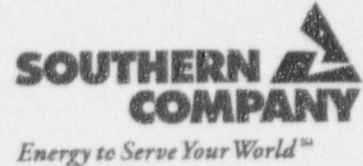


Lewis Sumner  
Vice President  
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May 7, 1997

Docket No. 50-366

HL-5386

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

Edwin I. Hatch Nuclear Plant - Unit 2  
Licensee Event Report  
Data Entry Error Results in Missed Technical Specifications  
Surveillance on Source Range Monitors

Gentlemen:

In accordance with the requirements of 10 CFR 50.73(a)(2)(i), Southern Nuclear Operating Company is submitting the enclosed Licensee Event Report (LER) concerning a data entry error which resulted in a missed Technical Specifications surveillance on the source range monitors.

Sincerely,

H. L. Sumner, Jr.

OCV/eb 130081

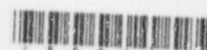
Enclosure: LER 50-366/1997-006

cc: Southern Nuclear Operating Company  
Mr. P. H. Wells, Nuclear Plant General Manager  
NORMS

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

U.S. Nuclear Regulatory Commission, Region II  
Mr. L. A. Reyes, Regional Administrator  
Mr. B. L. Holbrook, Senior Resident Inspector - Hatch

1/1  
LER



## 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 (MNB87714), 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)

Edwin I. Hatch Nuclear Plant - Unit 2

DOCKET NUMBER (2)

0 5 0 0 0 3 6 6

PAGE (3)

1 OF 5

TITLE (4)

Data Entry Error Results in Missed Technical Specifications Surveillance on Source Range Monitors

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(S)
0	4	0	7	9	7	9	7	0	0	0
0	4	0	7	9	7	9	7	0	0	0
OPERATING MODE (9)			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 7. (Check one or more of the following) (11)							
5			20.402(b) 20.405(c) 50.73(a)(2)(iv) 73.71(b)							
POWER LEVEL (10)			20.405(a)(1)(i) 50.36(c)(1) 50.73(a)(2)(v) 73.71(c)							
0 0 0			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)(ix)							

LICENSEE CONTACT FOR THIS LER (12)

NAME

Steven B. Tipps, Nuclear Safety and Compliance Manager, Hatch

TELEPHONE NUMBER (include area code)

AREA CODE

9 1 2 3 6 7 - 7 8 5 1

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

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 15 single-space typewritten lines) (16)

On 4/7/97 at 2330 EDT, Unit 2 was in the refuel mode with fuel in the vessel and the reactor vessel head studs being tensioned in preparation for the vessel leakage test. At that time, licensed personnel performed control rod movement in support of refueling outage activities without all the prerequisites for control rod movement being satisfied. Specifically, the channel functional test and determination of signal-to-noise ratio for the source range monitors (SRMs) had not been performed within the previous 7 days; therefore, the SRMs should have been considered inoperable. By moving a control rod with the SRMs inoperable, the plant was placed in a condition prohibited by the Technical Specifications.

The cause of this event was a data entry error on the part of the surveillance scheduler. Specifically, the due date entered for the SRM surveillance was incorrect; thus, control room personnel believed that the surveillance was current.

Corrective actions for this event included suspending control rod movement, performing the surveillance, and counseling the responsible individual. In addition, independent verification will be required for manual surveillance schedule updates, and the surveillance scheduling software will be enhanced.

**LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION**

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FACILITY NAME (1)  Edwin I. Hatch Nuclear Plant - Unit 2	DOCKET NUMBER (2)  05000366	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL YEAR	REVISION NUMBER			
		97	- 006	- 00	2	OF	5

TEXT (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 codes appear in the text as (EIIIS Code XX).

**DESCRIPTION OF EVENT**

On 4/7/97 at 2330 EDT, Unit 2 was in the refuel mode with fuel in the vessel and the reactor vessel head studs being tensioned in preparation for the vessel leakage test. At that time, licensed personnel were exercising control rods, which is a normal pre-startup activity designed to flush air from the hydraulic lines in the control rod drive (EIIIS Code AA) system. To withdraw a control rod, the source range monitors (SRMs, EIIIS Code IG) are required to be operable per Technical Specifications (TS) Limiting Condition for Operation (LCO) 3.3.1.2. One of the surveillances required to demonstrate the operability of the SRMs is a channel functional test and determination of signal-to-noise ratio (SNR) which is performed once per 7 days per TS Surveillance Requirement (SR) 3.3.1.2.5. At the time the control rods were being exercised, control room personnel mistakenly believed the SRM surveillance had been performed within the previous 7 days when the surveillance was actually performed on 3/28/97 (10 days earlier). Hence, the surveillance was overdue. The SRMs should have been declared inoperable, and no control rods should have been withdrawn. With a control rod withdrawn under these circumstances, the plant was no longer in compliance with Required Action E.1 of LCO 3.3.1.2.

When this condition was recognized, control rod movement was suspended with control rods inserted, and the SRM surveillance was performed prior to resuming control rod movement.

**CAUSE OF EVENT**

This event was caused by a data entry error on the part of the surveillance scheduler. Following the previous performance of the SRM surveillance on 3/28/97, the individual responsible for the computerized surveillance database failed to update the database to show the next surveillance due date as 4/4/97 with a late date of 4/5/97. The scheduler mistakenly entered a due date of 4/6/97 with a late date of 4/7/97. This erroneous information was provided in the form of a Surveillance Task Sheet to Operations personnel for work scheduling. As a result, when control rods were exercised on 4/7/97 and the SRM surveillance had not been performed within the previous 7 days, the plant was placed in a condition prohibited by the Technical Specifications.

LICENSEE EVENT REPORT (LER)  
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Edwin I. Hatch Nuclear Plant - Unit 2

05000366

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Two factors contributed to the occurrence of this event:

1. Under certain conditions, the surveillance scheduling database must be updated manually. For example, when a surveillance which is performed weekly (or more frequently) is performed prior to the scheduled date, the scheduling software does not automatically recalculate the next surveillance due date, thus, a manual update is required. Manual updates are inherently less accurate and reliable than an automatic update, and, as noted above, the data entry error which led to the missed surveillance occurred during a manual update.
2. When surveillance schedules are originated or permanently revised (e.g., from monthly to quarterly), independent verification is required. However, when a surveillance schedule is manually updated, independent verification of the change is not required.

#### REPORTABILITY ANALYSIS AND SAFETY ASSESSMENT

This event is reportable per 10 CFR 50.73 (a)(2)(i) because the plant was placed in a condition prohibited by the Technical Specifications. That is, by withdrawing control rods while in the refuel mode when the SRM channel functional test and determination of SNR had not been performed within the previous 7 days as required, the Required Action E of LCO 3.3.1.2 was not met.

The SRMs are designed to provide operators information on neutron flux when the flux levels in the core are very low. Hence, the SRMs provide operators with the primary indication of neutron flux levels when the plant is in the refuel mode. The SRMs monitor core activity during control rod movement and provide the operators early indication of subcritical neutron multiplication that could indicate an approach to criticality.

In this event, control rods were individually withdrawn and inserted with the SRMs inoperable due to a missed surveillance. The surveillance was completed within 2 hours of the discovery of the event and demonstrated the plant had the required number of operating SRM channels. Therefore, had it been possible to achieve criticality under the circumstances existing at the time, the approach to criticality would have been apparent on the SRMs to operators. In addition, the plant maintains a core configuration which satisfies requirements for shutdown margin in accordance with LCO 3.1.1. The shutdown margin was continuously maintained ensuring the full withdrawal of the highest worth rod could not result in the core becoming critical. Shutdown margin is preserved, in part, by control rod drive system interlocks which allow only one rod to be withdrawn at a time when the reactor mode switch is in the refuel position, as it was in this event.

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Edwin I. Hatch Nuclear Plant - Unit 2

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9 | 7 | -

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

Southern Nuclear Operating Company (SNC) concludes this event did not adversely impact nuclear safety. This conclusion applies to the refuel mode (mode 5). In modes 2, 3, or 4, the surveillance Frequency is 31 days rather than 7 days; therefore, the surveillance would have been current. The SRMs are not required to be operable in the run mode; hence, the surveillance is not required in the run mode.

CORRECTIVE ACTIONS

1. Control rod exercises were suspended until the SRM surveillance was successfully performed.
2. The responsible individual was counseled with regard to attention to detail.
3. Independent verification will be performed for manual updates of next surveillance due dates in accordance with departmental policy in the Outages and Planning Department. This action was implemented and is currently ongoing.
4. The surveillance scheduling software will be modified to improve the capability to detect and correct data entry errors at the time of entry. This change will be completed by 6/30/97.

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

ADDITIONAL INFORMATION

1. Other Systems Affected: No systems other than those already mentioned in this report were affected by this event.
2. Failed Components Information: No failed components either contributed to or resulted from this event.
3. Previous Similar Events: No Licensee Event Reports in which a data entry error in the surveillance scheduling computer resulted in a missed surveillance have been submitted in the past 2 years.