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July 17, 1992

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

Attention: Document Control Desk

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

Subject: Licensee Event Report (LER) 92-07-00: Non-compliance With Technical Specification 3.8.1 Action Requirements

Gentlemen:

Enclosed please find Licensee Event Report (LER) No. 92-07-00 for Seabrook Station. This submittal documents two related events which occurred on June 17 and 18, 1992. These events are being reported to 10CFR50.73(a)(2)(i).

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/act

cc: Mr. Thomas T. Martin
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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 5 |

TITLE (4)
Non-Compliance with Technical Specification 3.8.1 Action Requirements

| 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 6 | 1 8 | 9 2 | 9 2 | 0 0 7 | 0 0 | 0 7 | 1 7 | 9 2 | Seabrook Station | 0 5 0 0 0 4 4 3 |
| | | | | | | | | | | 0 5 0 0 0 |

| OPERATING MODE (9) | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11) | | | |
|---|---|---|---|---|
| POWER LEVEL (10) 1 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 |
|---|---|
| James M. Peschel, Regulatory Compliance Manager, ext. 3772 | AREA CODE 6 0 3 4 7 4 - 9 5 2 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 |
|---|---|---|---|---|---|
| YES (If yes, complete EXPECTED SUBMISSION DATE) | X NO | | | | |

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

On June 17, 1992 at 0500 the "B" train Emergency Diesel Generator (EDG) [EK] was removed from service to perform cylinder inspections. While the "B" train EDG was inoperable, two events occurred which resulted in non-compliance with Technical Specifications.

EVENT 1 On June 17, 1992 at 1415 it was discovered that the "A" train Containment Enclosure Emergency Air Cleanup System (EAH) [VC] was inoperable due to the performance of an instrument calibration on charging pump room exhaust fan EAH-FN-180A. This calibration activity rendered fan EAH-FN-180A incapable of automatically starting. The fan was capable of being manually started throughout this event. This resulted in non-compliance with Technical Specification 3.8.1.1, ACTION c.1, as the "A" train EAH was inoperable for a period that exceeded the first 2 hours that the "B" train EDG was inope[illegible]. At 1743 of the same day, the "A" train EAH was returned to an OPERABLE status.

EVENT 2 On June 18, 1992 at 0610 it was discovered that OPERABILITY of the "A" train EDG had not been demonstrated by the performance of Surveillance Requirement 4.8.1.1.2a.5) within 24 hours as required by Technical Specification 3.8.1.1, ACTION a. By 0638 of the same day, OPERABILITY of the "A" train EDG had been verified.

In each event the appropriate ACTION statement was entered and the inoperable equipment was returned to OPERABLE status. The Operations Manager has reviewed the events with the Operations shift personnel.

A review of the applicable Instrumentation & Control (I&C) procedures will be performed to determine if sufficient guidance is contained in the procedures to address Limiting Conditions for Operation and entering ACTION statements during maintenance activities. In addition, North Atlantic is reviewing the method used to track and schedule event driven surveillances to determine if enhanced methods of tracking can be utilized.

On June 17, 1992 at 0500 the "B" train Emergency Diesel Generator (EDG) [EK] was removed from service to perform cylinder inspections. While the "B" train EDG was inoperable, two events occurred which resulted in non-compliance with Technical Specifications.

EVENT 1

On June 17, 1992 at 1415 it was discovered that the "A" train Containment Enclosure Emergency Air Cleanup System (EAH) [VC] was inoperable due to the calibration of a pressure switch for charging pump room exhaust fan EAH-FN-180A. The calibration activity rendered fan EAH-FN-180A incapable of automatically starting. Fan EAH-FN-180A was capable of being started manually throughout this event.

The containment enclosure is the secondary containment barrier that prevents the release of radioactive material to the environment. The containment enclosure is automatically isolated in the event of a loss-of-coolant-accident (LOCA). Under normal conditions makeup air to the charging pump rooms is supplied by way of the containment enclosure ventilation area which is supplied by the Primary Auxiliary Building (PAB) supply fans. The charging pump rooms are exhausted through the PAB cleanup exhaust system to the atmosphere via the unit plant vent. Under LOCA conditions, return airflow from the charging pump rooms will stop; pressure differential switches will detect the loss of airflow; and the charging pump room exhaust fans (EAH-FN-180A and EAH-FN-180B) will start to recirculate air from the charging pump rooms back to the containment enclosure area. The pressure switch being calibrated was the one that would automatically start fan EAH-FN-180A. Therefore fan EAH-FN-180A was inoperable while the switch was being calibrated.

Technical Specification 3.8.1.1, ACTION c.1 states in part:

> "With one diesel generator inoperable in addition to ACTION a. or b. above, verify that:
>
> 1. All required systems, subsystems, trains, components, and devices that depend on the remaining OPERABLE diesel generator as a source of emergency power are also OPERABLE, ...
>
> If these conditions are not satisfied within 2 hours be in at least HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours."

Fan EAH-FN-180A is considered a subsystem in support of Train "A" Containment Enclosure Emergency Air Cleanup System. Therefore, non-compliance with Technical Specification 3.8.1.1, ACTION c.1 resulted because the "A" train EAH was inoperable for a period exceeding the first 2 hours that the "B" train EDG was inoperable. If a required system or train is inoperable, two hours are allowed to return the system or train to an OPERABLE status or a plant shutdown must be initiated. The following actions occurred on June 17, 1992 relative to this event:

| Time | Action |
|---|---|
| 1130 | Calibration started on the pressure differential switch for fan EAH-FN-180A. |
| 1415 | Entered T.S. 3.8.1.1, ACTION c.1 because the "A" train EAH was determined to be inoperable while the "B" train EDG was also inoperable, even though "A" train EAH had the capability to be started manually. |

| Time | Action |
|---|---|
| 1607 | Manually started fan EAH-FN-180A to place the fan in its safeguard position and exited T.S. 3.8.1.1, ACTION c.1. |
| 1650 | Determined that fan EAH-FN-180A was not in its safeguard position since the fan would not automatically start if a Loss of Offsite Power/Safety Injection (LOP/SI) event were to occur. Re-entered T.S. 3.8.1.1, ACTION c.1 and began preparations for a plant shutdown. |
| 1743 | Declared fan EAH-FN-180A to be OPERABLE and exited T.S. 3.8.1.1, ACTION c.1. |

**EVENT 2**

On June 18, 1992 at 0610 it was discovered that OPERABILITY of the "A" train EDG had not been demonstrated by the performance of Surveillance Requirement 4.8.1.1.2a.5) within 24 hours as required by Technical Specification 3.8.1.1, ACTION a.

Technical Specification 3.8.1.1, ACTION a. states in part:

> "With either an offsite circuit or diesel generator of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Specification 4.8.1.1.1a within 1 hour and at least once per 8 hours thereafter and Specification 4.8.1.1.2a.5) within 24 hours;"

Surveillance Requirement 4.8.1.1.1a was performed within 1 hour and at least once per 8 hours thereafter as specified in the Technical Specifications. Surveillance Requirement 4.8.1.1.2a.5 was performed within 25 hours 38 minutes, 1 hour and 38 minutes longer than required.

An EDG is OPERABLE if it can be started and attain rated voltage and frequency within the required time. Technical Specification 3.0.3 was entered due to the failure to complete the ACTION requirement of Technical Specification 3.8.1.1, ACTION a. within the required time. The following actions occurred relative to this event:

| Time | Action |
|---|---|
| 0610 | Entered Technical Specification 3.0.3 due to the failure to complete the requirements of Technical Specification 3.8.1.1c, ACTION a. within the required time. |
| 0638 | Started the "A" train EDG, verified that rated voltage and frequency were attained within the required times and exited T.S. 3.0.3. |

EVENT CAUSES

**EVENT 1**

The cause of this event was determined to be personnel error. Specifically, there was inadequate communication between an I&C technician and the Work Control Coordinator. The technician performing the procedure realized that the fan would become inoperable but, during the pre-job briefing he was not successful in communicating this to the individual responsible for controlling work in the plant. In addition, the lack of adequate procedural guidance contributed to the event.

The procedure IS1624.327, "P-5027 Charging Pump Room Return Duct Pressure - Train A," used to calibrate the pressure switch did not state that performance of the procedure would remove the ability of the fan to automatically start, thereby causing the fan to be considered inoperable.

EVENT 2

The cause of this event was determined to be personnel error. Specifically, there was an inadequate shift turnover briefing due to miscommunication. The requirement to complete the surveillance for the "A" train EDG was verbally communicated to the oncoming shift but not recorded on the shift turnover briefing sheet.

CORRECTIVE ACTIONS

1. The appropriate Technical Specification ACTION statements were entered and the inoperable equipment was returned to OPERABLE status.

2. The Plan of the Day (POD) process was revised to ensure that work activities not completed during their assigned system week are either postponed to the next week when the affected train is removed from service or are reviewed to ensure they can be worked in the opposite train system week without adversely affecting train operability.

3. The Operations Manager reviewed the events with the Operations shift personnel to emphasize close scrutiny of non-technical specification work items for their effect on systems required by the Technical Specifications, diligent tracking of action requirements and written discussion on turnover notes.

4. A review will be performed of the applicable Instrumentation & Control (I&C) procedures to determine if sufficient guidance is contained in the procedures to address Technical Specification Limiting Conditions for Operation and the entry into ACTION statements during maintenance activities. This review is scheduled to be completed by January 30, 1993.

5. The method utilized by Control Room personnel to track and schedule event driven surveillance requirements will be reviewed to determine if a revision can be made to provide enhanced tracking capability. This review is scheduled to be completed by January 15, 1993.

6. A Training Development Request (TDR) will be submitted to request training regarding disablements of automatic functions for Engineered Safety Features equipment. The TDR is scheduled to be submitted to Training by August 30, 1992.

7. A review will be performed of Technical Clarification 145, "EAH and CBA System Components Required to be OPERABLE in MODES 1-4," to determine if additional guidance is required regarding the automatic start feature for fans EAH-FN-180A and EAH-FN-180B. This review is scheduled to be completed by August 30, 1992.

8. A Technical Clarification will be developed to list the systems that must be reviewed for OPERABILITY per Technical Specification 3.8.1.1, ACTION c.1 when an EDG is determined to be inoperable. This Technical Clarification is scheduled to be issued by April 1, 1993.

## SAFETY EVALUATION

There were no adverse safety consequences as a result of these events.

The ability to manually start fan EAH-FN-180A was maintained throughout the event. The operation of this fan is monitored from the main control board. If the fan had not started when required, the operators would have been alerted to this by the absence of correct status light indication or an elevated temperature in the charging pump cubicles. Either of these indications would have alerted the operator of the need to start the fan.

Additionally, for events occurring without a loss of offsite power, fan EAH-FN-180B remained available for operation. Either fan EAH-FN-180A or EAH-FN-180B has the ability to recirculate air from the charging pump cubicles back to the containment enclosure area.

The OPERABILITY of the "A" train EDG was demonstrated by performance of the EDG surveillance. Therefore, it was OPERABLE throughout the event and the ability of the engine to start when required was maintained.

## PREVIOUS OCCURRENCES

This is the first event of this type at Seabrook Station. At the time of the event the plant was in MODE 1 at 100% power.