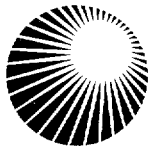

North Atlantic

North Atlantic Energy Service Corporation
P.O. Box 300
Seabrook, NH 03874
(603) 474-9521

The Northeast Utilities System

March 3, 2000

Docket No. 50-443

NYN-00023

Ref.: AR#00002611
CR 00-0688

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

Seabrook Station
Licensee Event Report (LER) 00-002-00
Inadequate Surveillance Testing of the Spent Fuel Pool Bridge and Hoist Interlock

Enclosed is Licensee Event Report (LER) 99-002-00 for an event that occurred at Seabrook Station on February 4, 2000. This event is being reported pursuant to 10 CFR 50.73(a)(2)(i). Also enclosed is a list of North Atlantic Energy Service Corporation (North Atlantic) commitments made in response to this LER.

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-00023

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)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Seabrook Station	05000443	1 of 3

TITLE (4)

Inadequate Surveillance Testing of the Spent Fuel Pool Bridge and Hoist Interlock

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
02	04	00	00	002	00	03	03	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)
James M. Peschel, Manager - Regulatory Programs	(603) 773-7194

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 February 4, 2000 with the plant operating at 100% power, it was determined by Operations Department personnel that the requirements of Technical Specification Surveillance Requirement (SR) 4.9.7 were not met. SR 4.9.7 requires the interlocks that prevent crane (spent fuel pool bridge and hoist) travel with loads in excess of 2100 pounds over the fuel assemblies be demonstrated operable within 7 days prior to crane use and at least 7 days thereafter during crane operation. SR 4.9.7 was met utilizing station procedure OX1415.04 "Spent Fuel Bridge Assembly Weekly Operational Test." During a review of OX1415.04, it was determined that inconsistencies existed between the surveillance procedure acceptance criteria and SR 4.9.7.

Since the spent fuel pool bridge and hoist travel interlock and the overload protection device were not set to meet the requirements of SR 4.9.7, this is a condition prohibited by the Technical Specifications and is reportable pursuant to the requirements 10 CFR 50.73(a)(2)(i)(B).

This event resulted from a misunderstanding of the relationship of the spent fuel pool bridge and hoist interlocks as they pertain to the requirements of SR 4.9.7. The safety consequences of this event are minimal. Two corrective actions have been identified to prevent recurrence.

I. Description of Event

On February 4, 2000 with the plant operating at 100% power, it was determined by Operations Department personnel that the requirements of Technical Specification Surveillance Requirement (SR) 4.9.7 were not met. SR 4.9.7 requires the interlocks that prevent crane (spent fuel pool bridge and hoist [DB]) travel with loads in excess of 2100 pounds over the fuel assemblies be demonstrated operable within 7 days prior to crane use and at least 7 days thereafter during crane operation. SR 4.9.7 was met utilizing station procedure OX1415.04 "Spent Fuel Bridge Assembly Weekly Operational Test." During a review of OX1415.04, it was determined that inconsistencies existed between the surveillance procedure acceptance criteria and SR 4.9.7. Specifically, OX1415.04 was used to meet SR 4.9.7 by verifying that the bridge notch travel interlock (travel interlock) would prevent spent fuel pool bridge and hoist travel to an area where a load greater than 2100 pounds could be lifted by the hoist. Contrary to the requirements of SR 4.9.7, this interlock did not prevent movement of the spent fuel pool bridge and hoist travel with loads in excess of 2100 pounds.

The design of the spent fuel pool bridge and hoist also incorporates the use of an overload protection device (overload cutout) to limit the uplift force which could be applied to the fuel storage racks. This protection device limits the hoist load when lifting a fuel assembly clear from its seated position. This overload protection device acts as an interlock to prevent movement of the spent fuel pool bridge and hoist with loads in excess of 2500 pounds but would not have prevented movement for loads in excess of 2100 pounds as specified by SR 4.9.7.

Subsequent opportunities to identify deficiencies associated with meeting SR 4.9.7 were missed. In 1986, it was determined that the requirements of SR 4.9.7 did not apply to spent fuel pool bridge and hoist. However, this information was misinterpreted and the 2500 pound overload protection device was relied on to meet the requirements of SR 4.9.7.

In 1996, an adverse condition report was written to document that the requirements of OX1415.04, as written were not consistent with the requirements of SR 4.9.7. The evaluation of this adverse condition report concluded that the overload cutout could not satisfy the requirements of SR 4.9.7 and incorrectly relied on the travel interlocks to satisfy this requirement. As a result, OX1415.04 was incorrectly revised to rely on the travel interlock to satisfy the requirements of SR 4.9.7.

Since the spent fuel pool bridge and hoist travel interlock and the overload protection device were not set to meet the requirements of SR 4.9.7, this is a condition prohibited by the Technical Specifications and is reportable pursuant to the requirements 10 CFR 50.73(a)(2)(i)(B).

II. Cause of Event

This event resulted from a misunderstanding of the relationship of the spent fuel pool bridge and hoist interlocks as they pertain to the requirements of SR 4.9.7.

III. Analysis of Event

The safety consequences of this event are minimal. There are two lifting devices located within the Fuel Storage Building that are capable of lifting loads. These devices are the cask handling crane and the spent fuel pool bridge and hoist. The cask handling crane is used to upend new fuel containers and transfer new fuel to dry storage, to transfer new fuel from dry storage to the new fuel elevator, and to transfer spent fuel shipping casks in and out of

the cask loading and decontamination areas. The cask handling crane as designed cannot be passed over the spent fuel storage area. The spent fuel pool bridge and hoist is a wheel-mounted walkway, spanning the fuel storage area which carries an electric monorail hoist on an overhead structure. The spent fuel pool bridge and hoist is used primarily to handle fuel assemblies and associated core components within the fuel storage area by means of long handled tools suspended from its hoist. The spent fuel pool bridge and hoist is also used to handle irradiated debris containers and to support fuel-related maintenance and inspection activities within the fuel storage area. Material handled with the spent fuel pool bridge and hoist within the spent fuel pool are administratively controlled (by procedure) to ensure that its 2100 pound lift rating is not exceeded. Therefore, the consequences of an accidental drop would not have exceeded the bounds of the most limiting case accident as described in Chapter 15 of the Updated Final Safety Analysis Report.

IV. Corrective Action

1. A design change will be implemented to the spent fuel pool bridge and hoist to establish compliance with Technical Specification Surveillance Requirement 4.9.7.

2. Surveillance procedure OX1415.04 will be revised to reflect the load limit of 2100 pounds to meet the requirements of SR 4.9.7. Thereby clarifying the requirements of the interlocks as they pertain to SR 4.9.7.

V. Additional Information

None

Similar Events

There have been three events reported (LERs 98-001-00, 98-003-00 and 98-013-01) in the last 2 years where inadequate surveillance tests have been identified. A review of these reports indicates that they were isolated events.

Manufacturer Data

Not Applicable.