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003747

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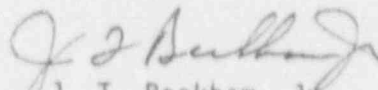
U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

PLANT HATCH - UNIT 1
NRC DOCKET 50-321
OPERATING LICENSE DPR-57
LICENSEE EVENT REPORT
INADEQUATE PROCEDURES RESULT IN
VIOLATIONS OF TECHNICAL SPECIFICATIONS REQUIREMENTS

Gentlemen:

In accordance with the requirements of 10 CFR 50.73(a)(2)(i), Georgia Power Company is submitting the enclosed Licensee Event Report (LER) concerning inadequate procedures which resulted in violations of Technical Specification requirements. This event occurred at Plant Hatch - Unit 1.

Sincerely,


J. T. Beckham, Jr.

OCV/cr

Enclosure: LER 50-321/1992-017

cc: Georgia Power Company
Mr. H. L. Sumner, General Manager - Nuclear Plant
NORMS

U.S. Nuclear Regulatory Commission, Washington, D.C.
Mr. K. Jabbour, Licensing Project Manager - Hatch

U.S. Nuclear Regulatory Commission, Region II
Mr. S. D. Ehneter, Regional Administrator
Mr. L. D. Wert, Senior Resident Inspector - Hatch

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TITLE (4)
INADEQUATE PROCEDURES RESULT IN VIOLATIONS OF TECHNICAL SPECIFICATIONS REQUIREMENTS

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	LOG NUM	REV	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
06	26	92	92	017	00	07	21	92	PLANT HATCH UNIT 2	05000366
									05000	

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR (11)

OPERATING MODE (9) 1	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL 100	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)(vi)	OTHER (Specify in Abstract below)
	20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(vii)(A)	
	20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(vii)(B)	
	20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME STEVEN B. TIPPS, MANAGER NUCLEAR SAFETY AND COMPLIANCE, HATCH	TELEPHONE NUMBER 912 367-7851
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COMPLETE ONE LINE FOR EACH FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORT TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORT TO NPROS

SUPPLEMENTAL REPORT EXPECTED (14)

<input type="checkbox"/> YES (if yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
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ABSTRACT (16)

On 6/26/92 at 0910 CDT, Unit 1 was in the Run mode at a power level of 2436 CMWT (100% rated thermal power). At that time, it was determined that the requirements of Unit 1 Technical Specifications Table 3.2-8, item 3, were not being met during the monthly performance of surveillance procedure 57SV-D11-008-1S, "Reactor Building Exhaust Vent Radiation Monitor Instrument FT." Specifically, the requirement to maintain operable one channel in a trip system while the other channel in the same trip system is being tested was not met. A jumper installed during the performance of the procedure defeated the trip signals from both exhaust vent radiation monitoring channels in the same trip system, rendering both channels inoperable. Further investigation revealed the same problem existed with surveillance procedures 57SV-D11-007-1S, "Refueling Floor Exhaust Vent Radiation Monitor Instrument," and 57SV-D11-008-2S, "Reactor Building Exhaust Vent Radiation Monitor Channel FT." Also, it was determined that procedure 57SV-D11-007-2S, "Refueling Floor Exhaust Vent Radiation Monitor Instrument," did not meet the Unit 2 Technical Specifications requirements for a functional test. Specifically, the functional test did not verify proper operation of the refueling floor exhaust vent radiation monitors' internal trip contacts.

The cause of this event is less than adequate procedures. Surveillance procedures 57SV-D11-007-1S, 57SV-D11-008-1S, and 57SV-D11-008-2S required the use of jumpers which rendered both channels in a trip system inoperable at the same time. Procedure 57SV-D11-007-2S did not completely test the channel as required for a functional test. Corrective actions for this event include revising procedure 57SV-D11-007-2S and implementing a design change.

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PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor
Energy Industry Identification System codes are identified in the text as (EIIIS Code XX).

DESCRIPTION OF EVENT

On 6/26/92 at 0910 CDT, Unit 1 was in the Run mode at a power level of 2436 MW (100% rated thermal power). At that time, non-licensed Nuclear Safety and Compliance personnel were investigating an event in which a fuse had blown during the performance of surveillance procedure 57SV-D11-008-1S, "Reactor Building Exhaust Vent Radiation Monitor Instrument FT." (That event was reported in Licensee Event Report 50-321/1992-016, dated 7/10/92.) Part of the investigation into the cause of the blown fuse focused on a jumper used during the performance of the exhaust vent radiation monitor (EIIIS Code IL) functional test. While it was concluded that inadvertent grounding of the jumper did not cause the fuse to blow, it was noted by personnel investigating the event that the placement of the jumper was such that both exhaust vent radiation monitor channels in the same trip system were rendered inoperable simultaneously. This is contrary to Unit 1 Technical Specifications which requires that one channel in a trip system remain operable while the other channel in the same trip system is being tested.

There are four reactor building exhaust vent radiation monitors, 1D11-K609A through D, which are arranged in two trip systems. The A and B monitors are in one trip system and the C and D monitors are in the other trip system. The logic is such that it takes a trip signal from both monitors (channels) in a trip system to actuate that trip system. Actuation of either trip system will then cause two of the four Standby Gas Treatment (SBGT, EIIIS Code BH) system trains to start, Unit 1 Secondary Containment inboard or outboard dampers to isolate, and selected Group 2 Primary Containment Isolation system (PCIS, EIIIS Code JM) inboard or outboard valves to close. Which trains start, dampers isolate, and valves close depends on which trip system actuates. Actuation of both trip systems, i.e., a trip signal from all four radiation monitors, will cause all four SBGT system trains to start, Unit 1 Secondary Containment inboard and outboard dampers to isolate, and selected Group 2 PCIS inboard and outboard valves to close.

Procedure 57SV-D11-008-1S requires that a jumper be placed across the trip output contacts in a trip system while the monitors in that system are being functionally tested. This is done to prevent the above listed actuations during that portion of the functional test in which both monitors in the same trip system are placed in the tripped condition. However, the jumper effectively renders both monitors in one trip system inoperable at the same time. This is contrary to Technical Specifications requirements which state that only one channel may be inoperable at a time during required surveillance testing.

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Further investigation revealed the same requirement was not being met during the monthly performance of surveillance procedures 57SV-D11-007-1S, "Refueling Floor Exhaust Vent Radiation Monitor Instrument," and 57SV-D11-008-2S, "Reactor Building Exhaust Vent Radiation Monitor Channel FT." T channel, trip system, and logic arrangements for the Unit 1 refueling floor exhaust vent radiation monitors and the Unit 2 reactor building exhaust vent radiation monitors are the same as previously described for the Unit 1 reactor building exhaust vent radiation monitors. The functional tests, including the use of jumpers, are the same as well. Therefore, the jumpers used in the respective functional tests rendered both channels in the same trip system inoperable contrary to the requirements of the Unit 1 and Unit 2 Technical Specifications.

The investigation also determined that procedure 57SV-D11-007-2S, "Refueling Floor Exhaust Vent Radiation Monitor Instrument," did not meet the Unit 2 Technical Specifications requirements for a functional test. Specifically, the functional test required by Unit 2 Technical Specifications Table 4.3.2-1, item 2, did not verify proper operation of the refueling floor exhaust vent radiation monitors' internal trip contacts. These contacts open on a high radiation signal and provide trip signals to the trip systems. Verification that these contacts open on a simulated high radiation signal was not performed as part of the monthly functional test; therefore, the Unit 2 Technical Specifications requirement to verify channel trip functions during the functional test was not met.

CAUSE OF THE EVENT

The cause of this event is less than adequate procedures. Surveillance procedures 57SV-D11-007-1S, 57SV-D11-008-1S, and 57SV-D11-008-2S required the use of jumpers in order to prevent unwanted Engineered Safety Feature system actuations during performance of portions of the procedures. However, due to the logic arrangement, the jumpers effectively rendered both channels in a trip system inoperable at the same time. Surveillance procedure 57SV-D11-007-2S did not completely test the Unit 2 refueling floor vent exhaust radiation monitors in that the proper operation of their internal trip contact was not verified.

REPORTABILITY ANALYSIS AND SAFETY ASSESSMENT

This event is reportable per 10 CFR 50.73(a)(2)(1) because a condition existed which was prohibited by the plant's Technical Specifications. Specifically, Unit 1 and Unit 2 Technical Specifications requirements concerning minimum number of operable channels were not met during the performance of certain surveillances. Functional test procedures 57SV-D11-007-1S, 57SV-D11-008-1S, and 57SV-D11-008-2S require the installation of jumpers which render inoperable both channels of refueling floor or reactor building exhaust vent radiation monitors in the same trip system. This is contrary to the operability requirements of

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Unit 1 Technical Specifications Table 3.2-8, items 2 and 3, and Unit 2 Technical Specifications Table 3.3.2-1, item 2.

The Unit 1 requirement/allowance for maintaining the remaining channel(s) operable in the trip system being tested is not explicitly listed in Table 3.2-8; it has been applied to this specification from the RPS and PCIS instrumentation specifications, Tables 3.1-1 and 3.2-1, respectively, of the Unit 1 Technical Specifications. The same requirement on Unit 2 is explicitly listed in Table 3.3.2-1.

Additionally, functional test procedure 57SV-D11-007-2S did not test completely the Unit 2 refueling floor exhaust vent radiation monitor channels per Unit 2 Technical Specifications Table 4.3.2-1, item 2.

The reactor building and refueling floor exhaust vent radiation monitoring systems are designed to monitor the exhaust vent from their respective areas and to initiate automatic actions to control the release of radioactive material to the environs when abnormal amounts of radioactive material are detected.

Exhaust vent high radiation signals isolate the normal ventilation systems and initiate the SBT systems to ensure the radioactive material is filtered through the SBT system trains before being discharged to the environs via an elevated release point, i.e., the Main Stack. In the case of the reactor building exhaust vent high radiation signal, selected Group 2 PCIS valves also close in order to isolate possible radioactive material leakage paths that may have caused the high radiation condition.

In this event, two monitors in a single trip system were rendered inoperable for short periods of time (less than two hours a month) during performance of the Technical Specifications required functional test. This prevented a signal from that trip system from actuating Engineered Safety Feature systems. However, one trip system was always operable and would have actuated sufficient systems to perform the design filtration and isolation functions on a high radiation signal. Furthermore, in the event of actuation of the one trip system and confirmation of the high radiation condition, it would be simply a matter of removing one or two jumpers (a few seconds work) to allow the other trip system to actuate the redundant Engineered Safety Feature systems.

Also in this event, it was determined that the internal trip contacts of Unit 2 refueling floor exhaust vent radiation monitors were not being directly tested as part of the monthly functional test; the test did, however, provide an indirect indication that the trip contact was functioning. The contacts were, and are, being tested directly as part of the Logic System functional Test performed during each refueling outage.

The trip contacts are part of the same relay as the annunciator contacts. The functional test did verify receipt of the high radiation annunciator on a simulated high radiation signal. The receipt of the annunciator confirmed that the internal trip relay de-energized upon receipt of a high radiation signal. Since the relay changes state during testing, it is reasonable to assume the

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trip contacts opened as well. It is highly unlikely that the trip contacts would fail to open if the annunciator were received. Therefore, it is reasonable to conclude that the verification of receipt of the annunciator and the performance of the Logic System Functional Test were sufficient to verify the proper operation of the trip contacts.

Based on the above analysis, it is concluded that this event had no adverse effect on nuclear safety. This analysis is applicable to all operating conditions.

CORRECTIVE ACTION

As a temporary measure, the Limiting Condition for Operation for two inoperable channels in the refueling floor or reactor building exhaust vent radiation system will be entered during the performance of the applicable functional test.

Wiring changes will be implemented to allow the internal trip contacts of each monitor to be tested without having to make both channels in the same trip system inoperable. Until such time as the wiring changes can be made, the applicable Limiting Condition for Operation will be entered during the performance of each functional test.

Procedure 57SV-D11-007-2S will be changed prior to its next scheduled performance to test the internal trip contact in the Unit 2 refueling floor exhaust vent radiation monitors. This also will require the Limiting Condition for Operation for two inoperable refueling floor exhaust vent radiation monitors to be entered during performance of the procedure.

ADDITIONAL INFORMATION

No systems other than those mentioned in this report were affected by this event.

No failed components caused or resulted from this event.

Previous similar events in the last two years in which inadequate procedures resulted in conditions prohibited by the plant's Technical Specifications were reported in the following Licensee Event Reports:

- 50-321/1990-019, dated 10/23/90,
- 50-321/1990-023, dated 1/9/91,
- 50-321/1991-008, dated 4/19/91,
- 50-321/1991-011, dated 7/9/91,
- 50-321/1991-012, dated 7/17/91,
- 50-321/1991-024, dated 11/12/91,
- 50-321/1991-025, dated 11/22/91,
- 50-321/1992-011, dated 5/29/92.

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Corrective actions for these previous events would not have prevented this event because the previous events involved different procedures. Moreover, the Company believes that no administrative changes in procedure processing are necessary to assure that Technical Specifications are correctly implemented. Corrections will continue to be incorporated into procedures when they are found necessary.