

0260

**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 • Seiden Street, Berlin, Connecticut

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

December 19, 1991

Docket No. 50-336  
A09962

Re: Employee Concerns ✓

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

Dear Mr. Hehl:

Millstone Nuclear Power Station, Unit No. 2  
RI-91-A-0260

We have completed our review of an identified issue concerning activities at Millstone Unit No. 2. As requested in your transmittal letter of October 29, 1991, 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 transmittal letter and our response have received controlled and limited distribution on a "need to know" basis during the preparation of this response. This response was originally due to the NRC Staff by December 4, 1991. An additional two weeks in which to respond were granted in a telephone conversation with the Region I Staff on December 2, 1991.

**ISSUE:**

"There has been a recurring Unit 2 problem, at Millstone Unit 2 [sic], with a 10 volt reference power supply for the channel 'C' Reactor Protection System (RPS). The issue does not appear to have been properly addressed by I&C [Instrumentation and Controls] Department management. The surveillance calibration specification for this power supply is 10 volt +/- 0.003 volt d.c. It is used as an on line reference for the RPS digital voltmeter and has frequently been found to have a low out of specification output voltage. Additionally, the power supply in question is said to be modified by drilling holes to allow internal adjustments to be made. This was accomplished without appropriate design change controls."

Mr. Charles W. Hehl  
A09962/Page 2  
December 19, 1991

**REQUEST:**

"Please discuss the validity of these assertions. If they are valid, please notify us of the safety significance of the error, trending of data on drift, whether or not the power supply had been modified and how that was controlled, and the corrective actions you have taken to prevent recurrence. Also, provide us with an assessment of the safety significance of any identified deficiencies, including any generic considerations."

**RESPONSE:**

The assertion is partially valid. The power supply at issue is located in the RPS cabinet in Core Protection Calculator No. 2. It is a modular design consisting of a circuit board in a plastic case. The plastic case performs no function other than to provide support for the circuit board. The hole which was drilled in this plastic case allows access to the only adjustment on the power supply, without requiring disassembly of the core protection calculator.

Since the hole in the plastic case could affect the strength of its support function, an inspection of all power supply modules was completed. It was determined that the size of the hole, which is limited to the width of the blade of a small screwdriver, is not detrimental to the strength of the case. A nonconformance report, NCR (291-272), has been initiated to document the satisfactory evaluation of the modification.

The vendor stated tolerance on the +/-10-volt power supply is +/-0.0025 volts. Since the RPS calibration instrument panel (RPSCIP) digital voltmeter can only display three significant digits, the useful tolerance value was established as +/-0.003 volts. The power supply at issue is checked daily using procedure OP 2601D to determine that the voltage output is within tolerance for the range from -10 volts to +10 volts as read by the RPS digital voltmeter. The procedure requires that any out-of-tolerance readings are to be reported to I&C by means of a Priority No. 1 Trouble Report for calibration of the voltmeter.

This power supply voltage is monitored by the RPSCIP digital voltmeter and is not used as a reference during calibrations. The voltmeter is calibrated using a calibrated voltage standard and Procedure IC 2417K.

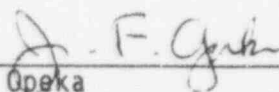
I&C Procedure IC 2417K is also used to calibrate the RPS digital voltmeter quarterly. This calibration does not use the +/-10-volt power supply as a reference. Since the power supply is monitored daily by procedure and adjusted as needed, this concern is considered to be of no safety significance.

Mr. Charles W. Hehl  
A09962/Page 3  
December 19, 1991

After our review and evaluation of this issue, we find that this issue did not present any indication of a compromise of nuclear safety. We were not aware of this issue prior to the receipt of the NRC letter. We appreciate the opportunity to respond and explain the basis of our actions. Please contact my staff if there are further questions on any of these matters.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

  
\_\_\_\_\_  
J. F. Opoka  
Executive 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  
E. M. Kelly, Chief, Reactor Projects Section 4A  
J. T. Shedlosky, U.S. Nuclear Regulatory Commission, Millstone

# ALLEGATION RECEIPT REPORT

Date/Time

Received: October 1, 1991 1135

Allegation No. **RI-91-A-0260**

Name:

Address:

Phone:

City/St./Zip:

Confid

Was it requested? No

Allegor's Employer: NNECO

Position/Title: Instrumentation and Control  
Department Technician

Facility: Millstone Unit 2

Locket No.: 50-336

Allegation Summary: Reactor Protection Channel "C" 10 volt reference power supply found out of specification - low. This is a recurring problem. Additionally, a modification, to allow internal adjustment of the power supply, had been made without appropriate design change controls.

Number of Concerns: 2

Employee receiving allegation: J. T. Shedlosky

Type of regulated activity: Reactor

Functional Area(s): Operations

Detailed Description of Allegation: There has been a recurring problem with a 10 volt reference power supply for the Channel "C" Reactor Protection System (RPS). The issue has not been properly addressed by I&C Department management.

The surveillance calibration specification for this power supply is 10 volt +/- 0.003 volt d.c. It is used as an on line reference for the RPS digital voltmeter and has frequently been found to have a low out of specification output voltage.

5/2/11

RECORD OF ALLEGATION PANEL DECISIONS

SITE: Millsstone 2 PANEL ATTENDEES:

ALLEGATION NO.: RI-91A-0260 Chairman - Wiggins

DATE: 9 OCT 91 (Panel No. 1 2 3 4 5) Branch Chief -

PRIORITY: High Medium Low Section Chief (AOC) - Kelly

SAFETY SIGNIFICANCE: Yes No Unkn Sr. Allegation Coord (SAC) Fuhrmeister

CONCURRENCE TO CLOSEOUT: DD BC SC OI Representative -

CONFIDENTIALITY GRANTED: Yes No (Other) Anderson Bankley Conner  
(See Allegation Receipt Report) Shedolsky Frenette

IS THERE A HARASSMENT/DISCRIMINATION ISSUE: Yes No  
IF YES,

1) has the individual been informed of the DOL process and the need to file a complaint within 30 days Yes No

2) has the individual filed a complaint with DOL Yes No

3) has a letter been sent to the complainant seeking any safety concerns Yes No

IS A CHILLING EFFECT LETTER WARRANTED: Yes No  
IF YES, HAS IT BEEN SENT Yes No

HAS THE LICENSEE RESPONDED TO THE CHILLING EFFECT LETTER: Yes No

ACTION: RESP ECD

- 1) Turnover to NY question significance of the error, DEP 2300791  
trending of data on drift, and whether or not
- 2) the power supply had been modified and how  
that was controlled
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_
- 5) \_\_\_\_\_

NOTES: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5/2/17

~~LIMITED DISTRIBUTION - NOT FOR PUBLIC DISCLOSURE~~

ENCLOSURE

Issue 91-260:

There has been a recurring Unit 2 problem, at Millstone Unit 2, with a 10 volt reference power supply for the channel "C" Reactor Protection System (RPS). The issue does not appear to have been properly addressed by I&C Department management. The surveillance calibration specification for this power supply is 10 volt  $\pm$  0.003 volt d.c. It is used as an on line reference for the RPS digital voltmeter and has frequently been found to have a low out of specification output voltage.

Additionally, the power supply in question is said to be modified by drilling holes to allow internal adjustments to be made. This was accomplished without appropriate design change controls.

Request:

Please discuss the validity of these assertions. If they are valid, please notify us of the safety significance of the error, trending of data on drift, whether or not the power supply had been modified and how that was controlled, and the corrective actions you have taken to prevent recurrence. Also, provide us with an assessment of the safety significance of any identified deficiencies, including any generic considerations.

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# NONCONFORMANCE REPORT

OP5569 REV. 11-89

SEE NEO 3.05 FOR INSTRUCTIONS

SUBJECT <b>DEVAR <math>\pm 10</math> vdc Reference Module #19 603C</b>		UNIT <b>2</b>	
COMPONENT LOCATION <b>RPS</b>		MFR/VENDOR <b>DEVAR ICE</b>	
SOURCE DOCUMENT <b>MRIR 282-040</b>		SOURCE DOCUMENT <b>25203-39069 5440</b>	
SOURCE DOCUMENT <b>VTM 2-160-009A</b>			
DESCRIPTION OF NONCONFORMANCE/CAUSE <p>1 <b>DEVAR <math>\pm</math> Vdc Reference Module's #19-603C used in RPS CPC's have access hole drilled in back of case. This is not shown on Devar product drawing. Suspect modification was made after original installation.</b></p>			
ORIGINATOR <b>TERRY ARNETT</b>		DATE <b>11/20/91</b>	
QSD REPRESENTATIVE <b>William G. Lang</b>		DATE <b>11/21/91</b>	
DISPOSITION <input checked="" type="checkbox"/> USE-AS-IS <input type="checkbox"/> REPAIR <input type="checkbox"/> INSTALL N.C. MATL. <input type="checkbox"/> REWORK <input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> ADMIN. <input type="checkbox"/> OTHER			
DISPOSITION DETAILS <p>3 <b>Devar module plastic case provides no function other than support for circuit board. Hole in case does not degrade modules function in any way. Hole provide access to module adjustment without need to disassemble CPC-1. This modification has no effect on seismic integrity of the CPC.</b></p>			
ENGINEER <b>Terry Arnett</b>		DATE <b>11/21/91</b>	
UNIT SUPERVISOR/ENGINEERING SUPV. <b>Bob Baker</b>		DATE <b>11/21/91</b>	
SUPERVISOR <b>Bob Baker</b>		DATE <b>11/21/91</b>	
REMARKS: INSPECTION/VERIFICATION <input type="checkbox"/> SAT. <input type="checkbox"/> UNSAT. <input checked="" type="checkbox"/> N/A			
6 <b>Use-as-is</b>			
NCR REVIEWED & CLOSED <b>Montgomery</b>			DATE <b>11-26-91</b>

ORIGINAL: TO NUCLEAR RECORDS

COPY: TO QSD

5/21/4

RECORD OF ALLEGATION PANEL DECISIONS

SITE: Millstone 2 PANEL ATTENDEES:

ALLEGATION NO.: R291-A-0261 Chairman - Wiggins

DATE: 9 OCT 91 (Panel No. 1 2 3 4 5) Branch Chief -

PRIORITY: High Medium Low Section Chief (AOC) - Kelly

SAFETY SIGNIFICANCE: Yes No Unkn Sr. Allegation Coord (SAC) Fuhrmeister

CONCURRENCE TO CLOSEOUT: DD BC SC OI Representative -

CONFIDENTIALITY GRANTED: Yes No (Other) Anderson Barkley Conner  
(See Allegation Receipt Report) Shadlosky (T) Frennette

IS THERE A HARASSMENT/DISCRIMINATION ISSUE: Yes No  
IF YES,

1) has the individual been informed of the DOL process and the need to file a complaint within 30 days Yes No

2) has the individual filed a complaint with DOL Yes No

3) has a letter been sent to the complainant seeking any safety concerns Yes No

IS A CHILLING EFFECT LETTER WARRANTED: Yes No  
IF YES, HAS IT BEEN SENT Yes No

HAS THE LICENSEE RESPONDED TO THE CHILLING EFFECT LETTER: Yes No

ACTION: RESP ECD

- 1) Residents inquire about status of new monitor DRP 16 OCT 91
- 2) Send combined acknowledgement/closeout letter to allegor stating "our understanding is..." DRP 6 NOV 91
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_
- 5) \_\_\_\_\_

NOTES: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5/2/16



RECORD OF ALLEGATION PANEL DECISIONS

SITE: Millstone 2 PANEL ATTENDEES:

ALLEGATION NO.: R1-91-A-0261 Chairman - Wiggins

DATE: 24 OCT 91 (Panel No. 1 2 3 4 5) Branch Chief - \_\_\_\_\_

PRIORITY: High Medium Low Section Chief (AOC) - Kelly

SAFETY SIGNIFICANCE: Yes No Unkn Sr. Allegation Coord (SAC) Johnson

CONCURRENCE TO CLOSEOUT: DD SC SC OI Representative - \_\_\_\_\_

CONFIDENTIALITY GRANTED: Yes No (Other) Durr, Raymond (7)

(See Allegation Receipt Report)

IS THERE A HARASSMENT/DISCRIMINATION ISSUE: Yes No

IF YES,

1) has the individual been informed of the DOL process and the need to file a complaint within 30 days Yes No

2) has the individual filed a complaint with DOL Yes No

3) has a letter been sent to the complainant seeking any safety concerns Yes No

IS A CHILLING EFFECT LETTER WARRANTED: Yes No

IF YES, HAS IT BEEN SENT Yes No

HAS THE LICENSEE RESPONDED TO THE CHILLING EFFECT LETTER: Yes No

ACTION: RESP ECD

- 1) close DRP 20NOV91
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_
- 5) \_\_\_\_\_

NOTES: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5/2/97

## RECORD OF ALLEGATION PANEL DECISIONS

SITE: Millstone 2 PANEL ATTENDEES:

ALLEGATION NO.: RI-91-A-0261 Chairman - Wiggins

DATE: 24 OCT 91 (Panel No. 1 2 3 4 5) Branch Chief - \_\_\_\_\_

PRIORITY: High Medium Low Section Chief (AOC) - Kelly

SAFETY SIGNIFICANCE: Yes No Unkn Sr. Allegation Coord (SAC) Fuhrmeister

CONCURRENCE TO CLOSEOUT: DD SC SC OI Representative - \_\_\_\_\_

CONFIDENTIALITY GRANTED: Yes NO (Other) Durr, Raymond (T)

(See Allegation Receipt Report)

IS THERE A HARASSMENT/DISCRIMINATION ISSUE:  
IF YES,

Yes ☒ No

- IF YES,
- 1) has the individual been informed of the DOL process and the need to file a complaint within 30 days
  - 2) has the individual filed a complaint with DOL
  - 3) has a letter been sent to the complainant seeking any safety concerns

Yes	No
Yes	No
Yes	No

any safety concerns  
IS A CHILLING EFFECT LETTER WARRANTED:  
IF YES, HAS IT BEEN SENT

Yes No  
Yes No

HAS THE LICENSEE RESPONDED TO THE CHILLING EFFECT LETTER:

Yes      No

ACTION:

RESP ECD

- 1) close DRP 2010091
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_
- 5) \_\_\_\_\_

NOTES:

5/2/8



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

Docket Number: 50-336  
File Number: RI-91-A-0262

OCT 29 1991

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

Dear Mr. Opeka:

The U.S. Nuclear Regulatory Commission recently received information concerning activities at Milistone Unit 2. Enclosed are the details for your review and followup.

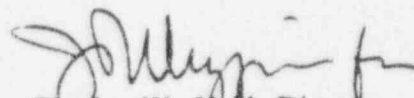
We request that the results of your review and disposition of these matters be submitted to Region I within 30 days of the date of receipt of this letter. We request that your response contain no personal privacy, proprietary, or safeguards information so it can be released to the public and placed in the NRC Public Document Room. If necessary, such information shall be contained in a separate attachment which will be withheld from public disclosure. The affidavit required by 10 CFR 2.790(b) must accompany your response if proprietary information is included. Please refer to file number RI-91-A-0262 when providing your response.

The enclosure to this letter should be controlled and distribution limited to personnel with a "need to know" until your investigation of the concern has been completed and reviewed by NRC Region I. The enclosure to this letter is considered Exempt from Public Disclosure in accordance with Title 10, Code of Federal Regulations, Part 2.790(a). However, a copy of this letter excluding the enclosure will be placed in the NRC Public Document room.

The response requested by this letter and the accompanying enclosure are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Your cooperation in this matter is appreciated. We will gladly discuss any questions you have concerning this information.

Sincerely,

  
Charles W. Hall, Director  
Division of Reactor Projects

9/11/91 50-336-210

S/220

Northeast Nuclear Energy Company

2

OCT 29 1991

Enclosure: 10 CFR 2.790(a) Information  
Issues and Requests

cc w/o encl:

Public Document Room (PDR)  
Local Public Document Room (LPDR)  
State of Connecticut

bcc w/encl:

Allegation File, RI-91-A-0262  
E. Conner files  
E. Kelly (Section Chief)  
W. Raymond  
T. Shedlosky  
Contractor's office files (REAGAN)  
RI:DRP

concurrences:

RI:DRP

Conner

1/1

RI:DRP

Kelly  
10/22

RI:DRP

Wenzinger

10/22/91

10/29