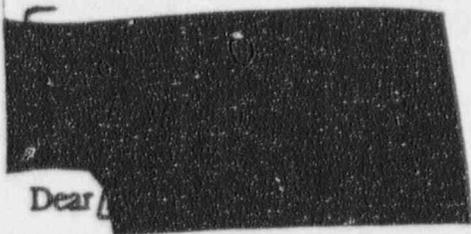




UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

FEB 28 1992



Dear [Redacted]

I am responding to the concerns that you provided to us on September 6, 1991, asserting that the Safety Injection Tank (SIT) pressure switches at Millstone Unit 2: (1) were the wrong range; (2) did not have the correct technical manual; (3) were not appropriate, according to the manufacturer, for nuclear application; (4) may have the wrong temperature range; and (5) would not work correctly, according to the manufacturer, above a set pressure.

We have inspected these concerns; a report that documents the results of that inspection is attached for your information. Based on our inspection, we have determined that the switches in question are not safety-related or Environmentally Qualified (EQ) and that Northeast Utilities (NU) has been aware of and documented several of the concerns that you provided to us regarding these switches. NU's actions originated several months ago and Nonconformance Report 291-225 concluded that these devices were acceptable for use as-is. NU initiated a Plant Design Change Request (PDCR 2-090-91) to replace these switches in an effort to eliminate the nuisance alarms they cause. These nuisance alarms were thought to be caused by a wide deadband on the switches and the alarms were received when containment ambient temperature increased after reactor startup, causing SIT pressure to increase to the alarm setpoint. NU's actions to resolve the problems associated with these switches are appropriate. 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.

Sincerely,

for
Edward Wenzinger, Chief
Reactor Projects Branch 4

9503020294 940809
PDR FOIA
HUBBARD92-162 PDR

Attachment: Excerpts from NRC Inspection Report 50-336/91-3i (Detail 14.0).

9503020294
299

Act, exemptions 7C
FOIA 92-162

129
T/102

bcc /w encl:

Allegation File: RI-91-A-0241

E. Conner's files

W. Raymond/T. Shedlosky

Contractor's office files (Meeker)



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

Docket No. 50-336

FEB 24 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.

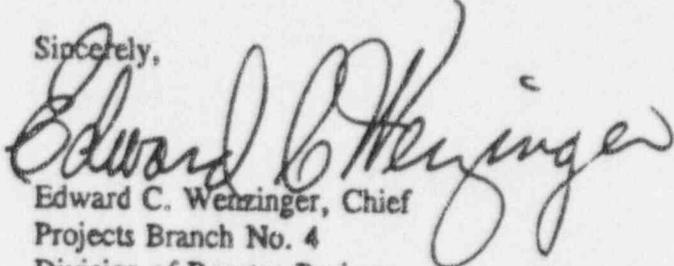
Areas examined during the inspection are described in the enclosed report. Within these areas, the inspection focused on issues brought to Northeast Utilities by the NRC. Our independent review evaluated your performance in complying with regulatory requirements important to public and worker health 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.

Sincerely,


Edward C. Wenzinger, Chief
Projects Branch No. 4
Division of Reactor Projects

7203020233

SFP

FEB 24 1992

Northeast Nuclear Energy Company 2

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. Scafe, 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

calibration of test equipment, including DMMs and Transmation model 1040s, as required by ACP-QA-10.04.

The inspector found no I&C Department procedure or other applicable NNECO procedure that promulgated specific administrative instructions for completion of Form 3.02-1A. Because Form 3.02-1A was not used as a QA record, there was no regulatory requirement to provide such an I&C Department procedure.

Conclusions

Based on review of applicable documentation and discussion with cognizant NNECO personnel, the inspector concluded that NNECO had adequate guidance in TIB 89-5 describing the use of a calibrated voltmeter for measuring the output of Transmation model 1040 test equipment. Further, NNECO adequately identified and maintained QA records for I&C maintenance and surveillance work on non-safety related recorders.

There was evidence that NNECO may not have always listed on instrument calibration data sheets DMMs used with Transmation model 1040's, and the supervisory review of such data sheets did not always identify such discrepancies. NNECO promptly corrected specific examples noted during the inspection and initiated action to sample the adequacy of additional instrument calibration data sheets. The inspector concluded that management expectations for maintenance of instrument calibration data sheets in I&C Department working files were not clearly defined in I&C Department Instructions. Because the instrument calibration data sheets were not QA records, and because flow recorders such as FR-210Y and RJR-9373 were not safety related, there was no regulatory requirement to document test equipment usage on instrument calibration data sheets. The inspector had no further concerns regarding this matter.

14.0 SAFETY INJECTION TANK PRESSURE SWITCHES

The NRC provided a concern regarding the adequacy of MP2 safety injection tank (SIT) pressure switches (PSs).

Background

MP2 Technical Specifications (TS), section 3.5.1.d, has a limiting condition for operation that requires SIT cover pressure of between 200 and 250 psig when in modes 1 or 2, and when in mode 3 if pressurizer pressure is equal to or greater than 1750 psia. NNECO ensures SIT cover pressure is between 200 and 250 psig at least once every 12 hours using OPS Form 2619A-1. High pressure and low pressure switches are set to alarm in the control room prior to exceeding the MP2 TS allowable range. Operating procedure OP 2306 is used to make adjustments in SIT cover pressure. SITs are initially pressurized to approximately 215 psig prior to plant startup.

A desirable operating practice was to have no control room annunciators illuminated during steady state full power operation. Control room panel C-01 annunciator windows C-10, C-11,

C-12, and C-13 were for SIT high pressure alarms. NNECO indicated in AWO M2-91-04556, dated September 11, 1991, that previous SIT high pressure alarm trouble reports (TRs) related to alarm "lock in" were too frequent, and may have been caused by a wide deadband on the PSs associated with these alarms. Operations believed an additional factor was the pressure increase caused by the SITs normally warming from ambient temperature to approximately 110°F during plant startup. NNECO initiated AWO M2-91-04556 to establish, if possible, a reliable method of adjustment for SIT high pressure alarm pressure switches (PSs) 313, 323, 333, and 343. These PSs were Custom Component Switches, Inc. (CCS) model 604GR3-353S.

NNECO determined in evaluation MP2-CD-674 that only the pressure boundary of PSs 313, 323, 333, and 343 was safety related. Failure of these pressure switches during a seismic event could vent the associated SIT and prevent the affected SIT from performing its safety related function of supplying borated water to the reactor coolant system. The PS alarm function was not safety related. SIT pressure indication was available on Control Room instrumentation and on the MP2 process computer.

NNECO initiated PDCR 2-090-91 to replace the SIT CCS model 604GR3-353S pressure switches with CCS model 5NN-K5-U9-C1A-PCPB pressure switches. The new switches had a nominal 5 psig deadband that NNECO believed would avoid "lock in" alarms during plant operation.

Assessment

According to documentation associated with AWO M2-91-04556, CCS model 604GR3-353S pressure switches had an adjustment range of 60 to 225 psig (increasing) and 45 to 210 psig (decreasing). Because the SIT high pressure Pss setpoint and reset values were in excess of the switch nameplate rating, the inspector questioned if the CCS model 604GR3-353S PSs were adequate for their intended purpose. NNECO compared switch nameplate data with procurement documents and found differences in the switch adjustment range. For example, the switch nameplate listed an increasing adjustment range of 60 to 225 psig, but drawing 25203-29115, sheet 37, indicated the adjustment range on increasing pressure was 50 to 250 psig. NNECO stated that the nameplate adjustment range information was incorrect. Because these switches will be replaced per PDCR 2-090-91 and the switches were not readily accessible during plant operation, NNECO stated there was no need to correct the switch nameplate.

CCS vendor manual VTM2-167-002A was a maintenance and parts replacement manual for standard commercial switch models 604 and 605GC. According to the equipment list for VTM2-167-002A, it applied to PSs 313, 323, 333, and 343.

The inspector questioned if CCS model 604GR3-353S pressure switches were adequate for their current application. NNECO stated that these devices were adequate because they were appropriately mounted on seismically qualified supports and Nonconformance Report 291-225 concluded these devices were acceptable for use-as-is. Also, the pressure retaining parts of these pressure switches had a proof pressure rating of 4500 psig, but the normal operating pressure

was less than 250 psig.

The control room annunciator response book (CRAB) and OP 2306 used a value of 250 psig for the SIT high pressure alarm, but the actual setpoint was 245 psig (increasing). ACP-QA-3.02A, section 6.8.3, stated that "if actions are required based on receipt of an annunciated alarm, then list the setpoint of the alarm for ease of verification." Also, ACP-QA-3.02A, section 6.8.4, stated to "provide an acceptable range instead of a point value, when applicable." Calibration data indicated PS reset occurred in the range of 227 to 236 psig. When questioned by the inspector, NNECO stated that in some cases procedures also used MP2 TS limits rather than actual setpoints for values described in the CRAB, OPs, and SPs.

Conclusions

Based on review of applicable documentation and discussion with cognizant NNECO personnel, the inspector concluded the CCS model 604GR3-353S PSs were adequate for application as SIT high pressure alarm switches. Also, the inspector concluded that, unless workers thoroughly researched relevant information, inaccurate nameplate data could cause worker confusion regarding the adequacy of CCS model 604GR3-353S PSs.

Finally, the inspector concluded that NNECO may not have adequately described in all cases alarm setpoints in the CRAB, Ops, and SPs, as required by ACP-QA-3.02A. NNECO agreed to evaluate this matter, take appropriate action as necessary, and respond back to the NRC.

15.0 WORK CONTROL CENTER

The NRC provided various concerns related to the Work Control Center (WCC). The concerns were generally on the subjects of safety tags, work orders, and administration of the WCC. Thirty two (32) concerns were associated with tagging and 41 were associated with other WCC issues. Previous NRC actions in response to these concerns included inspection of specific issues that may have had some potential safety significance and referral to NNECO with subsequent NRC evaluation.

Background

The NRC documented in inspection reports its review of previous employee concerns and other issues related to the WCC. For example, Inspection Report 50-336/91-04 identified (open) unresolved item (UNR) 50-336/91-04-02 as post maintenance control of safety related equipment. Future NRC inspection of this item will include verification of licensee corrective actions to strengthen control of post maintenance activities. Another example was (open) UNR 50-336/91-28-01 in Inspection Report 50-336/91-28 (IR 91-28). Future NRC inspection will assess the adequacy of the equipment tag-out restoration process.