

NORTHEAST UTILITIES

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

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December 7, 1990

Docket No. 50-336
A09076

Mr. E. C. Wenzinger, Chief
Projects Branch No. 4
Division of Reactor Projects
U. S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, Pennsylvania 19406

Dear Mr. Wenzinger:

Millstone Nuclear Power Station, Unit No. 2
RI-90-A-144

We have completed our review of an allegation concerning activities at Millstone Unit 2 (RI-90-A-144). 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 October 25, 1990, Region I personnel extended the due date for this response to December 7, 1990. The basis for our extension request was the competing demands for time on personnel involved in these matters and the then ongoing refueling outage.

Item 1

Steam Jet Air Ejector (SJAE) radiation monitor, RM 5099, does not appear to be collecting water. The monitor response may have decreased. The Plant Equipment Operator (PEO) has not emptied the collection bottle for ten days (as of September 14, 1990), although normally, four quarts of water are emptied per day. The monitor has been reading 2,000 cpm and has decreased to 1,000 cpm.

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Background Information

The SJAE RM monitors the gaseous activity in the SJAE exhaust. The system includes a moisture removal system that dries the gas going to the detector pig. The output of the moisture removal system is manually removed from collection bottles as part of the Plant Equipment Operator rounds. The moisture content of the gas exiting the SJAE is largely dependent upon the performance of the SJAE drain system. When this SJAE drain system is operating effectively, there is essentially no moisture to be removed. When the SJAE is not being effectively drained, the moisture content in the SJAE exhaust increases substantially. As a result, the amount of moisture removed by the RM moisture collection system increases as well. If the moisture is not effectively removed from the gas, it collects in the detector pig and causes the detector to fail.

Excessive moisture in the SJAE exhaust has been a long-standing problem with the operation of this system. A replacement radiation monitoring system that is external to the process piping is currently being designed (Project Assignment 89-053). This will allow reliable radiation monitoring without compromise by the moisture level of the SJAE exhaust.

This allegation questions the response of the RM during the time period of September 4 through 14 of 1990. During this period, the unit operated at 100% power. During the previous week, the unit had undergone a startup that included a review of the valve alignment of the SJAE drain system. Changes in the valve alignment at that time significantly improved the moisture removal effectiveness of the SJAE. The result of this improved drain performance was the low output of moisture from the RM moisture removal system. This low output of moisture is a normal response for the RM system when these conditions exist.

The activity level of the gas at the SJAE is dependent upon the amount of the gaseous activity of the RCS, the amount of primary to secondary leakage, and the amount of air inleakage into the condenser. During this time period, the RM readings varied between 1,000 and 2,400 cpm. Chemistry samples indicate that SJAE activity was 2 E-5 uci/ml to 6 E-5 uci/ml respectively. This shows a close correlation between actual sample values and RM response.

- a. Should Operations have determined there to be a problem?

Response

The RM performance during this time period does not represent a problem. The response of the RM was correct for the plant conditions present. The secondary side conditions, including the SJAE activity levels, are appropriately monitored by Operations. This includes review by Plant Management and Chemistry staffs on a daily basis.

- b. Have appropriate compensatory measures been taken by Operations?

Response

No additional actions were necessary.

- c. Have evaluations been done to ensure the monitor is operating properly or is reliable?

Response

Yes. The RM's performance is reviewed on a daily basis by the Operations, Management, and Chemistry staffs. When the monitor was removed from service at the next outage, it was verified to be dry and in proper working order. The long-term reliability issue is being addressed by the replacement of the RM with a non-intrusive system, which is not subject to moisture damage. Short-term reliability of this RM has been enhanced by the upgrading of the moisture removal system capacity and additional Operations' awareness of the need for optimum performance of the SJAE drain system.

- d. If problems have been noted, what actions have been taken to evaluate, compensate, track, and resolve the problems? Have all appropriate trouble reports or other documents been completed or filed?

Response

We currently plan to replace the RM with an improved design in 1991.

The RM was calibrated during the outage as part of its normal maintenance. Bypass jumpers remain in place that have increased the moisture removal capability of the system. All work has been conducted in accordance with station procedures.

- e. Have Operations and I&C personnel performed the appropriate duties with regard to the radiation monitor? (The Shift Supervisor and an I&C supervisor have been made aware that there may be a problem.)

Response

Yes, appropriate duties were performed.

- f. What actions are planned to ensure continued reliability and performance?

Response

Short term - Additional attention has been placed by Operations on the proper operation of the SJAE drain system. Performance review activities will be continued by Operations, Management, and Chemistry staff personnel. A temporary SJAE radiation monitor is being used to provide diverse indication.

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Long term - The RM is planned to be replaced in 1991 with the more reliable system being designed and procured at this time.

Item 2

The allegor has complained that an I&C Supervisor failed to respond to one of his concerns within a 14-day administrative requirement. The concern was raised by the allegor on August 23, 1990 and involved three issues:

1. use of the "completed by" block for prerequisites,
2. a procedure statement about required actions if RPS pretrips come in on another channel, during testing, and
3. break times.

Items (1) and (3) were discussed at a September 5, 1990 I&C Department meeting. Item (2) was not discussed.

Background Information

A Unit 2 I&C Department meeting was held on August 23, 1990. A variety of material was covered. Numerous questions were fielded from the attendees.

- a. What is your policy in this regard?

Response

Pertinent questions asked during Department meetings for which an answer must be researched are addressed. No time requirements exist for this process. The Department meeting forum is used as a means of sharing information and discussing issues in an open environment which are of interest to the entire Department.

- b. Does the complaint have validity, and if so, why wasn't the employee's concern addressed?

Response

The issue does not have validity. The question (i.e., Item 2 of this allegation) was asked by a member of the I&C Department and addressed by the Department Manager at that time. The Department Manager did not note the need for specific follow-up to this question. The verbal response provided by the Department Manager to Item 2 of this allegation discussed the Unit 2 I&C procedure guidance regarding surveillance testing.

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Item 3

A worker was assigned to troubleshoot a problem with the control circuit for the turbine bypass valves under AWO 90-09684 on September 11, 1990. Work had previously been performed on this system under AWO 90-06498 and AWO 90-07792. This work identified deficiencies with PT 4300 which were to be corrected during the outage.

- a. The initial AWOs may not have been documented in the appropriate loop folder. Is there a requirement to do so? Why wasn't this requirement met?

Response

There is no station requirement to maintain a loop folder. Work activities that are performed are required to be documented on the AWO document. Unit 2 I&C has a Department Instruction 1.10 that defines the contents of the department loop folders. It includes the I&C specialists' and technicians' responsibility to maintain a brief handwritten work history in the loop folder. It is expected that all Unit 2 I&C personnel will keep the loop folder information up to date. This allows a more efficient work history review than can be obtained from the PMMS system or the Nuclear Plant Records Facility.

AWO M2-90-06498 was written to troubleshoot a problem associated with a reactor regulating system alarm. Since this was written against the system ID, there is no loop folder to record information in. The AWO that governed the specific calibration activity on PT 4300 was updated with the necessary information. All Unit 2 I&C Department expectations were met with respect to loop folder entries.

- b. An orange sticker was not affixed to the instrument PT 4300 contrary to Department instruction causing a redundant trouble report to be issued. Is there a requirement to affix an orange sticker when a deficiency is identified with an instrument? Why wasn't that requirement met?

Response

ACP-QA-2.02C, "Work Orders", contains step 6.1.2 that states, "Where possible, place problem report tags/stickers on the component or other conspicuous location, which indicate the problem has been reported." The requirement was met for each trouble report. Note that the AWO problem description reflected the problem as it was seen by the Operations staff. Work order tags were appropriately hung, as indicated on the associated AWOs. The location of the tag is typically at the location that is conspicuous to the Operations Department staff. In this case, it was properly located in the control room by the alarm window that is associated with the reactor regulating system.

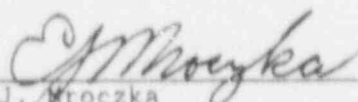
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Note the second AWO, M2-90-09684, is not a "redundant" trouble report. The first AWO, M2-90-06498, identified the alarm condition as being caused by the pressure transmitter and recommended its calibration. The second AWO describes an additional problem, that of the recent decrease in the Tref value as well as the previously existing alarm condition. The information that PT 4300 had already been identified as needing calibration was included in the job description section of AWO M2-90-09684. The work activities of this AWO resolved problems associated with both the recorder and the pressure transmitter wiring. AWO M2-90-07792 performed the calibration activity.

After our review and evaluation, we find that none 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 further questions on any of these matters.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY



E. J. Wroczka
Senior Vice President

cc: W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2, and 3