

NORTHEAST UTILITIES



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

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April 26, 1991

Docket No. 50-336
A09354

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

Dear Mr. Hehl:

Millstone Nuclear Power Station, Unit No. 2
RI-90-A-187

We have completed our review of an allegation concerning activities at Millstone Unit No. 2 (RI-90-A-187). 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 March 15, 1991, Region I personnel extended the due date for this response to April 26, 1991. Additional time was requested to support the ongoing INPO evaluation and to prepare for an Enforcement Conference held on March 27, 1991 involving an ongoing allegation-related matter.

Issue 1

Isometric drawing 25203-23512 contains a number of deficiencies including inaccurate transmitter piping distances and incorrect support mounting orientations.

Please discuss the accuracy of the above assertion and your corrective actions with regard to any identified deficiencies. Please discuss if identified drawing problems are indicative of a generic problem with configuration control.

Background

Drawing 25203-28512 is a general representation of the installation for all the instruments in question and not detailed documentation of specific as-built dimensions. The drawing shows a tubing configuration for one instrument and states that it is "typical" for all eight.

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Response

The drawing referenced in the statement (25203-23512) does not exist. Investigation into the subject indicates that the correct number should be 25203-28512 and that this drawing does have the discrepancies noted.

Drawing change request M2-P-198-90 was initiated to correct drawing 25203-28512. This activity took place after the discrepancies were identified during the 1990 refueling outage. The only potential implication of the discrepancies was that the seismic analysis may have been affected. NNECO has performed a seismic analysis of the configuration as defined on drawing 25203-28512 with "as-built" dimensions that were taken during the refueling outage. This analysis is documented in SQR #90-076, Rev. 0 and was completed on April 12, 1991. The results of the analysis verified that the configuration in its existing condition is seismically sound.

The discrepancies identified with this isometric drawing do not represent a generic problem with configuration control. A procedure is now in place (ACP-QA-3.10) requiring upgrade of isometric drawings whenever changes are made. When a design change is accomplished, the proposed change is "walked down" in the field before and after implementation and "as-built" configuration is documented at that time. This procedure was not in place at the time these modifications were made.

Issue 2

The reactor coolant flow transmitter test connections are missing swagelok port connectors and swagelok cap assemblies. One unidentified test connection is bent at the reducer location. Quality Assurance Audit QS-274 may identify a number of problems with test connections. A modification of this system controlled by Plant Design Change Record (PDCR) 2-66-83 did not include seismic certification for the transmitter installation nor did the original purchase order, 283-318.

Please discuss the accuracy of the above assertions. Please discuss the safety significance of any identified problems as well as your corrective actions and actions that you have taken to ensure plant safety. Please discuss the seismic qualification of the reactor coolant flow transmitters.

Background

PDCR 2-66-83 was written in 1983 to upgrade the reactor coolant flow indicating system with more reliable instrumentation that is also qualified for EEQ service.

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Swagelok port connectors and caps are fittings which have been included in the tubing configuration to facilitate calibration activities. They serve no critical purpose to the safety function of the instrument while it is in service. These fittings fall outside the pressure boundary of the process system and by definition are not subject to the same design criteria as other components which normally do see process pressure. These deficiencies are not considered "design" problems but normal maintenance discrepancies which were brought to the attention of department supervision and corrected.

Response

The test fittings discussed above perform no function while the instrument is in service. Therefore, there is no safety significance to the reported deficiencies. The discrepancies were identified during calibration activities and promptly corrected. Quality Assurance Audit QS-274 identified these same maintenance discrepancies. The discrepancies were corrected by AWO Nos. M2-90-12325, M2-90-12326, M2-90-12327, and M2-90-12328.

The transmitters were procured and installed to meet appropriate seismic requirements. PDCR 2-66-83 clearly states that the new instruments are qualified to IEEE 323 (1974) and 344 (1975) which covers requirements for seismic and EEQ qualification. The instruments were installed in accordance with Bechtel's MS-66, "Seismic Instrument Mounting Details," and vendor requirements for seismic qualification.

Purchase Order 283-318 does not exist. Purchase Order 628590, which is the order for the referenced transmitters, specifies the purchase of instruments nuclear qualified in accordance with IEEE 323 and 344 and a Certificate of Conformance from the vendor stating such.

The concern was brought to management's attention via memo 901006A on October 6, 1990. A seismic qualification review was initiated to evaluate the "as-built" seismic integrity of the RCS flow transmitter tubing as shown on NUSCO Drawing No. 25203-28512. The review was finalized on April 12, 1991, and concludes that the tubing and transmitter support scheme "as installed" is seismically acceptable for its intended usage.

Issue 3

The procedures for calibrating the RCS flow transmitters (SP-2402A and SP-2418J) contain a number of deficiencies including: static alignment offset values may not be correct; the as-left alignment check is completed after the transmitters have been statically aligned; and calculational errors exist for the reactor protection system bistable and input resistance values. These deficiencies have been identified to management.

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Please discuss the validity of the above assertions. Please discuss any corrective actions that you have taken or will take to correct any identified deficiencies. Please discuss the operability of the reactor coolant flow transmitters if the surveillance procedure used on these instruments contains these deficiencies.

Background

While performing a calibration of the RCS flow transmitters, questions arose as to the intent and adequacy of the calibration procedure SP2402A. A review of the procedure was done, and a revision to incorporate two changes and resolve several comments was completed in October 1990. The comments were tracked by I&C memo #901012C.

Response

NNECO concluded as a result of the procedure review that the existing procedure SP2402A, Rev. 3 adequately addressed the subject of static alignment of the transmitters. NNECO, however, decided that clarification and incorporation of the vendor's allowable tolerance on the alignment would be added to Revision 4 as an enhancement. It is true that an alignment check is completed after the alignment activity is done. However, this is not considered to be a deficiency. It is standard practice to perform an alignment check after any alignment adjustments are made.

As a result of the questions raised during the calibration activity, additional review of the procedure and the calibration methods being used is being performed. Additional refinement of the procedure is expected as a result of these activities.

The RPS bistable setpoint values are determined by engineering review of full flow system performance and actual RPS flow trip bistable input values during zero flow and full flow conditions. This method allows for the calculation of trip setpoints that are based on actual flow channel input values during these conditions. There are no "input resistance values" associated with the process.

As no significant deficiencies existed, there was no compromise of system operability.

Issue 4

The RPS turbine trip is not tested monthly.

Please discuss the validity of the above assertion and the adequacy of the testing program for the turbine trip.

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Background

The RPS turbine trip input is tested prior to reactor startup as required by Technical Specification 4.3.1.1.1. This issue was raised by an employee via I&C memo file number 901012D written on October 12, 1990. This information was provided to the employee in a written response on October 17, 1990.

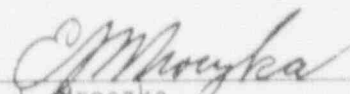
Response

The RPS turbine trip is not tested monthly. There is no requirement or need to test the trip on a monthly basis. The performance of the equipment has not warranted any additional testing.

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 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, Region I