6232

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

JAN 13 1992

[ ]

Dear [ ]:

I am responding to the concerns that you provided to us on August 20 and 21, 1991, and October 2, 1991, asserting that there were problems associated with I&C system spare parts control and I&C Department documentation at Millstone Unit 2.

These concerns were referred to Northeast Utilities (NU) for their evaluation; attached for your information is their response. We have evaluated their response and determined that the spare power supply assemblies with the old style capacitors which you were concerned with tested out satisfactorily even without the replacement capacitor. The recurring low level alarms on the "B" Reactor Coolant Pump (RCP) lower oil reservoir which you noted are being investigated in conjunction with the pump manufacturer. The remainder of your concerns were not substantiated. NU's maintenance actions associated with the "B" RCP lower oil reservoir level alarm unit and the use of a spare Reactor Protective System (RPS) Auxiliary Logic Drawer as a source of spare parts were acceptable for the situations that existed. The I&C Department loop folder documentation appears to be acceptable and consistent with the administrative control procedures that apply to all the units at Millstone. As with most technical systems, training and experience must be utilized to properly function with such an administrative system to obtain the information necessary to properly complete maintenance tasks. Based on the information provided by NU and our evaluation, 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.

Sincerely,

Edward Wenzinger

Edward Wenzinger, Chief
Reactor Projects Branch 4

Attachment: NU Response Letter A09664 of December 19, 1991.

T-105

bcc /w encl:
Allegation File: RI-91-A-0232,RI-91-A-0263
E. Conner's files
W. Raymond/T. Shedlosky
Contractor's office files (Meeker)

concurrences:

RI/DRP
Barkley
1/10/92

RI/DRP
for Kelly
1/10/92

RI/DRP
Wenzinger
1/17/92

NORTHEAST UTILITIES

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

December 19, 1991

Docket No. 50-336
A09664

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-0232 and RI-91-A-0263

We have completed our review of identified issues concerning activities at Millstone Unit No. 2. As requested in your transmittal letter of October 29, 1991, our responses do not contain any personal privacy, proprietary, or safeguards information. The material contained in these responses may be released to the public and placed in the NRC Public Document Room at your discretion. The NRC transmittal letter and our responses have received controlled and limited distribution on a "need-to-know" basis during the preparation of these responses. The responses to these issues were originally due on 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 A-0232-01/A-0263-01:

"There were two examples of alleged inadequate control and maintenance of equipment spare parts. First, that a spare power supply in the warehouse (SPM 798, revision 16, item 34) for the 'B' RCP [reactor coolant pump] lower oil reservoir level alarm unit allegedly did not receive a capacitor change out, as did the in-service power supply units. Allegedly, PMMS [Production Maintenance Management System] item M2-02-ENV-PWR-X-20 (Serial No. 10521) typified a maintenance history record for a power supply replacement. Second, that an RPS [reactor pressure system] spare component, the Auxiliary Logic Drawer identified in Concern RI-91-A-0263-02, allegedly lacked a modification (three versus four amber indicating lamps)."

REQUEST:

"Please provide your review of the above assertions. If the above conditions are valid, notify us of the corrective actions you have taken to prevent

recurrence. Also provide us with an assessment of the safety significance of any identified deficiencies, including generic considerations."

RESPONSE:

The assertion is partially valid. During the 1989 refueling outage a decision was made to change out the electrolytic capacitors in the GEMAC Model 570 power supply assemblies, including the spare power supply assemblies stored in the warehouse. The decision to change out capacitors was a preventive maintenance action based upon the length of time these power supply assemblies had been in service. As the result of an oversight on our part, the circuit board at issue, and two other circuit boards which were also not contained in the spare power supplies, were not changed out.

The auxiliary logic drawer at issue was not intended for use as a spare, and therefore did not require modification as asserted. This is discussed further in response to issue 0263-02 below.

Background:

As part of troubleshooting and maintenance activities, the individual involved is trained to check the equipment being installed against the equipment it is to replace and resolve any differences in configuration. Equipment is tested and proven completely functional before it is placed in service. This evaluation and testing process functioned as desired. The circuit board did not have the same capacitor installed as the board it was to replace. Investigation of the difference between cards revealed that the in-service units had had their capacitors changed out. Based on the results of the investigation, the capacitor was changed out on the card before it was tested and installed. We were informed of the capacitor concern after the spare power supply at issue had been modified by installation of the proper capacitor and the power supply card successfully tested and installed in troubleshooting the alarm.

When we were initially informed of the capacitor concern by the individual performing the work on the power supply assembly, all warehouse spare circuit boards (a total of two) with the old-style capacitors were subsequently tested and found to operate properly.

Use of the old-style spare part would not have resulted in failure of the power supply. While the assertion that the spare circuit boards did not receive a capacitor change out is correct, it has no safety significance in that the equipment would have operated normally, as shown by our testing, had the card at issue been installed without change out of the electrolytic capacitor.

ISSUE RI-91-A-0263-02:

"Allegedly, a spare RPS Auxiliary Logic Drawer was used to support troubleshooting, on or about October 1, 1991, of a power supply relay failure within the same drawer in RPS channel 'D,' but was not installed in place of the failed drawer. Allegedly, the spare RPS Auxiliary Logic Drawer lacked some original parts (three lamps)."

REQUEST:

"Please provide your review of the above assertions. If the above conditions are valid, notify us of the corrective actions you have taken to prevent recurrence. Also provide us with an assessment of the safety significance of any identified deficiencies, including generic considerations."

RESPONSE:

This assertion is not valid. The alleged "spare" RPS auxiliary logic drawer that was used to support troubleshooting was actually a "parts" drawer. Necessary spare quality assurance (QA) parts have been taken from this drawer to support maintenance of the operating drawers. In this instance a relay socket was found broken in the operating drawer and a replacement was taken from the "parts" drawer to complete the repair. Since the function of the "parts" drawer is to provide a rapid means of obtaining parts when necessary, the condition in which some original parts are missing is to be expected. There was never any intention of using the "parts" drawer as a replacement for an operating drawer in the plant. Personnel working on RPS auxiliary logic drawers are not allowed to work on equipment without training on that equipment and the knowledge of equipment configuration that such training brings. As a result, the personnel working on these drawers know that the "parts" drawer is not to be used as a replacement drawer.

We were not aware that the parts drawer was a concern prior to receipt of the NRC letter, and we find no safety significance to this concern.

ISSUE RI-91-A-0232-02:

"On or about August 16, 1991, Loop Folders for the 'B' RCP oil reservoir alarm instruments allegedly did not reflect the actual physical location of specific power supplies. Allegedly, some boards had five separate power supplies within the power supply unit."

REQUEST:

"Please provide your review of the above assertions. If the above conditions are valid, notify us of the corrective actions you have taken to prevent recurrence. Also provide us with an assessment of the safety significance of any identified deficiencies, including generic considerations."

RESPONSE:

The assertion that the RCP-B loop folders did not contain power supply location information is not valid. NUSCO drawings in each folder clearly indicate the location of Power Supply X-21 as C04R, slot BOU.

The GEMAC Model 570 power supply contains five circuit boards in one housing. Each circuit board, by design, provides power to a single instrument loop. The assertion that some boards had five separate power supplies within the power supply unit is a simple statement of fact. There is no safety or generic significance to these items.

We were not aware that the loop folder contents or power supply configuration was a concern prior to the receipt of the NRC letter.

ISSUE RI-91-A-0232-03:

"On or about August 16, 1991, Loop Folders for the 'B' RCP allegedly did not provide information regarding which additional instrument loads [were] powered from each power supply. For example, power supply X-21 supplied several other instrument loops in addition to the 'B' RCP upper and lower oil sump levels. The individual doing the work believed this information was considered essential to preclude the loss of power to other instrumentation when performing maintenance on an instrument loop component."

REQUEST:

"Please provide your review of the above assertions. If the above conditions are valid, notify us of the corrective actions you have taken to prevent recurrence. Also provide us with an assessment of the safety significance of any identified deficiencies, including generic considerations."

RESPONSE:

The assertion is not valid. Power Supply X-21 is clearly identified as an individual component on the loop drawing found in the instrument loop folders for this pump. The X-21 loop folder contains the following precaution: "Verify effects on loops powered by this power supply before de-energizing." We concur that it is essential to know what other loads are serviced by multiloop power supplies before working on them. Such information was, and is, readily available to technicians.

As is indicated in response to specific question Item 'e' below, loop folders do not necessarily contain all the information needed to do a job. The PMMS ID base and applicable drawings list the instruments powered from this supply. The information was promptly supplied to the technician performing this work by the PMMS group.

ISSUE RI-91-A-0232-04:

"On or about August 16, 1991, Instrument Record Sheets for the 'B' RCP upper and lower oil reservoir level transmitters (LT-176 & LT-177) allegedly were missing from the Instrument Loop Folders."

REQUEST:

"Please provide your review of the above assertions. If the above conditions are valid, notify us of the corrective actions you have taken to prevent recurrence. Also provide us with an assessment of the safety significance of any identified deficiencies, including generic considerations."

RESPONSE:

We are unable to establish the validity of the assertion as stated. If the information record sheets, which are uncontrolled documents, are discovered missing, the information they contain can be easily obtained from NUSCO drawings and the PMMS ID system by any Instrumentation and Controls (I&C) technician prior to the start of a job.

On or about August 17, 1991, a technician requested new instrument record sheets for the L-176/177 loop folder. The records were provided by the PMMS group and inserted into the loop folder as the technician requested. It could not be independently determined whether or not record sheets were actually missing.

Obtaining information by such approved alternate means is of no safety consequence to the worker or the equipment; therefore, there is no safety or generic significance to this issue.

ISSUE RI-91-A-0232-05:

"There were allegedly nuisance alarms, associated with the 'B' RCP upper and lower oil reservoirs, caused by mechanical action within the RCP oil reservoirs (reference AWO [Automated Work Order] M2-91-08614)."

REQUEST:

"Please provide your review of the above assertions. If the above conditions are valid, notify us of the corrective actions you have taken to prevent recurrence. Also provide us with an assessment of the safety significance of any identified deficiencies, including generic considerations."

RESPONSE:

The assertion is correct in stating that the AWO at issue was written to investigate frequent low-level alarms for the oil reservoir on the 'B' RCP.

The nature of the alarm instrumentation for the reservoir is such that the low-level alarm is conservative in nature. Oil is added to bring the oil reservoir to the proper level based on a marked indication on the oil reservoir (sight glass) rather than adding oil to clear the alarm. Experience has shown that when oil is added to the reservoir, less oil is added than would have been expected based on the existence of the alarm.

We do not consider the occasional existence of low-level alarms to be a mechanical problem and because of the conservative nature of the alarm instrumentation, we find no nuclear safety concern associated with this issue. The Millstone Unit No. 2 Engineering Department is aware of the alarm sensitivity versus actual oil level and has contacted the pump manufacturer. The situation remains under investigation.

SPECIFIC QUESTIONS:

"In addition to the above general request, please provide your review of the following specific questions. (a) Are spare parts, that are either located in the warehouse(s) or used for troubleshooting, controlled and maintained in accordance with the NU QA Program? (b) Is there a mechanical problem with RCP oil sump levels? (c) Does Unit 2 administratively control I&C documentation in a manner consistent with the methodology used for Units 1 and 3 and with the NU QA Program? (d) Is Departmental Instruction 2-I&C-10.03, Establishing and Maintaining Instrument Records, adequate for administrative control of I&C documentation? (e) In general, do loop folders adequately identify instrument loads for each power supply?"

RESPONSES TO SPECIFIC QUESTIONS:

a. QA parts are processed and used in accordance with provisions of the NU QA Program. Non-QA parts are processed in accordance with ANSI Standard N45.2.2 (Level B). No specific program requirements exist for handling Non-QA parts during troubleshooting. There are no safety or generic issues associated with this item.

b. NNECO does not believe there is a mechanical problem with the RCP oil sump levels. NNECO has been in contact with the pump manufacturer and the issue of sensitivity of the alarm circuitry remains under investigation.

c. Generally, Millstone Unit No. 2 administratively controls I&C documentation under the same procedures and QA program as Millstone Unit Nos. 1 and 3. I&C documentation is governed overall by the site Administrative Control Procedures (ACPs) and various internal department instructions. The handling of work orders and work-related documents is governed by ACP-QA-2.02C. ACPs govern most other administrative aspects of department business including vendor manual control, nuclear records transmittals, procedures, correspondence, etc. In these respects the three units' administrative controls are the same for QA and Non-QA documents.

Administrative areas that do differ are minor. All three units maintain loop folders and drawings, although the content and control of these documents may vary as provided by individual unit instructions. The Millstone Unit No. 2 I&C Department instructions govern such areas as loop folders, maintenance history, and the use of drawings and vendor manuals. The administrative controls are consistent with the Northeast Utilities QA Program as documented in the NUQAT.

d. Department Instruction 2-I&C-10.03 was canceled several years ago and a newer version is now in effect. These department instructions are provided at the discretion of the department manager to give employees additional information for the implementation of the requirements contained in applicable ACPs and policies. Department instructions do not supersede the requirements of existing station procedures and are adequate for the administrative control of I&C documentation.

e. Loop folders are not designed to provide technicians with all the information they need for every job; they typically only contain a loop drawing and references to other drawings. Instrument loads are identified in the PMMS ID system and applicable NUSCO drawings. All personnel in the department have the access and training to obtain such information from the PMMS computer or by asking the PMMS group directly. In this particular case, the list of loops powered by this supply were provided to the technician by the I&C PMMS group as soon as they were requested.

After our review and evaluation of these issues, we find that these issues did not present any indication of a compromise of nuclear safety. 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
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