowing when I need to “directly” reference procedures to do my assigned work.
- Performing simple evolutions not covered by procedures using my judgement based on my experience or qualification. I ask questions first if I am unsure of how an evolution should be performed.
- Reviewing, preparing, or revising procedures as assigned by my supervisor.
- Carefully reviewing and understanding the requirements of all applicable procedures for my assigned tasks. I ask my supervisor or job leader when I have questions.
- Knowing the requirements of any procedures that I will “indirectly” reference when doing my assigned tasks.
- Ensuring I know all required emergency action steps from memory.
- Following all applicable procedures! I ensure the copies I am using are approved, current and complete.

Worker  
PROCEDURES

- **STOPPING WORK** and informing my job leader if I believe my actions have violated a procedure, or I cannot perform my assigned tasks in accordance with applicable procedures. I do not proceed until authorized by my job leader.
- Performing procedure steps in sequence unless otherwise stated in the procedure or the associated work order package.
- Documenting completion of each action I take in accordance with appropriate procedures or forms.
- Reflecting on the work I performed, and initiating any procedure changes that I believe will enhance future performance.

### The Job Leader's Contribution to Procedures and Procedural Compliance

When, as a qualified Millstone worker, I am assigned to be a job leader, I am responsible for overseeing the use of procedures at my job site. I ensure procedures are complied with by:

- Identifying and obtaining **current** revisions of all procedures needed to perform my assigned job. I ensure that **all** outstanding temporary procedure changes are included.
- Reviewing the procedures to be used for my assigned job. I get clarification from my supervisor for any items I do not understand.
- During my pre-job briefing, I review the procedures to be used with my work crew. Specifically, I identify those that must be "**directly**" referenced at my job site.
- Ensuring workers know and understand any emergency action steps that must be committed to memory.
- **STOPPING WORK** and informing my supervisor when I discover a procedure will not work or has been violated. I do **not** allow work to continue until the discrepancy is addressed.

Worker/Job Leader  
**PROCEDURES**

## The Millstone Supervisor's Contribution to Procedures and Procedural Compliance

As a supervisor, it is my responsibility to help set and implement effective work standards by supervising the development and maintenance of Millstone Station's policies and procedures. Then, I must oversee the activities performed by my group and ensure the work performed "measures up" to those standards.

I meet these supervisory obligations by:

- Identifying evolutions that are performed by my work group which require written instructions and establishing procedures to cover them.
- Coordinating the development, review, approval, and implementation of procedures for my work group.
- Ensuring my work group understands the procedures they use by providing clarification on content and use.
- Identifying which procedures must be directly referenced for work performed under my cognizance.
- Ensuring procedures are being followed when I visit my job sites.
- Coordinating the resolution of procedure discrepancies and conflicts that come to my attention.
- Evaluating and determining whether or not procedure changes brought to my attention are "intent" or "non-intent" changes, and then processing them accordingly.
- Coordinating the development of, or obtaining special process procedures and specifications necessary to do my assigned work.
- Reviewing and coordinating changes to vendor special process procedures.
- Identifying any emergency procedure action steps that are required to be committed to memory.
- Evaluating, and if appropriate, waiving procedural step sequencing requirements.
- Evaluating, and if appropriate, identifying procedure sub-sections or step sequences that can be performed in lieu of performing entire procedures.

**NORTHEAST UTILITIES**



THE CONNECTICUT LIGHT AND POWER COMPANY  
 WESTERN MASSACHUSETTS ELECTRIC COMPANY  
 NEW YORK WATER POWER COMPANY  
 NORTHEAST UTILITIES SERVICE COMPANY  
 NORTHEAST NUCLEAR ENERGY COMPANY

**PHYSICAL JOB DESCRIPTION**

MSP20

PER3429-4 4-83

JOB TITLE

GRADE

CODE

INSTRUMENT SPECIALIST

ISPEC

LOCATION

DATE

MILLSTONE STATION

2/1/83

THIS JOB DESCRIPTION INCLUDES THE DUTIES AND CONDITIONS LISTED ON THE REVERSE SIDE

JOB SUMMARY

Performs the more complex technical work associated with installing, testing, calibrating, maintaining and repairing mechanical, pneumatic, electrical and electronic (analog and digital) instruments and controls used in a nuclear power generating station.

PRIMARY DUTIES

1. Researches and analyzes faults in all types of mechanical, pneumatic, electrical and electronic instruments and their related equipment up to prescribed boundaries; determines corrective action to be taken and makes necessary adjustments and repairs.
2. Analyzes problems in order to recommend changes, additions, improved calibration methods and adjustments to solid-state digital and hybrid systems.
3. Performs surveillance procedures on safety related protection systems and ensures compliance with operating license requirements (Technical Specifications).
4. Calibrates meters, instruments and recorders and maintains documentation on equipment that is traceable to the National Bureau of Standards.
5. Performs duties as a Quality Assurance Inspector on work performed on safety-related equipment.
6. Sets up test instrumentation for all types of testing operations; Designs and fabricates special instruments and related equipment for specific situations as directed.
7. Maintains records and maintenance histories on all nuclear, non-nuclear and balance-of-plant instrumentation.
8. Prepares drawings of electronic and pneumatic instrumentation loops; uses various complex sketches and schematic diagrams in connection with the work.
9. Installs, removes and/or replaces instruments and equipment including the pre-operations testing and inspection.

10. Recommends changes in instruments and control methods, procedures and applications to improve overall plant operation and reduce maintenance time.
11. Writes and reviews complex surveillance procedures, special tests and special procedures. Submits changes to these procedures as necessary.
12. Ensures that replacement parts are ordered as necessary.
13. Answers NRC questions as required. (This relates to work in progress, training, plant incidents and overall plant operation.)
14. Trains assigned personnel on an individual basis and provides department training as requested.
15. Works within the boundaries of the Quality Assurance Program, Radiological Protection Program, and Site Security Program.

ACCOUNTABILITY/END RESULTS

1. Timely and accurate installation, testing, calculation, maintenance and repair of instrumentation and controls.

TYPICAL REQUIREMENTS (Minimum)

Training and Experience

1. High school diploma or equivalent plus one year of technical schooling or equivalent with specialized courses in instrumentation.
2. Three and one half years experience in a related instrument field. Two years shall have been as an Instrument Technician at an operating nuclear station.

Knowledge/Skill

1. Must be qualified to perform the duties of Instrument Technician.
2. Thorough knowledge of assigned unit instrumentation including complex protection systems.
3. Working knowledge of unit administrative procedures.
4. Working knowledge of unit license requirements as related to I&C Department responsibilities.
5. Ability to analyze instrument problems, determine facts and makes decisions/recommendations accordingly.
6. Ability to communicate and work effectively with others.
7. Must hold a valid motor vehicle operator's license.

**NORTHEAST UTILITIES**

THE CONNECTICUT LIGHT AND POWER COMPANY  
 WESTERN MASSACHUSETTS ELECTRIC COMPANY  
 NEW HAVEN WATER POWER COMPANY  
 NORTHEAST UTILITIES SERVICE COMPANY  
 NORTHEAST NUCLEAR ENERGY COMPANY

**PHYSICAL JOB DESCRIPTION**

PER3429-4 4-83

MSP21

JOB TITLE	GRADE	CODE
INSTRUMENT TECHNICIAN		ITECH
LOCATION	DATE	
MILLSTONE STATION	2/1/83	

THIS JOB DESCRIPTION INCLUDES THE DUTIES AND CONDITIONS LISTED ON THE REVERSE SIDE

JOB SUMMARY

Performs technical work associated with installing, testing, maintaining, calibrating and removing mechanical, pneumatic, electrical and electronic instruments and controls used in a nuclear power generating station.

PRIMARY DUTIES

1. Installs, adjusts, tests, repairs, cleans and calibrates mechanical, pneumatic, electrical and electronic instruments and control devices used on all plant equipment, including pressure gauges, radiation monitoring instruments, flowmeters, thermocouples, temperature gauges, control switches, ammeters, voltmeters and indicators of speed, level and position associated with nuclear generating station.
2. Analyzes faulty instruments and controls; makes adjustments and repairs as necessary.
3. Sets up test instruments and equipment for routine testing operations.
4. Calibrates a limited range of meters, instruments and controls; assists with the calibration of the more complex instruments and controls.
5. Maintains file of instrument and control instruction books and prints.
6. Uses, inspects and maintains laboratory instruments and related testing equipment. Draws and uses various sketches and schematic diagrams in connection with the work.
7. Maintains laboratory files and records; helps with special analyses, tests, inspections and investigations; makes necessary calculations when required. Reports any abnormal conditions found.
8. Installs, removes and/or replaces instruments and equipment including the pre-operational testing and inspection.
9. Ensures that replacement parts are ordered as necessary.

10. Answers NRC questions as required. (This relates to work in progress, training, plant incidents and overall plant operation.)
11. Performs duties as a Quality Assurance Inspector on work performed on safety related equipment.
12. Performs or assists in the performance of surveillance procedures on safety related systems.
13. Writes and reviews surveillance procedures, special tests and special procedures. Submits recommendations for changes to these procedures as necessary.
14. Works within the boundaries of the Quality Assurance Program, Radiological Protection Program, and Site Security Program.

ACCOUNTABILITY/END RESULTS

1. Timely and accurate maintenance and installation of instrument and control devices.

TYPICAL REQUIREMENTS (Minimum)

Training and Experience

1. High school diploma or the equivalent plus one year of technical schooling or equivalent with specialized courses in instrumentation, such as, basic electronics, calibration/test equipment, pneumatic and electronic instrument and control systems and logic.
2. Two years experience in a related instrument field. One of the two years shall have been as an Assistant Instrument Technician or equivalent.

Knowledge/Skill

1. Must be qualified to perform the duties of Assistant Instrument Technician.
2. Thorough knowledge of assigned unit instrumentation.
3. Working knowledge of unit administrative procedures.
4. Working knowledge of unit license requirements as related to I&C Department responsibilities.
5. Ability to troubleshoot instrument problems, and make recommendations.
6. Ability to work effectively with others.
7. Must hold a valid motor vehicle operator's license.



THE CONNECTICUT LIGHT AND POWER COMPANY  
 WESTERN MASSACHUSETTS ELECTRIC COMPANY  
 NEW HAVEN WATER POWER COMPANY  
 NORTHEAST UTILITIES SERVICE COMPANY  
 NORTHEAST NUCLEAR ENERGY COMPANY

MSP22

PER3429-4 4-83

JOB TITLE  ASSISTANT INSTRUMENT TECHNICIAN	GRADE	CODE  AITECH
LOCATION  MILLSTONE STATION	DATE  2/1/83	

THIS JOB DESCRIPTION INCLUDES THE DUTIES AND CONDITIONS LISTED ON THE REVERSE SIDE

JOB SUMMARY

Assists with work done on instruments and controls used in a nuclear power generating plant.

PRIMARY DUTIES

1. Assists with installing, adjusting, repairing and cleaning of mechanical, pneumatic, electrical and electronic instruments and controls associated with nuclear generating stations.
2. Assists with the calibration of instruments and controls including, but not limited to, flowmeters, recording meters, pressure gauges, automatic controls, regulators, temperature indicators and radiation monitoring instruments.
3. Assists with the setting up of tests, instruments and equipment and with tests, inspections and related work.
4. Operates a motor vehicle.
5. Assists in the performance of surveillance procedures on safety related systems.
6. Works within the boundaries of the following programs: Quality Assurance Program, Radiological Protection Program, Site Security Program.

ACCOUNTABILITY/END RESULTS

1. Assure timely and accurate completion of all assignments as related to plant instrumentation and controls.

TYPICAL REQUIREMENTS (Minimum)

Training and Experience

1. High school diploma or equivalent plus one year of technical schooling or equivalent with specialized courses in instrumentation, such as basic electronics, calibration/test equipment, pneumatic and electronic instrument and control systems and logic.

2. No experience required.

Knowledge/Skill

1. Basic knowledge of instrumentation.
2. Ability to work effectively with others.
3. Must hold a valid motor vehicle operator's license.

2. No experience required.

Knowledge/Skill

1. Basic knowledge of instrumentation.
2. Ability to work effectively with others.
3. Must hold a valid motor vehicle operator's license.

August 8, 1991

MEMORANDUM TO: Edward C. Wenzinger, Chief  
Reactor Projects No. 4,  
Division of Reactor Projects, Region I

FROM: John T. Shedlosky, Senior Allegation Coordinator  
for the Millstone Nuclear Station,  
Reactor Projects Section No. 4A

SUBJECT: RADIATION MONITOR LOCAL ALARM HORNS

REFERENCE: RI-88-A-040  
RI-91-A-103  
RI-91-A-183  
RI-91-A-204

The equipment status of local alarm horns, which are associated with radiation monitors, has resulted in a series of nuclear safety allegations at Millstone Unit 2. The issues have been concerned with the audible alarm horns for the area and process radiation monitors which are located in the plant Auxiliary Building and in the Containment Enclosure Building.

Allegations have been made of personnel both improperly defeating local alarm horns by tampering with equipment; and also, of personnel failing to follow station procedures which require an alarm to be bypassed (and silenced) under certain conditions.

This issue was first documented in the report of a special team inspection, 50-336/89-13, as Allegations No. A.6.17 and A.7.4, and was also tracked as Unresolved Item No. 50-336/89-13-13 through resolution in inspection report 50-336/90-11. Closure was based on revisions made to operating procedures.

However, these changes have apparently not been totally effective in addressing aspects of the problem. Additional cases where personnel may have failed to follow procedures have been brought to the NRC in the referenced allegations.





ALLEGATION RECEIPT REPORT

Date/Time

Received: August 16, 1991 0900 Allegation No.

Name: [ ]

Address: [ ]

Phone: [ ]

City/St./Zip: [ ]

Confidentiality:

Was it requested? No

Alleger's Employer: [NNECO]

Position/Title: [ ]

Facility: Millstone Unit 2

Docket No.: -336

Allegation Summary: 1) Update to Allegation RI-91-A-114: a) Potential H&ID: Unit 3 I&C Technician in conversation with Unit 1 I&C Technician. b) Inadequate licensee response to Unit 1 Technician's concern. 2) Alleger dissatisfied with response to Allegation RI-91-046-01 & -03, hours worked by "on-call" personnel. 3) Alleger dissatisfied with response to Allegation RI-91-220-02, technicians assigned as "job supervisors." 4) Reference was made to conversations about Allegation RI-91-A-219-03, Appendix "R" power supplies.

Number of Concerns: 4

Employee receiving allegation: P. J. Harigorst (Resubmitted by Shedlosky)

Type of regulated activity: Reactor

Functional Area(s): Operations

Detailed Description of Allegation: The alleger provided additional information and documented conversations on four previously made allegations.

Allegation RI-91-A-114, Unit 3 SIT level transmitters calibration:

- 1a) The calibration concern originated with a Unit 1 I&C Technician working at Unit 3. A technician from Unit 3 questioned the Unit 1 technician if [ ] because of his actions. There have been no DOL H&ID complaints made on this issue either by the alleger or the Unit 1 technician.
- 1b) The alleger claims that the Unit 1 I&C Technician raised the issue with the Nuclear Concerns Task Group; but, was not pleased with the response. No technical details were provided by the alleger. Nor has the Unit 1 Technician contacted the NRC about the Task Group.

Act. exemptions b  
FOIA-92-162

2/5/3

ALLEGATION RECEIPT REPORT

Date/Time

Received: August 16, 1991 0900 Allegation No.

Name: [ ]

Allegation RI-91-A-046-01, & -03, hours worked by on call personnel:

- 2) The allegor does not agree with the licensee response, letter dated July 1, 1991 (Serial A09557), which was forwarded to him by letter [ ] To support his position, the allegor provided copies of memoranda: E. J. Mroczka to the Nuclear Emergency On-Call Organization, dated October 24, 1990, (Serial NEO-90-G-292), and S. E. Scace to the On-Call SEO Members, dated November 7, 1990 (Serial MP-90-1197). These memos instruct those on call to be expected to work eight to twelve hours if called. The allegor believes that this conflicts with working a normal ten hour day and being recalled to support plant non-emergency activities. The on-call issue was recently addressed by C. Amato; the results will be documented in report 50-245/91-19, 50-336/91-23, 50-423/91-19.

Allegation RI-91-A-220-02, technicians assigned as "job supervisors."

- 3) The allegor does not agree with licensee management response to his issue concerning I&C Technicians who are assigned as "job supervisors" or "job leaders." The allegor believes that Mr. Scace's response conflicts with a "Work Practices" document and also with the Instrument Specialist Physical Job Description.

Allegation RI-91-A-219-03, Appendix R power supplies.

- 4) The allegor documented a conversation previously held with the Resident Inspector about this issue.

Attachments:

Allegation Receipt Report dated August 16, 1991

Memorandum [ ]

Memorandum [ ]

Memorandum Mroczka to Nuclear Emergency On-Call Organization, dated October 24, 1990

Memorandum Scace to On-Call SEO Members, dated November 7, 1990-

Memorandum Scace to [ ]

Principals of Excellence, pages 21 through 28

Physical Job Description, Instrument Specialist, dated February 1, 1983

Physical Job Description, Instrument Technician, dated February 1, 1983

Physical Job Description, Assistant Instrument Technician, dated February 1, 1983

Inspector's Recommendation:

No additional action is required. File the information with the referenced allegations.

ALLEGATION RECEIPT REPORT

Date/Time Received: AUGUST 16, 1991 9:00AM

Allegation No. \_\_\_\_\_ (leave blank)

Name: [ \_\_\_\_\_ ]

Address: [ \_\_\_\_\_ ]

Phone: \_\_\_\_\_

City/State/Zip: [ \_\_\_\_\_ ]

Confidentiality:

Was it requested?	Yes _____	No <input checked="" type="checkbox"/>
Was it initially granted?	Yes _____	No <input checked="" type="checkbox"/>
Was it finally granted by the allegation panel?	Yes _____	No _____
Does a confidentiality agreement need to be sent to alleege?	Yes _____	No _____
Has a confidentiality agreement been signed?	Yes _____	No _____
Memo documenting why it was granted is attached?	Yes _____	No _____

Alleege's Employer: [ Northeast Utilities ] Position/Title: [ \_\_\_\_\_ ]

Facility: Millstone 2 Docket No.: 50-336

(Allegation Summary (brief description of concern(s)): ① ~~to~~ Disagreement with NU response to previous concerns.

Number of Concerns: 2  
Employee Receiving Allegation: PJ Habighorst / T Shredlosky  
(first two initials and last name)

Type of Regulated Activity (a)  Reactor (d) \_\_\_\_\_ Safeguards  
(b) \_\_\_\_\_ Vendor (e) \_\_\_\_\_ Other: \_\_\_\_\_  
(c) \_\_\_\_\_ Materials (Specify)

Materials License No. (if applicable): \_\_\_\_\_

Functional Area(s): (a)  Operations (e) \_\_\_\_\_ Emergency Preparedness  
(b) \_\_\_\_\_ Construction (f) \_\_\_\_\_ Onsite Health and Safety  
(c) \_\_\_\_\_ Safeguards (g) \_\_\_\_\_ Offsite Health and Safety  
(d) \_\_\_\_\_ Transportation (h) \_\_\_\_\_ Other: \_\_\_\_\_

U3 I+C

Description of allegation:

1. Memorandum ( ) allegor has become aware of third hand that the NU safety coordinator ( ) told a Unit 1 IC tech in February, 1991 (if "he was pulling a ( )

Inspector Actions: The inspector informed the allegor of his rights with the Department of Labor on August 16, if he felt that he had been harassed, or discriminated against. Allegor stated that he was unsure if he would file with DOL.

Inspector Assessment: Review of past allegations indicated that the unit 3 safety injection tank level concern was documented in allegation EI-91-a-114. NRC Region I documented at letter to NU on July 9, 1991 requesting a 30 day response. Further, the technical issue was inspected in routine inspection report 50-423/91-12 under section 3.1. The inspection concluded NNECO action were adequate to correct the level indicator inaccuracies.

2. ( ) Allegor displeasure with NU response of July 1, 1991 concerning allegation EI-91-a-0046. Allegor dissatisfied with July 19, 1991 NRC response to previous concern. Specifics were not provided. The allegor also provided a complaint about

Enclosed are associated memorandums and supporting information.