North Atlantic
Energy Service Corporation

P.O. Box 300
Seabrook, NH 03874
Telephone (603) 474-9521
Facsimile (603) 474-2987

Ted C. Feigenbaum
Senior Vice President and
Chief Nuclear Officer

NYN-920126

September 25, 1992

United States Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Document Control Desk

Reference: (a) Facility Operating License No. NPF-86, Docket No. 50-443

Subject: Licensee Event Report (LER) 92-12-00: Engineered Safety Feature Actuation, Inadvertent SG Blowdown Isolation

Gentlemen:

Enclosed please find Licensee Event Report (LER) No. 92-12-00 for Seabrook Station. This submittal documents an Engineered Safety Feature actuation which occurred on August 26, 1992. This event is being reported pursuant to 10CFR50.73(a)(2)(iv). This event was previously reported by North Atlantic as a non-emergency four hour report, pursuant to 10CFR50.72(b)(2)(ii), on August 27, 1992.

Should you require further information regarding this matter, please contact Mr. James M. Peschel, Regulatory Compliance Manager at (603) 474-9521, extension 3772.

Very truly yours,

Ted C. Feigenbaum

TCF:MDO/tad
Enclosures: NRC Forms 366, 366A

cc: Mr. Thomas T. Martin
Regional Administrator
U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

INPO
Records Center
1100 Circle 75 Parkway
Atlanta, GA 30339

Mr. Gordon E. Edison
Senior Project Manager
Project Directorate I-3
Division of Reactor Projects
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Mr. Noel Dudley
NRC Senior Resident Inspector
P.O. Box 1149
Seabrook, NH 03874

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NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Seabrook Station	0 5 0 0 0 4 4 3	1 OF 0 3

TITLE (4)
Engineered Safety Feature Actuation, Inadvertent SG Blowdown Isolation

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	DOCKET NUMBER(S)
0 8	2 6	9 2	9 2	- 0 1 2	- 0 0	0 9	2 5	9 2		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)					
POWER LEVEL (10)	0 9 9	20.402(b)	20.405(c)	X	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)	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
James M. Peschel, Regulatory Compliance Manager, extension 3772	AREA CODE 603 4 7 4 - 9 5 2 1

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

CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

ABSTRACT

On August 26, 1992 at 2109 an Engineered Safety Feature (ESF) actuation occurred causing Steam Generator Blowdown (SGBD) [WI] to isolate. The inadvertent actuation and isolation occurred while performing surveillance testing on the Emergency Feedwater (EFW) [BA] system. The valves which isolated, normally close automatically whenever an EFW pump is started. This event was determined to be an inadvertent ESF actuation and thus, a 4 hour report was made to the NRC, pursuant to 10CFR50.72(b)(2)(ii), on August 27, 1992.

During EFW pump surveillance testing, procedure steps direct the installation of jumpers to prevent a SGBD isolation from occurring as a result of the specific surveillance activity being performed. The procedure which was used to start the EFW pump required the installation of two different jumpers. Another EFW surveillance procedure in use, specified that only one jumper be installed. The differing jumper requirements were due to the differences in what was being tested by the two procedures. Contrary to procedural requirements, only one jumper was installed, resulting in a SGBD isolation when the EFW pump was started. SGBD was re-established approximately 10 minutes after the isolation.

The primary root cause of this event has been determined to be personnel error involving failure to follow procedures required for the surveillance activities being performed. A contributing cause is procedure deficiency. Corrective action includes issuing written guidance stressing the importance of meeting all procedural prerequisites and changing procedures to specify the function of each jumper.

There were no adverse safety consequences as a result of this event. This is the first event of this type at Seabrook Station. At the time of the event the plant was in MODE 1 at 99% power.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Seabrook Station	0 5 0 0 0 4 4 3	9 2	— 0 1 2	— 0 0	0 2 OF 0 3

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

On August 26, 1992 at 2109 an Engineered Safety Feature (ESF) actuation occurred causing Steam Generator Blowdown (SGBD) to isolate. The inadvertent actuation and isolation occurred while performing surveillance testing on the Emergency Feedwater (EFW) system. The valves which isolated, normally close automatically whenever an EFW pump is started. This event was determined to be an inadvertent ESF actuation and thus, a 4 hour report was made to the NRC, pursuant to 10CFR50.72(b)(2)(ii), on 8/27/92.

The Steam Generator Blowdown (SGBD) system assists in maintaining secondary water chemistry by continuously removing and processing water from the steam generators. Since operation of the Emergency Feedwater System (EFW) is indicative of a low water level in the steam generators, SGBD is automatically isolated when a EFW pump is started. During EFW pump surveillance testing, procedure steps direct the installation of jumpers to prevent a SGBD isolation from occurring as a result of starting either the turbine driven or electric driven EFW pump.

On 8/26/92 two surveillance procedures were being performed which tested the EFW system. Each of these procedures specified the installation of jumpers specific to the surveillance activity being performed. Surveillance procedure OX1456.49, "Train B ESFAS Slave Relay K615 Quarterly GO Test", specified that two jumpers be installed. One jumper was to prevent an SGBD isolation from occurring due to starting of the electric driven EFW pump and the other jumper was to prevent an SGBD isolation from occurring due to the simulated starting of the turbine driven EFW pump.

Two surveillance activities from procedure OX1436.03, "Electric Driven EFW Pump Monthly, Quarterly, and 18 Month Surveillance Test", were also being performed at the same time as OX1456.49. These activities specified that one jumper be installed to prevent a SGBD isolation from occurring due to starting the electric driven EFW pump. This jumper is the same as the one specified in OX1456.49.

It is not uncommon to perform several surveillance activities simultaneously. In this case OX1456.49 was used, in part, to verify that the electric driven EFW pump would start when actuated by slave relay K615. Surveillance procedure OX1436.03 was used to verify that the electric driven EFW pump operating parameters, i.e. vibration, flow, and discharge pressure, were acceptable.

The control room operator performing the surveillance activities reviewed the procedures and issued the jumper installation/removal sheet, from only procedure OX1436.03, to the I&C technician. Thus, the jumper defeating the simulated turbine driven EFW pump SGBD isolation signal was not installed. When the electric driven EFW pump was started per OX1456.49, Steam Generator Blowdown isolated.

ROOT CAUSE

The primary root cause of this event has been determined to be personnel error involving a failure to complete all procedure prerequisites required for the surveillance activities being conducted. A contributing cause is a procedural deficiency, in that the surveillance activity prerequisite did not specify which SGBD signals were being bypassed.

CORRECTIVE ACTION

Written guidance has been issued which stresses that when performing concurrent surveillance activities, a complete review of each procedure is necessary to ensure that all required prerequisites have been completed. In addition, changes to SGBD procedures will be made to identify the specific isolation signals being isolated by the applicable prerequisite. The expected completion date for the SGBD procedure changes is November 1, 1992.

SAFETY CONSEQUENCES

The inadvertent ESF actuation placed the SGBD system in its safety related configuration, therefore there were no adverse safety consequences as a result of this event.

PLANT CONDITIONS

At the time of the event the plant was in MODE 1 at 99% power.

SIMILAR EVENTS

This is the first event of this type, involving the SGBD system, at Seabrook Station.