

# NUCLEAR REGULATORY COMMISSION

REGION I 475 ALLENDALE ROAD KING OF PRUSSIA, PENNSYLVANIA 19406-1415

MAR 0 3 1992



I am responding to the concerns that you provided to us on October 1, 1991, asserting that there has been a recurring problem, at Millstone Unit 2, with a 10 volt reference power supply for the Channel "C" Reactor Protective System (RPS), and that this issue has not been properly addressed by I&C Department management. You also asserted that the power supply in question was modified by drilling holes in its enclosure to allow internal adjustments to be made without appropriate design change controls.

These concerns were referred to Northeast Utilities (NU) for their evaluation; attached for your information is their response. We have evaluated their response and have determined that the power supply in question was modified without appropriate approval, but the hole in its plastic case had no effect upon the strength of its support function. The 10 volt power supply output voltage is monitored daily and has only required adjustment on three occasions since May 1990. In addition, we independently reviewed this concern during NRC Inspection 50-336/91-31; our findings in this matter agreed with the conclusions drawn by NU. Based upon this information, there appears to be no safety significance involved with either the operation or modification of this power supply. The remainder of your concerns were not substantiated. Therefore, no further action is planned by the NRC in these matters, and we consider these concerns to be resolved.

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

Information in this record was deleted in accordance with the Freedom of Information

Act, exemptions 7C FOIA 92-162 Sincerely,

Edward Wenzinger, Chief

Reactor Projects Branch

Attachments:

1) NU Response Letter A09962 of December 19, 1991.

2) NRC Inspection Report 50-336/91-31 (Detail 16.0)

9503030049 940809 PDR FDIA HUBBARD92-162 PDR 4/17/



bcc /w encl:

Allegation File: RI-91-A-0260 E. Conner's files

W. Raymond/T. Shedlosky Contractor's office files (Meeker)

concurrences:

RMDRP



P O BOX 270 HARTFORD, CONNECTICUT 06141-0270 (203) 665-6000

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."

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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  $\pm$ -10-volt power supply is  $\pm$ -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  $\pm$ -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 iPSCIP 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. Opeka Guh

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



# NUCLEAR REGULATORY COMMISSION

REGION I 475 ALLENDALE ROAD KING OF PRUSSIA, PENNSYLVANIA 19406 1415

Docket No. 50-336

FEB 2 4 1992

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

Dear Mr. Opeka:

Subject: NRC Region I Inspection Report No. 50-336/91-31

Mr. J. T. Shedlosky and others of this office conducted a special safety inspection December 17, 1991, through February 7, 1992, at the Millstone Nuclear Station Unit 2, Waterford, Connecticut. The inspection results are documented in the enclosed report. They were discussed with Mr. J. S. Keenan and other members of your staff at the conclusion of the inspection.

Areas examined during the inspection are described in the enclosed report. Within these areas, the inspection focused on issues brought to Northeast Utilities by the NRC. Our independent review evaluated your performance in complying with regulatory requirements important to public and worker health and safety. This review consisted of performance observations of ongoing activities, inspection of plant equipment, interviews with personnel, and review of records.

Our overall assessment was that performance was acceptable. The enclosed inspection report notes a number of issues on which your staff agreed to provide a response to the NRC. NNECO's response to the NRC may be made in communication with the resident inspectors.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be placed in the NRC Public Document Room. The responses directed by this letter are not subjected to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Public Law No. 96.511.

Your cooperation with us is appreciated.

Edward C. Wenzinger, Chief

Projects Branch No. 4

Division of Reactor Projects

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Northeast Nuclear Energy Company

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Enclosure: NRC Region I Inspection Report No. 50-336/91-31

#### cc w/enclosure:

W. D. Romberg, Vice President, Nuclear Operations

D. O. Nordquist, Director of Quality Services

R. M. Kacich, Manager, Nuclear Licensing

S. E. Scace, Nuclear Station Director, Millstone

J. S. Keenan, Nuclear Unit Director, Millstone Unit 2

Gerald Garfield, Esquire

Nicholas Reynolds, Esquire

K. Abraham, PAO (2)

Public Document Room (PDR)

Local Public Document Room (LPDR)

Nuclear Safety Information Center (NSIC)

NRC Resident Inspector

State of Connecticut

## Conclusions

Based on discussion with cognizant NNECO operations, maintenance and I&C personnel, observation of WCC activities, and review of relevant documentation, the inspector concluded that MP2 WCC helps reduce SS and SCO administrative burdens during peak work periods and supported work group needs. This is considered a management strength. Further, if effectively implemented, NNECO efforts to standardize WCC activities through written instructions and to implement innovative programs such as MAPS would result in an excellent enhancement of MP2 work control activities.

# 16.0 NONCONFORMANCE REPORT 291-272

The NRC provided a concern related to a 10 vdc reference power supply in the reactor protection system (RPS) core protection calculator (CPC). The concern was that this power supply may have been modified, without appropriate design controls, by drilling an access hole in the plastic case that covered a circuit board. NRC disposition of that concern involved providing the concern to NNECO for review and resolution, with subsequent NRC evaluation to ensure the adequacy of NNECO's actions. NNECO letter AO9962, dated December 19, 1991, described NNECO's review of this concern.

# Assessment

NNECO inspected all similar CPC power supply modules, as described in AO9962. Since the access hole for the affected power supply module did not appear on the manufacturer's product drawing, NNECO suspected this modification was made after original installation. Accordingly, NNECO initiated Nonconformance Report (NCR) 291-272 as required by ACP-QA-1.20 and ACP-QA-5.01. Because the hole did not degrade the function of the plastic case, which was circuit board support, NNECO determined that the affected power supply modules were acceptable for use-as-is.

The inspector questioned if this was an isolated instance or if there were other similar examples of modifications made without adequate design change controls. NNECO stated it was not aware of any similar modification of other power supply modules that did not have the requisite documentation. Because this was an apparently isolated incident with no significant impact on plant safety, there was no requirement to initiate either a Plant Incident Report (PIR) per ACP-QA-10.01 or a Corrective Action Request (CAR) per ACP-QA-10.10.

## Conclusions

Based on review of applicable documentation and discussion with cognizant NNECO personnel, the inspector concluded that NNECO adequately resolved this matter in NCR 291-272.