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LaSalle Generating Station
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May 9, 1997

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Licensee Event Report #97-012-00, Docket #050-373 is being submitted to your office in accordance with 10 CFR 50.73(a)(2)(i).

Respectfully,

Fred Dacimo
Plant General Manager
LaSalle County Station

Enclosure

cc: A. B. Beach, NRC Region III Administrator
M. P. Huber, NRC Senior Resident Inspector - LaSalle
C. H. Mathews, IDNS Resident Inspector - LaSalle
F. Niziolek, IDNS Senior Reactor Analyst
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LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), 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.

FACILITY NAME (1):

LaSalle County Station Unit One

DOCKET NUMBER (2) 05000373

PAGE (3)

1 of 4

TITLE (4) The Low-Low-Setpoint Function Of The Main Steam Safety Relief Valves Has Not Been Tested In Accordance With The Technical Specification Surveillance Requirements Due To An Inadequate Procedure

| 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 | |
| 04 | 10 | 97 | 97 | 012 | 00 | 05 | 09 | 97 | LaSalle County Station Unit Two | 05000374 | |
| OPERATING MODE (9) | | | 4 | | | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11) | | | | | |
| POWER LEVEL (10) | | | 000 | | | | | | | | |
| | | | <input type="checkbox"/> 20.2201(b) | <input type="checkbox"/> 20.2203(a)(3)(i) | | | <input type="checkbox"/> 50.73(a)(2)(iii) | | | <input type="checkbox"/> 73.71(b) | |
| | | | <input type="checkbox"/> 20.2203(a)(1) | <input type="checkbox"/> 20.2003(a)(3)(ii) | | | <input type="checkbox"/> 50.73(a)(2)(iv) | | | <input type="checkbox"/> 73.71(c) | |
| | | | <input type="checkbox"/> 20.2203(a)(2)(i) | <input type="checkbox"/> 20.2003(a)(4) | | | <input type="checkbox"/> 50.73(a)(2)(v) | | | <input type="checkbox"/> OTHER | |
| | | | <input type="checkbox"/> 20.2203(a)(2)(ii) | <input type="checkbox"/> 50.36(c)(1) | | | <input type="checkbox"/> 50.73(a)(2)(vi) | | | (Specify in Abstract below and in Text, NRC Form 366A) | |
| | | | <input type="checkbox"/> 20.2203(a)(2)(iii) | <input type="checkbox"/> 50.36(c)(2) | | | <input type="checkbox"/> 50.73(a)(2)(vii)(A) | | | | |
| | | | <input type="checkbox"/> 20.2203(a)(2)(iv) | <input checked="" type="checkbox"/> 50.73(a)(2)(i) | | | <input type="checkbox"/> 50.73(a)(2)(vii)(B) | | | | |
| <input type="checkbox"/> 20.2003(a)(2)(v) | <input type="checkbox"/> 50.73(a)(2)(ii) | | | <input type="checkbox"/> 50.73(a)(2)(x) | | | | | | | |
| LICENSEE CONTACT FOR THIS LER (12) | | | | | | | | | | | |
| NAME | | | | | | TELEPHONE NUMBER (Include Area Code) | | | | | |
| Steve Latimer, System Engineer | | | | | | (815) 357-6761 Extension 2463 | | | | | |
| 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) | | | | | | | | | | | |
| <input checked="" type="checkbox"/> YES | (If yes, complete EXPECTED SUBMISSION DATE) | | | | NO | EXPECTED SUBMISSION DATE (15) | | MONTH | DAY | YEAR | |
| | | | | | | | | 05 | 01 | 98 | |

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

On April 10, 1997, it was determined during the Main Steam (MS) Safety Relief Valve (SRV) System Functional Performance Review that the functional procedure utilized to fulfill Technical Specification 4.4.2.2 for the Unit 1 and Unit 2 SRV Low-Low-Setpoint (LLS) System does not satisfy the requirements of this specification. Specifically this procedure fails to verify that the LLS function does not interfere with the operation of the SRVs or the Automatic Depressurization System (ADS). The procedure fails to keep the LLS logic active by energizing the SRV actuator solenoid while the ADS is initiated.

There is one ADS solenoid that is independent from the LLS system which would still be available to operate the SRVs when needed. Thus, the safety significance of this event is minimal.

This event was caused by an inadequate procedure. The appropriate procedures will be revised to ensure the testing requirements of the Technical Specifications are incorporated.

A supplemental report will be issued upon the completion of the revised SRV testing.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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

PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor

Energy Industry Identification System (EIIS) codes are identified in the text as [XX].

A. CONDITION PRIOR TO EVENT

| | | |
|----------------------|----------------------|------------------------|
| Unit(s): 1/2 | Event Date: 04/10/97 | Event Time: 0900 Hours |
| Reactor Mode(s): 4/N | Mode(s) Name: Cold | Power Level(s): 0%/0% |
| | Shutdown/Defueled | |

B. DESCRIPTION OF EVENT

The Main Steam (MS) [SB] Safety Relief Valves (SRVs) can be operated in three modes as follows:

1. The ADS mode, a design basis safety function, during which seven SRVs are opened by pneumatic actuators upon completion of system logic actuation.
2. The reactor vessel overpressure protection mode, a design basis safety function, during which SRVs are self-actuated by reactor vessel pressure overcoming the spring force in the SRVs.
3. The relief mode which is accomplished using the pneumatic operators, via a pressure switch or manually by a control switch.

The ADS mode (function 1) above) provides rapid depressurization of the reactor vessel, allowing Low Pressure Core Spray (LPCS) and Low Pressure Core Injection (LPCI) to inject into the reactor vessel. This may be required during a small or intermediate break Loss of Coolant Accident (LOCA) in the event of failure of the High Pressure Core Spray (HPCS) system.

Separate from the above functions, the Low-Low-Setpoint (LLS) system is used to limit SRV cycling for function 3 above, by assuring that no more than one SRV is cycling following the initial operation of SRVs. In doing so, the LLS controls five of the seven SRVs also utilized by ADS.

On April 10, 1997, it was determined that procedure LTS-500-5, "Low-Low-Setpoint System Functional Test", for the Unit 1 and Unit 2 LLS System does not verify that the LLS function does not interfere with the operation of the SRVs when actuated via the ADS as required by plant Technical Specifications. This discovery occurred during the station initiated System Functional Performance Review of the SRVs and ADS when the functional test was reviewed against the Technical Specification surveillance requirement.

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Technical Specification surveillance requirement 4.4.2.2 specifies a channel calibration of the LLS circuit be performed. The surveillance requirement was also written to ensure the LLS function does not interfere with the ADS operation. LTS-500-5 was written to satisfy these Technical Specification surveillance requirements; however, this procedure does not energize the ADS solenoids while the LLS logic is still energized. (LLS and ADS can be accomplished via common control solenoids.) LLS is initiated during the test but the signal is cleared prior to energizing the ADS solenoids.

Procedures LIS-NB-114(214), "Reactor High Pressure ADS and SRV Pressure Switch Refuel Calibration", LES-NB-101A(201A), "Division 1 ADS Relay Logic Test", and LES-NB-101B(201B), "Division 2 ADS Relay Logic Test", are additional procedures used to calibrate or test portions of the LLS or ADS logic. These procedures have been reviewed to determine if the Technical Specification surveillance requirements are satisfied. This review discovered that these procedures do not provide sufficient testing overlap, as well.

C. CAUSE OF EVENT

The cause of this event is an inadequate procedure. The cause of the inadequate procedure can not be determined from the documentation available. The original draft and the subsequent revisions provide identical testing methodology.

A supplemental report will be issued upon the completion of the revised ADS and LLS testing.

D. ASSESSMENT OF SAFETY CONSEQUENCES

This event is reportable per 10 CFR 50.73 (a)(2)(i) due to a condition prohibited by the plant Technical Specifications.

There are three solenoids on the SRV actuator that energize to open the valve. One solenoid is utilized by ADS only, one solenoid is utilized by ADS and LLS, and one solenoid is utilized by LLS and the main control room hand switch. The Design Basis for the ADS assumes a LOCA occurs coincident with a single failure of the HPCS system. In addition, due to the above described inadequate surveillance testing, this review assumes those SRV solenoids common to the LLS system and ADS do not function. Irrespective of this, the ADS solenoid which is independent of the LLS system, would still be available to operate the SRVs.

While this event represents a failure to fully comply with the Technical Specification surveillance requirement, it did not place the plant in an unsafe condition.

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E. CORRECTIVE ACTIONS

1. Procedures LIS-NB-114(214), LES-NB-101A(201A) and LES-NB-101B(201B) will be revised to functionally test the LLS logic along with the ADS logic. This will include steps to verify that the LLS does not interfere with the ADS. In addition, the role of these procedures to partially satisfy the Technical Specification surveillance requirement will be clarified. The procedures will be performed prior to operational condition 2 (startup) and 3 (hot shutdown) of Unit 1 and Unit 2. (NTS 373-180-97-012.01, NTS 373-180-97-012.02)
2. Procedure LTS-500-5 will be deleted. This procedure is no longer necessary since LIS-NB-114(214), LES-NB-101A(201A) and LES-NB-101B(201B) will be used to satisfy the Technical Specification surveillance requirement. (NTS 373-180-97-012.03)
3. The System Functional Performance Review Program, currently in progress, provides added confidence that selected Technical Specification surveillance requirements are consistent with other plant documentation and/or are being appropriately implemented. This program was initiated to establish a level of confidence that selected systems demonstrate performance consistent with the design basis. One of the elements of the program is to identify required system functions and sub-functions as described in design bases documents including the Technical Specifications. Surveillance testing requirements and procedures and other test documentation are then reviewed to confirm that system functionality is demonstrated. As stated previously, it is this program which identified the aforementioned discrepancy. Any inconsistencies identified among the source documents are being documented and tracked to resolution. This program is being implemented with applicable corrective actions completed prior to restart.

F. PREVIOUS OCCURRENCES

| LER NUMBER | TITLE |
|------------|---|
| 373-97-006 | Diesel Generator Testing Did Not Meet Surveillance Requirements Due to Misinterpretation of Technical Specification |

The System Functional Performance Review Program is reviewing the Technical Specifications and plant documentation to assure that the license requirements are being appropriately implemented. This LER is being submitted as a result of corrective actions identified in LER 373-97-006 and others.

G. COMPONENT FAILURE DATA

Since no component failure occurred, this section is not applicable.