NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES 8/31/85

# LICENSEE EVENT REPORT (LER)

| FACILITY NAME (1) | DOCKET NUMBER (2) | PAGE (3) |
|---|---|---|
| EDWIN I. HATCH, UNIT 1 | 0 5 0 0 0 3 2 1 | 1 OF 0 7 |

TITLE (4)
PERSONNEL ERRORS IN TECH SPEC AMENDMENT IMPLEMENTATION CAUSE MISSED SURVEILLANCES

| 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 1 | 0 9 | 8 7 | 8 7 | — | 0 0 3 | — 0 0 | 0 2 | 0 9 | 8 7 | E. I. HATCH, UNIT 2 | 0 5 0 0 0 3 6 6 |
| | | | | | | | | | | | 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) | | | |
|---|---|---|---|---|
| 1 | 20.402(b) | 20.405(c) | 50.73(a)(2)(iv) | 73.71(b) |
| POWER LEVEL (10) 1 0 0 | 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 |
|---|---|
| | AREA CODE |
| Raymond D. Baker, Nuclear Licensing Manager - Hatch | 4 0 4 5 2 6 - 7 0 1 6 |

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 1/9/87 at approximately 1400 CST, plant personnel in the Procedure Upgrade Program (PUP) performed a validation review of two plant procedures. They determined the procedures did not fully satisfy all surveillance requirements for two liquid radwaste discharge radiation monitors.

The validation review is required by the PUP to verify that procedures are technically adequate and incorporate all required license conditions. The validation process is part of our continuing actions for previous procedural problems.

The root cause of the event is personnel error. Plant personnel failed to completely incorporate the new surveillance requirements of Technical Specification Amendments 110 and 48 into plant procedures. Additionally, personnel error occurred in that the design of the Unit 1 discharge radiation monitor system would not cause the release pathway to isolate when the control switch was not in the operate position.

Corrective actions included: 1) procedure modification, 2) implementing a design change request, 3) performing surveillance tests, and 4) continuing to implement the PUP.




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

A. REQUIREMENT FOR REPORT

This report is required per 10 CFR 50.73 (a)(2)(i), because a portion of a Unit 1 and a Unit 2 Technical Specifications surveillance was not met. This caused the Unit 1 Technical Specifications section 1.0 item II and the Unit 2 Technical Specifications Section 4.0.2 not to be met.

B. UNIT(s) STATUS AT TIME OF EVENT

Unit 1 was in the run mode at an approximate power level of 2427 MWt (100 percent of rated thermal power). Unit 2 was in the run mode at an approximate power of 2431 MWt (100 percent of rated thermal power).

C. DESCRIPTION OF EVENT

On 1/9/87 at approximately 1400 CST, Procedure Upgrade Program (PUP) personnel were performing a validation review of two procedures, " Liquid Radwaste Monitor Instrument FT and C" (57SV-D11-011-1S) and " Liquid Radwaste Monitor Instrument FT" (57SV-D11-011-2S). The procedure validation process is required by the PUP and is intended to verify that procedures are technically adequate and incorporate all license conditions. The validation process is part of our continuing upgrading actions for previous procedural problems.

During the procedure validation review, PUP personnel determined the subject procedures do not fully implement a portion of a functional testing requirement. The requirement is applicable to the liquid radwaste effluent line radiation monitors 1D11-K604 and 2D11-K604. The Unit 1 Technical Specifications Table 4.14.1-1 table notation (1)c and Unit 2 Technical Specifications Table 4.3.6.9-1 table notation (1)c both require that the channel functional test demonstrate that when the controls for the monitors are not in the operate mode, the following occur: 1) automatic isolation of the liquid radwaste effluent pathway, and 2) alarm annunciation in the main control room. The Unit 1 and Unit 2 procedures did not verify the automatic isolation of the pathway. Both procedures did verify that the alarm annunciation occurred.

PUP personnel reviewed the Unit 1 design drawings and determined that the pathway could not isolate when the instrument controls for 1D11-K604 were taken out of the operate mode. Thus, the design criteria for the requirements of the Unit 1 Technical Specifications Table 4.14.1-1 table notation (1)c could not be met. The Unit 2 actual installation and drawings were reviewed and no similar problem was noted.

D. CAUSE OF EVENT

The root cause of this event is personnel error. Technical Specifications amendment numbers 110 and 48 for Unit 1 and Unit 2 respectively, were not thoroughly reviewed to insure procedure compliance with these amendments. The procedures which perform the functional test (FT) requirements of the Unit 1 Technical Specifications Table 4.14.1-1 and the Unit 2 Technical Specifications Table 4.3.6.9-1 did not fully satisfy the FT requirements listed in the above referenced tables under table note (1)c. These procedures had not been revised to include the above FT requirements for the respective Technical Specifications amendments numbers 110 and 48 when they became effective on 07/01/85.

The reason the Unit 1 liquid radwaste effluent radiation monitor 1D11-K604 did not isolate when the controls were moved out of the operate mode is due to personnel error. The amendments were implemented without checking the impact of the amendment on both units. Only the Unit 2 design was checked and it was assumed that the Unit 1 design was similar. This was not correct.

E. ANALYSIS OF EVENT

While the design of the Unit 1 controls for the liquid radwaste effluent radiation monitor was not consistent with the revised Technical Specifications, the plant had administrative controls in place, prior to and during this event, which would have precluded a release of radioactive materials in concentrations that would have exceeded normal release limits. The administrative controls involve not only the plant Health Physics/Chemistry Department, but also the Operations Department. For Health Physics (HP), these controls consist of:

1. Obtaining samples of the proposed discharge material, analyzing the sample and preparing a discharge permit. The permit documents the amount of radioactivity of the sample and the Health Physics personnel determine if the batch is suitable for release or if it requires further treatment.
2. The HP calculations are based on a minimum dilution flow rate of 10,000 gpm. The discharge is not performed without dilution. The 10,000 gpm flowrate is monitored by a discharge pipe flow monitor.

Operations personnel perform the following:

1. Verifying dilution flow rate.
2. Obtaining the approved discharge permit and releasing the sampled contents per the permit instructions.
3. Verifying the liquid radiation monitor is operable by consulting with the unit shift supervisor that no outstanding Limiting Conditions for Operations (LCOs) are in effect on the radiation monitor.
4. "Red lining" the discharge flow path on the appropriate procedure data package. "Red lining" means outlining the flow discharge path with a red marker to verify only the correct (sampled and approved for release) batch can flow out of the plant. All alternate flow paths are blocked by confirming at least one valve in each alternate flow path is closed.
5. Recording the radiation monitor reading of the discharge approximately 10 minutes after the flow is set. This data is documented on the discharge permit. If the reading on the monitor is greater than or equal to 5 percent below the background monitor reading on the discharge permit, the discharge is terminated. The discharge is terminated if at any time the monitor reading, in counts per second, exceeds the monitor trip set point noted on the discharge permit.

All of these administrative controls were in place at all required times.

Based on the above information, it is concluded this event had no adverse impact on plant safety.

F. CORRECTIVE ACTIONS

The Unit 1 liquid radwaste discharge monitor was placed in a LCO per the requirements of the Unit 1 Technical Specifications table 3.14.1-1 item #1 action 100. Design change request 87-13 was written on 1/13/87 to bring the Unit 1 radwaste discharge monitor, 1D11-K604, design logic into compliance with the Technical Specifications table 4.14.1-1, table notation (1)c. Procedure 57SV-D11-011-1S "Liquid Radwaste Monitor Instrument FT & C" was revised to include the functional test requirements of the Unit 1 Technical Specifications Table 4.14.1-1 table item (1)c. The revised 57SV-D11-011-1S procedure was performed during the validation process to satisfy the FT requirements. 1D11-K604 was returned to operable status on 1/21/87.

The Unit 2 liquid radwaste discharge monitor was confirmed to be operable per the requirements of the Unit 2 Technical Specifications table 4.3.6.9-1 table notation (1)c on 1/9/87. Procedure 57SV-D11-011-2 "Liquid Radwaste Monitor FT" was revised to fully incorporate the above mentioned Technical Specifications. The procedure was approved by the Plant Review Board (PRB) on 1/29/87.

The completion of Design Change Request 87-13 and the revision of 57SV-D11-011-1S "Liquid Radwaste Monitor Instrument FT & C" and 57SV-D11-011-2S "Liquid Radwaste Monitor Instrument FT" will assure compliance with the requirements of the Technical Specifications. Both procedures are in the final stages of the revision process and will be in place prior to the next scheduled surveillance.

A contributing cause to the events described in this LER may have been a superseded plant procedure 40AC-REG-001-0S, "Technical Specifications Surveillance Program" Rev. 0. This procedure was in effect at the time Technical Specifications amendments 110 and 48 became effective (7/1/85). This procedure was revised and strengthened by plant personnel as part of the continuing upgrading of plant procedures. The current revision (Rev. 2), were it effective on 7/1/85, could possible have prevented this event.

However, in light of this event, plant personnel have evaluated Rev. 2 of the procedure and have decided to further enhance the procedure. As previously mentioned, Rev. 2, as is, is believed fully adequate. However, a procedure enhancement will be performed as part of the normal procedure review/upgrade process, as a pro-active measure. The enhancement will include statements which will more fully explain the Technical Specifications amendment review criteria.

When amendments to the Technical Specifications are sent to the Corporate Office for processing, these amendments will be reviewed to determined if the changes are the result of design changes or for other causes. When the amendments are the result of causes other than design changes, the proposed amendment will be routed to the Corporate Office Engineering section to verify that the change can be performed by the existing plant design.

In addition to the above, the plant will continue to implement the PUP. This program is part of the long term corrective action to prevent these sorts of problems. These corrective actions are working, as demonstrated by the detection of this event by the PUP implementers.

G. ADDITIONAL INFORMATION

1. FAILED COMPONENT(s) IDENTIFICATION

No components failed in this event.

2. PREVIOUS SIMILAR EVENTS

Previous LER have reported events similar to those reported in this LER. These LERs are: 50-321/1985-028 (dated 7/29/85, 50-366/1985-022 (dated 8/14/85), 50-366/1985-028 Rev. 1 (dated 8/9/85), 50-321/1986-014 (dated 4/3/86), 50-366/1986-004 (dated 1/31/86), and 50-366/1986-006 (dated 3/20/86).

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

These LERs describe events where Technical Specifications surveillance requirements were not fully met due to inadequate procedures. The procedures were inadequate for the following reasons: 1) surveillance requirements were not fully incorporated into procedures, and 2) amendments to the Technical Specifications were not completely reviewed to ensure that the surveillance requirements were incorporated into the surveillance procedures.

The corrective actions for these events included: 1) performance of line-by-line reviews of the Technical Specifications and the surveillance procedures, 2) performing on site reviews of the surveillance data base, Technical Specifications and the applicable procedures, and 3) performing reviews of the events.

Other corrective actions have been in effect to further reduce the possibility of these sorts of events. These actions include: 1) revising procedures, 2) continuing with the PUP program, and 3) the strengthening of controls on the implementation of procedures as a result of Technical Specifications amendments.

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L. T. Gucwa
Manager Nuclear Safety
and Licensing

SL-1977
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February 9, 1987

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D. C. 20555

Attached is Licensee Event Report 50-321/1987-003. This report meets the reporting requirement of 10 CFR 50.73(a)(2)(i).

Sincerely,

for L. T. Gucwa

LGB/lc

Enclosure

c: Georgia Power Company
Mr. J. P. O'Reilly
Mr. J. T. Beckham, Jr.
Mr. H. C. Nix, Jr.
GO-NORMS

Nuclear Regulatory Commission
Dr. J. N. Grace, Regional Administrator
Mr. P. Holmes-Ray, Senior Resident Inspector - Hatch

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