NORTHEAST UTILITIES
The Connecticut Light And Power Company
Western Massachusetts Electric Company
Holyoke Water Power Company
Northeast Utilities Service Company
Northeast Nuclear Energy Company

General Offices · Selden Street, Berlin Connecticut

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Re: 10CFR50.73(a)(2)(i)
February 26 1992
MP-92-221

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Reference: Facility Operating License No. DPR-21
Docket No. 50-245
Licensee Event Report 92-001-00

Gentlemen:

This letter forwards Licensee Event Report 92-001-00 required to be submitted within thirty (30) days pursuant to 10CFR50.73(A)(2)(i).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

Stephen E. Scace
Director, Millstone Station

SES/SC:dlr

Attachment: LER 92-001-00

cc: T. T. Martin, Region 1 Administrator
W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2 and 3
D. H. Jaffe, NRC Project Manager, Millstone Unit No. 1

Cert No P8288713565

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NRC Form 366 (6-89)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES: 4/30/92

Estimated burden per response to comply with this information collection request: 50.0 hrs. Forward comments regarding burden estimate to the Records and Reports Management Branch (P-630), U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Millstone Nuclear Power Station Unit 1	0 5 0 0 0 2 4 5	1 OF 0 5

TITLE (4)

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES	
0 1	2 7	9 2	9 2	- 0 0 1	- 0 0	0 2	2 6	9 2		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS BEING SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	0 0 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
Steven Cohen, Assoc. Engineer Ext. 4401	2 0 3 4 4 7 - 1 7 9 1

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
X YES (If yes, complete EXPECTED SUBMISSION DATE)	NO		0 8	0 3	9 2

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On January 27, 1992, at 1300 hours, with the plant in cold shutdown (136 degrees Fahrenheit, 0 psi) it was discovered that opening a Stand-by Gas Treatment (SBGT) circuit breaker would defeat the isolation signal to two (2) of the four (4) reactor building ventilation isolation dampers thus making them inoperable with regard to providing secondary containment isolation. Defeating the isolation signal to two of the four reactor building ventilation isolation dampers resulted in a violation of Technical Specifications secondary containment requirements. The remaining two dampers were operable and would have isolated the reactor building in the event of a condition requiring secondary containment isolation. The SBGT system procedures have been revised to provide guidance on removing one SBGT circuit from service. No safety consequences resulted from this event.

I. Description of Event

On January 27, 1992, at 1300 hours, with the plant in cold shutdown (136 degrees Fahrenheit, 0 psi) it was discovered that opening a Stand-by Gas Treatment (SBGT) circuit breaker would defeat the isolation signal to two (2) of the four (4) reactor building ventilation isolation dampers thus making them inoperable with regard to providing secondary containment isolation. Defeating the isolation signal to two of the four reactor building ventilation isolation dampers resulted in a violation of Technical Specifications secondary containment requirements. The remaining two dampers were operable and would have isolated the reactor building in the event of a condition requiring secondary containment isolation. The SBGT system procedures have been revised to provide guidance on removing one SBGT circuit from service. No safety consequences resulted from this event.

II. Cause of Event

The cause of this event was determined to be the inadequate design of the original isolation logic for the Reactor Building Ventilation dampers for all SBGT system configurations (i.e. one SBGT breaker opened).

III. Analysis of Event

The isolation of the Reactor Building Ventilation is required to prevent a radioactive release during an accident or high radiation condition. The Reactor Building Ventilation isolates on a Group II isolation (2 psi drywell pressure and low reactor water level (+8)) or Hi-radiation signal (steam tunnel exhaust radiation 50mr/hr or greater, refuel floor radiation 100mr/hr or greater and reactor building ventilation exhaust radiation 1.mr/hr or greater).

During an engineering technical evaluation of the supporting systems required to implement an Emergency Operating Procedure (EOP) the following was discovered. (Reference Figures 1 and 2 attached)

1) The relay that provides the isolation signal to the reactor building ventilation dampers also provides the SBGT initiation signal. This relay is energized to isolate/initiate and receives power from the SBGT circuit breaker.

2) The pilot solenoids to the air operated isolation dampers are normally energized and de-energize to isolate. These pilot solenoids valves receive power from Instrument AC and 125 VDC and do not fail closed when a SBGT breaker is opened. These pilot solenoids valves receive a close signal when the SBGT initiation relay energizes. When the SBGT circuit breaker is opened, the power to the SBGT initiation relay is removed. This prevents the SBGT initiation relay from energizing and providing the isolation signal to 2 of the 4 Reactor Building Ventilation Isolation dampers (one supply damper and one exhaust damper). These two dampers will remain open until the redundant supply and exhaust damper close, tripping the Reactor Building Supply fans. The redundant supply and exhaust dampers would still receive an isolation signal and isolate the Reactor Building.

3) Defeating the isolation signal to 2 of the 4 isolation dampers would reduce the reliability of the Reactor Building Ventilation Isolation. However, during normal plant operation a SBGT circuit breaker is not opened except as required for maintenance or surveillance.

This event is being reported per 10CFR50.73 (a) (2) (i) (B) , "Any operation or condition prohibited by Technical Specifications" based on the following:

1) The opening of a SBGT circuit breaker defeats the isolation signal to 2 of the 4 isolation dampers. These two dampers will remain open and will not receive an isolation signal until the redundant supply and exhaust damper close, tripping the Reactor Building supply fans.

2) Technical Specification's definition of Secondary Containment requires "All automatic ventilation system isolation valves be operable or secured in the isolated position".

IV. Corrective Action

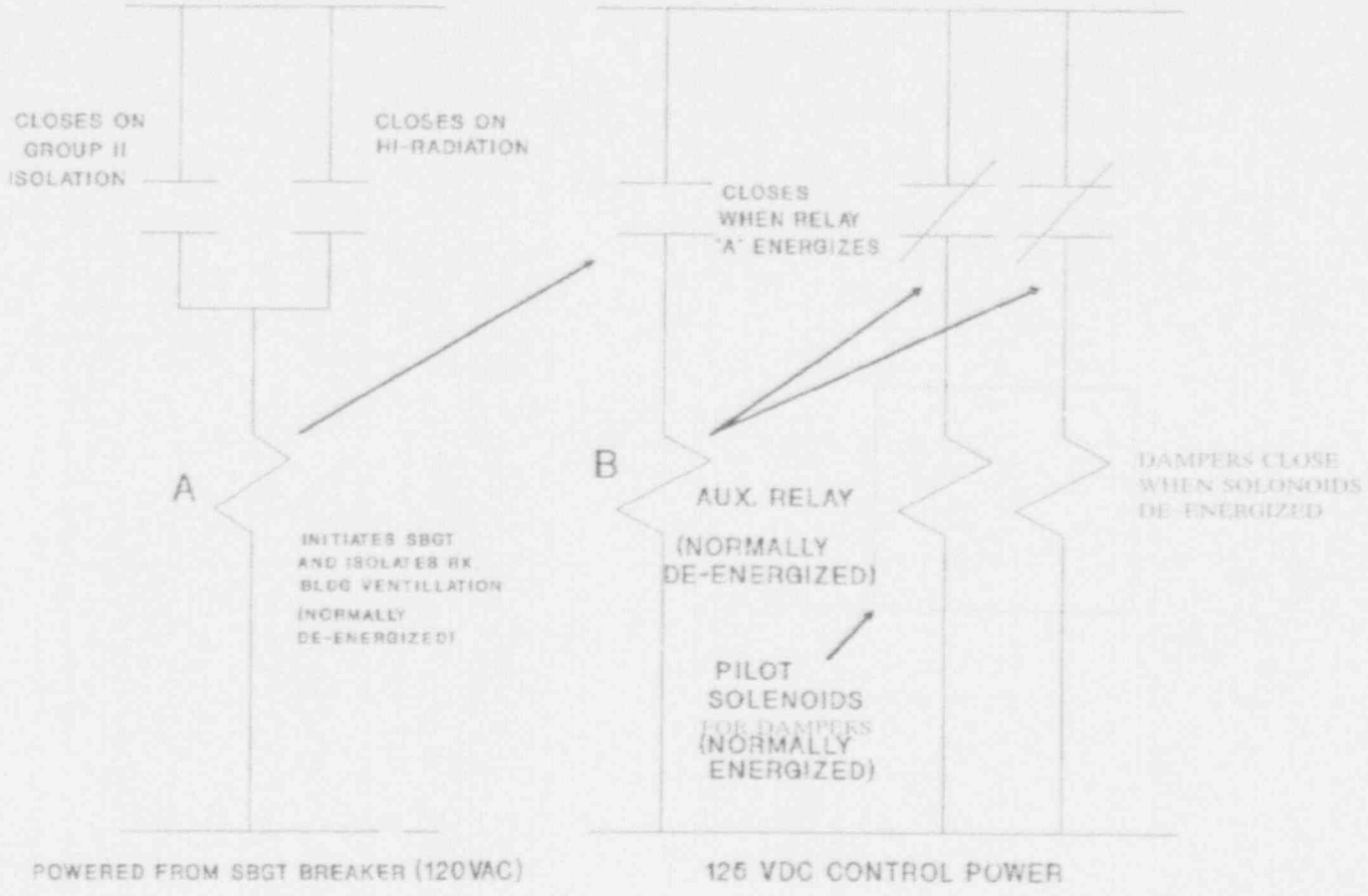
The short term corrective action was to revise the SBGT System operating procedure (SP 646.6) to provide guidance on removing one train of SBGT from service when Secondary Containment is required per Technical Specification Requirements. The procedure revision provides guidance for removing one train of SBGT for maintenance or surveillance of the fan and filter assembly or for maintenance of the SBGT control logic. The procedure directs operators to pull the thermal overloads in lieu of opening the circuit breaker. This prevents the isolation signal to 2 of the 4 dampers from being defeated. If the breaker is required to be opened, the operators will be required to isolate the normal reactor building ventilation and run the operable SBGT train. Additionally, Caution labels have been installed on the SBGT breakers referencing the operators to SP 646.6 prior to opening a SBGT circuit breaker.

A design modification to the SBGT initiation and Reactor Building Ventilation isolation logic is being evaluated. If deemed appropriate, this modification will be implemented during the next refueling outage.

V. Additional Information

None

REACTOR BUILDING VENTILATION ISOLATION LOGIC FIGURE 1



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		YEAR		SEQUENTIAL NUMBER		REVISION NUMBER				
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

REACTOR BUILDING VENTILATION ISOLATION DAMPERS FIGURE 2