

J. Barnie Beasley, Jr., P.E.
Vice President
Vogtle Project

Southern Nuclear
Operating Company, Inc.
40 Inverness Center Parkway
P.O. Box 1295
Birmingham, Alabama 35201

Tel 205.992.7110
Fax 205.992.0403



December 7, 1999

LCV-1402

Docket No. 50-425

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

Ladies and Gentlemen:

**VOGTLE ELECTRIC GENERATING PLANT
LICENSEE EVENT REPORT 2-99-003
UNPLANNED MODE CHANGE WHILE
COOLING DOWN FOR REFUELING OUTAGE**

Southern Nuclear Operating Company hereby submits a Vogtle Electric Generating Plant licensee event report for a condition that occurred on Unit 2 on October 4, 1999. This report is being submitted voluntarily.

Sincerely,

A handwritten signature in black ink, appearing to read "J. B. Beasley, Jr." with a large, stylized flourish at the end.

J. B. Beasley, Jr.

JBB/JPC

Enclosure: LER 2-99-003

cc: Southern Nuclear Operating Company
Mr. J. T. Gasser
Mr. M. Sheibani
SNC Document Management

U. S. Nuclear Regulatory Commission
Mr. L. A. Reyes, Regional Administrator
Mr. Ramin R. Assa, Vogtle Project Manager, NRR
Mr. J. Zeiler, Senior Resident Inspector, VEGP

IE22

PDL A0001 05000425

Estimated burden per response to comply with this mandatory information request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), 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. If an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

FACILITY NAME (1)

Vogtle Electric Generating Plant - Unit 2

DOCKET NUMBER (2)

0 5 0 0 0 4 2 5

PAGE (3)

1 OF 4

TITLE (4)

UNPLANNED MODE CHANGES WHILE COOLING DOWN FOR REFUELING OUTAGE

EVENT DATE (6)			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
1	0	04	1999	003	00	1	2	07		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	POWER LEVEL (10)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)			
4	0	20.2201(b)	20.2203(a)(1)	20.2203(a)(2)(i)	20.2203(a)(2)(v)
		20.2203(a)(2)(ii)	20.2203(a)(2)(iii)	20.2203(a)(2)(iv)	20.2203(a)(3)(i)
		20.2203(a)(2)(iv)	20.2203(a)(3)(ii)	20.2203(a)(4)	20.2203(a)(3)(iii)
		20.2203(a)(2)(iii)	20.2203(a)(2)(iv)	50.36(c)(1)	20.2203(a)(2)(v)
		20.2203(a)(2)(iv)	50.36(c)(2)	50.73(a)(2)(i)	50.73(a)(2)(vii)
				50.73(a)(2)(ii)	50.73(a)(2)(x)
				50.73(a)(2)(iii)	73.71
				50.73(a)(2)(iv)	<input checked="" type="checkbox"/> OTHER
				50.73(a)(2)(v)	Specify in Abstract below
				50.73(a)(2)(vii)	or in NRC Form 366A

LICENSEE CONTACT FOR THIS LER (12)

NAME

Mehdi Sheibani, Nuclear Safety and Compliance

TELEPHONE NUMBER (include area code)

7 0 6 - 8 2 6 - 3 2 0 9

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)

EXPECTED SUBMISSION DATE (15)

MONTH DAY YEAR

YES (If yes, complete EXPECTED SUBMISSION DATE)

NO

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-space typewritten lines) (16)

This report is being submitted voluntarily.

On October 4, 1999, operators were cooling down the reactor coolant system (RCS) at the start of a refueling outage. At approximately 0020 EDT, system cooldown stopped for operators to investigate an anomaly with residual heat removal (RHR) flow rates. After consulting with engineering and management personnel, it was determined that the RHR flow rate was acceptable and operators resumed the cooldown. A follow-up review of plant computer trends from the unit shutdown found that the RCS temperature, as measured by the auctioneered high wide range RCS average temperature (computer point UT5468), had dipped to approximately 199 degrees F when the cooldown was stopped for the RHR flow rate investigation. After approximately six minutes, RCS temperature, as indicated by UT5468, raised above 200 degrees F while the flow rate issue was being resolved. Therefore, because Mode 5 entry occurs when RCS average temperature is at or below 200 degrees F, the unit had entered Mode 5 for approximately six minutes prior to returning to Mode 4. The cause of the unplanned mode changes is ambiguity in the procedural guidance. The applicable procedure requires monitoring and recording of a variety of temperature parameters. This includes monitoring the UT5468 computer point. However, the procedure does not provide adequate guidance for what parameter is to be utilized for determination of mode changes. Appropriate procedures are being reviewed for necessary clarifications.

LICENSEE EVENT REPORT (LER)
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		YEAR 1 9 9 9	SEQUENTIAL NUMBER - 0 0 3	REVISION NUMBER - 0 0	2	OF	4

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

A. REQUIREMENT FOR REPORT

This report is being submitted voluntarily.

B. UNIT STATUS AT TIME OF EVENT

At the time of this event, Unit 2 was in Mode 4 (Hot Shutdown), at 0 percent of rated thermal power, and was cooling down at the start of a refueling outage. Other than that described herein, there was no inoperable equipment that contributed to the occurrence of this event.

C. DESCRIPTION OF EVENT

On October 4, 1999, operators were cooling down the reactor coolant system (RCS) at the start of a refueling outage. At approximately 0020 EDT, system cooldown stopped for operators to investigate an anomaly with residual heat removal (RHR) flow rates. At this time, operators determined that the unit was in Mode 4, based on an RCS temperature of 204 degrees F, as shown by the computer point for the five highest incore thermocouples. A slight increase to 210 degrees F was undertaken while the flow rate issue was being resolved. After consulting with engineering and management personnel, it was determined that the RHR flow rate was acceptable and operators resumed the cooldown. Entry into Mode 5 was logged at 0443 EDT, when the RCS temperature dropped to 200 degrees F, based on the five highest incore thermocouples. Technical Specifications defines Mode 5 as the average RCS temperature less than or equal to 200 degrees F.

On October 6, 1999, plant personnel were reviewing plant computer trends from the unit shutdown. It was found that the RCS temperature, as measured by the auctioneered high wide range RCS average temperature (computer point UT5468), had dipped to approximately 199 degrees F when the cooldown was stopped for the RHR flow rate investigation. Other parameters, such as T-hot and T-cold, indicated below 200 degrees F as well. After approximately six minutes, RCS temperature, as indicated by UT5468, raised above 200 degree F while the flow rate issue was being resolved. Therefore, the unit had entered Mode 5 for approximately six minutes prior to returning to Mode 4.

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

D. CAUSE OF EVENT

The cause of the unplanned mode changes is ambiguity in the procedural guidance. The applicable procedure requires monitoring and recording of a variety of temperature parameters. This includes monitoring the UT5468 computer point. However, the procedure does not provide adequate guidance for what parameter is to be utilized for determination of mode changes.

E. ANALYSIS OF EVENT

The unplanned entry into Mode 5 followed by a return to Mode 4 did not result in a violation of plant Technical Specification requirements. There were no Mode 5 entry requirement violations. Furthermore, components required to be operable in Mode 4 continued to remain in service and surveillances needed for Mode 4 compliance remained valid. Based on these considerations, there was no adverse effect on plant safety or on the health and safety of the public as a result of this event.

F. CORRECTIVE ACTIONS

- 1) Licensed operators will be briefed by December 22, 1999, on the specific parameters to use to determine when mode changes occur as defined in the Technical Specifications.
- 2) By February 11, 2000, this event will have been reviewed in licensed operator requalification training.
- 3) By February 15, 2000, the applicable unit operating procedures will be revised to clarify specific parameters used to track mode changes and other temperature / power breakpoints.

G. ADDITIONAL INFORMATION

- 1) Failed Components:
None
- 2) Previous Similar Events:
None

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
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Vogtle Electric Generating Plant - Unit 2	05000425	1999	-003	-00	4	OF	4

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

- 3) Energy Industry Identification System Code:
 - Reactor Coolant System - AB
 - Residual Heat Removal System - BP
 - Integrated Plant Computer System - ID