North Atlantic

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The Northeast Utilities System

February 18, 2000

Docket No. 50-443

NYN-00013

Ref.: AR#00001337
AR#00000874
CR 00-334

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Seabrook Station
Licensee Event Report (LER) 00-001-00
Non-Compliance With Technical Specification 4.8.4.2 Action Requirements

Enclosed is Licensee Event Report (LER) 00-001-00 for an event that occurred at Seabrook Station on January 19, 2000. This event is being reported pursuant to 10 CFR 50.73(a)(2)(i).

Should you require further information regarding this matter, please contact Mr. James M. Peschel, Manager-Regulatory Programs at (603) 773-7194.

Very truly yours,

NORTH ATLANTIC ENERGY SERVICE CORP.

Ted C. Feigenbaum
Executive Vice President and
Chief Nuclear Officer

cc: H. J. Miller, NRC Regional Administrator
R. M. Pulsifer, NRC Project Manager, Project Directorate 1-2
R. K. Lorson, NRC Senior Resident Inspector

IE22

ENCLOSURE 1 TO NYN-00013

NRC FORM 366 (4-95) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 04/30/98
ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-6 F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

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TITLE (4)

Non-Compliance With Technical Specification 4.8.4.2 Due to Inadequate Breaker Scheduling Guidance

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 NAME	DOCKET NUMBER
01	19	00	00	001	00	02	18	00	FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)			
POWER LEVEL (10)	100	20.2201(b)	20.2203(a)(2)(v)	[X] 50.73(a)(2)(i)	50.73(a)(2)(viii)
		20.2203(a)(1)	20.2203(a)(3)(i)	50.73(a)(2)(ii)	50.73(a)(2)(x)
		20.2203(a)(2)(i)	20.2203(a)(3)(ii)	50.73(a)(2)(iii)	73.71
		20.2203(a)(2)(ii)	20.2203(a)(4)	50.73(a)(2)(iv)	OTHER
		20.2203(a)(2)(iii)	50.36(c)(1)	50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A
		20.2203(a)(2)(iv)	50.36(c)(2)	50.73(a)(2)(vii)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
Jeffrey E. Sobotka, Supervisor - Regulatory Compliance	(603) 773-7152

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
N/A										

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE).	[X] NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On January 19, 2000, with the plant operating at 100% power (operational mode 1), it was determined that the performance of a Technical Specification (TS) required surveillance was not fully met prior to the start-up from refueling outage 5 (OR05) (May/June 1997). TS 4.8.4.2.a.2 requires testing of 5 Type FJ circuit breakers, (10% of the total population of 42) and should a circuit breaker be found inoperable during functional testing, an additional representative sample of at least 10% of all circuit breakers of the inoperable type shall be functionally tested until no more failures are found or all circuit breakers of that type have been functionally tested. Contrary to the requirement of TS 4.8.4.2.a.2, testing on 5 additional Type FJ circuit breaker was not performed per TS. Out of a total population of 42 Type FJ circuit breakers, 25 breakers had been tested while 16 of the remaining available 17 breakers were inappropriately considered unavailable for testing due to preconditioning, (removed from their cabinets and manually exercised) and one breaker was inadvertently left off the list of available breakers, thus the requirements of TS 4.8.4.2.a.2 were not met.

This event is reportable pursuant to the requirements of 10 CFR 50.73 (a)(2)(i)(B) as a condition prohibited by the plant Technical Specifications. The cause of the event was the lack of a formal program to ensure TS 4.8.4.2.a.2 was met. Corrective actions have been identified to formalize the program to improve scheduling guidance for TS 4.8.4.2.a.2 breaker selection.

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TEXT *(If more space is required, use additional copies of NRC Form 366A)* **(17)**

I. Description of Event

On January 19, 2000, with the plant operating at 100% power (operational mode 1), North Atlantic Energy Service Corporation (North Atlantic) determined that the performance of a Technical Specification (TS) required surveillance was not fully met prior to the start-up from refueling outage 5 (OR05). TS 4.8.4.2 provides surveillance testing requirements for containment penetration conductor overcurrent protective devices and protective devices for class 1E power sources connected to non-class 1E circuits. The surveillance requirement for TS 4.8.4.2.a.2 states that the above stated protective devices are demonstrated operable at least once per 18 months by functionally testing a representative sample of at least 10% of each type of device. It also states that, "Circuit breakers and/or overload devices found inoperable during functional testing shall be restored to OPERABLE status prior to resuming power. For each circuit breaker and or overload devices found inoperable during these functional tests, an additional representative sample of at least 10% of all circuit breakers and/or overload devices of the inoperable type shall be functionally tested until no more failures are found or all circuit breakers and or overload devices of that type have been functionally tested."

During OR05 (May/June 1997), North Atlantic scheduled time/current testing of (5) five 480V pressurizer heater Type FJ thermal magnetic molded case circuit breakers [ED] (10% of a population of 42 Type FJ circuit breakers). The initial testing of the 5 Type FJ circuit breakers identified one failure. Per the requirements of TS 4.8.4.2.a.2, an additional representative sample of 10% of the Type FJ circuit breakers was tested. Once again, one failure of the 5 Type FJ circuit breakers was identified. This testing process was repeated three more times with a fresh sample of 5 Type FJ circuit breakers used for each additional test with one failure identified for each test. At the conclusion of the fifth series of tests, 25 Type FJ breakers had been tested and 5 failures had been identified. Per the requirements TS 4.8.4.2.a.2, an additional 5 Type FJ circuit breakers were required to be tested. However, of the remaining 17 Type FJ breakers, 16 breakers were inappropriately excluded from the population of breakers available for testing since they were preconditioned during previously performed preventative maintenance. As a result, none of the remaining 16 breakers were tested. Additionally, the last remaining available Type FJ breaker was not tested due to being inadvertently left off the list of Type FJ breakers. Thus the requirements of TS 4.8.4.2.a.2 were not fully met.

The failure to test all of the TS required circuit breakers within the 18 month period allowed, as required by Specification TS 4.8.4.2.a.2 is a condition prohibited by the plant Technical Specifications. This condition is reportable pursuant to the requirements of 10 CFR 50.73 (a)(2)(i)(B).

II. Cause of Event

The cause of this event was the lack of a formal program to ensure TS 4.8.4.2.a.2 was met. Insufficient guidance was provided for identifying the population of breakers that would be available for testing, should a failure occur. Improper interpretation of existing information on preconditioning led to the inappropriate assumption that the breakers were not available for testing due to preconditioning. Specifically, the 16 breakers had been removed from their cabinets and manually exercised. Breaker preconditioning should not have eliminated the breakers from the requirements of TS 4.8.4.2.a.2. The one breaker that was inadvertently left off the list of Type FJ breakers was an administrative oversight. A contributing factor to the lack of a formal program was the inadequate response to observations made during a 1992 Quality Assurance (QA) audit report. Effectively addressing many of the observations identified in the 1992 QA audit report may have prevented this event.

III. Analysis of Event

The safety consequences of this event are minimal. The 42 Type FJ breakers are 480v thermal magnetic molded case circuit breakers that provide containment penetration conductor overcurrent protection for the pressurizer heaters. Per the requirements of TS 4.8.4.2, Type FJ circuit breakers are subjected to one of two types of activities; 1) a time/current test performed at a rate of 10% of the breakers every 18-months and, 2) a 60-month preventative maintenance (PM) inspection. During OR05, the 16 circuit breakers that were incorrectly eliminated from the population available to satisfy TS 4.8.4.2.a.2, (time/current testing) were subjected to the 60-month preventative maintenance activity. The 60-month preventative maintenance activity includes the removal of the breaker from its cabinet and manually exercising the breaker to check mechanical operation. Surveillance records indicate that the most common failure mode of Type FJ circuit breaker TS 4.8.4.2.a.2 testing has been the inability to meet the instantaneous time requirements for tripping. Experience has shown that the likelihood of meeting the instantaneous time requirements is greatly enhanced when the breaker has been mechanically exercised such as during the 60-month PM. As a result of an administrative oversight, North Atlantic believes that the 16 circuit breakers mentioned above would have performed their intended function and provided adequate penetration protection in the event of an overcurrent condition. In addition, during OR06, 10 of the 16 circuit breakers mentioned above were tested, 9 tested successfully and 1 failure that was replaced. The one breaker that was not tested had been successfully tested during OR03. A review of previous refueling outage Type FJ TS 4.8.4.2.a.2 documentation was performed to ensure that there were no previous occurrences of this event.

IV. Corrective Action

1. Procedure WM 9.1, "Technical Specification Surveillance Performance and Scheduling," will be revised to provide instructions for scheduling and clarify the responsibilities regarding the selection of the breaker sample population for the performance of TS 4.8.4.2.a.2.
2. Of the remaining 17 FJ circuit breakers not tested during OR05, 10 breakers were tested during OR06 and the seven remaining Type FJ circuit breakers will be scheduled for testing in the 12 week work planning schedule or by the completion of OR07.
3. Completed TS 4.8.4.2.a.2 surveillance activities, (for other than Type FJ circuit breakers) will be reviewed to determine if there are any generic implications regarding selection of sample populations based on preconditioning as a result of preventative maintenance or administrative oversight.

V. Additional Information

Similar Events

This is the first event of this type. North Atlantic has reported other events involving missed TS surveillances and inadequate controls in testing programs, however, none of them occurred as a result of inadequate breaker scheduling guidance.

LICENSEE EVENT REPORT (LER)

TEXT CONTINUATION

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Manufacturer Data

Not applicable.