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April 3, 2014

Docket No.: 50-424
50-425

NL-14-0472

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Vogtle Electric Generating Plant-Unit 1
Licensee Event Report 2014-001-00
Operation Outside of Pressure and Temperature Limit Report Curve
Required by Technical Specification 3.4.3

Ladies and Gentlemen:

In accordance with the requirements of 10 CFR 50.73 (a)(2)(i)(B), Southern Nuclear Operating Company (SNC) is submitting the enclosed Licensee Event Report. This letter contains no NRC commitments. If you have any questions, please contact Doug McKinney at (205) 992-5982.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "T. E. Tynan".

T. E. Tynan
Vice President – Vogtle

TET/GWG

Enclosure: Unit 1 Licensee Event Report 2014-001-00

cc: Southern Nuclear Operating Company
Mr. S. E. Kuczynski, Chairman, President & CEO
Mr. D. G. Bost, Executive Vice President & Chief Nuclear Officer
Mr. B. L. Ivey, Vice President – Regulatory Affairs
Mr. D.R. Madison, Vice President – Fleet Operations
Mr. C.R. Pierce, Regulatory Affairs Director
Mrs. M. A. Cline, Vogtle OE Coordinator
RType: CVC7000

U. S. Nuclear Regulatory Commission
Mr. V. M. McCree, Regional Administrator
Mr. R. E. Martin, NRR Senior Project Manager - Vogtle
Mr. L. M. Cain, Senior Resident Inspector – Vogtle

IE22
NRR

Vogtle Electric Generating Plant– Unit 1
Licensee Event Report 2014-001-00
Operation Outside of Pressure and Temperature Limit Report Curve
Required by Technical Specification 3.4.3

Enclosure

Unit 1 Licensee Event Report 2014-001-00

**LICENSEE EVENT REPORT (LER)**(See Page 2 for required number of
digits/characters for each block)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollections.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose 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.

1. FACILITY NAME

Vogtle Electric Generating Plant (VEGP) – Unit 1

2. DOCKET NUMBER

05000-424

3. PAGE

1 OF 3

4. TITLE

Operation Outside of Pressure and Temperature Limit Report Curve Required by Technical Specification 3.4.3

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
02	20	14	2014	- 001	- 00	04	11	2014	VEGP - Unit 2	05000-425
									FACILITY NAME	DOCKET NUMBER

9. OPERATING MODE

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)

1	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)
	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)
100	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)
	<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER
	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER**LICENSEE CONTACT**

Vogtle Electric Generating Plant / George Gunn, Licensing Supervisor

TELEPHONE NUMBER (Include Area Code)

706-826-3596

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

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX
D				Y					

14. SUPPLEMENTAL REPORT EXPECTED☐ YES (If yes, complete 15. EXPECTED SUBMISSION DATE) ☒ NO**15. EXPECTED SUBMISSION DATE**

MONTH DAY YEAR

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

On February 20, 2014 with VEGP Units 1 and 2 operating at 100 percent thermal power, VEGP identified that both units had operated outside the Pressure / Temperature Limit Report (PTLR) curve required by Technical Specification LCO 3.4.3 RCS Pressure and Temperature Limits following the seven previous refueling outages on each unit. From October 2003 through May 2013, seven refueling outages have been conducted on each unit in which the Reactor Pressure Vessel (RPV) was placed under vacuum to perform fill and vent operations. LCO 3.4.3 requires that Reactor Coolant System (RCS) pressure, temperature, and heatup and cooldown rates be maintained with the limits specified in the Pressure Temperature Limit Report (PTLR) and is applicable at all times. Although minimum RCS temperature and heatup rates were maintained within limits, RCS pressure was lowered below 0 pounds per square inch gauge (psig), the lowest RCS pressure value identified on the curve.

The cause of not entering LCO 3.4.3 was the condition was procedurally allowed and aligned with Operations training. These events are of very low safety significance and resulted in no adverse effects on the health or safety of the public.

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

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollections.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose 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.

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
		YEAR	SEQUENTIAL NUMBER	REV NO.	
Vogtle Electric Generating Plant – Unit 1	05000-424	2014	- 001	- 00	2 OF 3

NARRATIVE**A. REQUIREMENT FOR REPORT**

This report is required per 10 CFR50.73(a)(2)(i)(B) for an operation or condition which was prohibited by Technical Specifications Limiting Condition of Operation (LCO) 3.4.3, RCS Pressure and Temperature Limits during vacuum refill of the RPV when RCS pressure was lowered below zero (0) psig.

B. UNIT STATUS AT TIME OF EVENT

At the time of discovery of the issue, both units were operating in Mode 1 at 100% reactor power. There were no additional inoperable structures, systems, or components at the time of discovery that contributed to this event. This event is considered a discovery of an existing but previously unrecognized condition.

C. DESCRIPTION OF EVENT

On February 20, 2014 with VEGP Units 1 and 2 operating at 100 percent thermal power, VEGP identified that both units had operated outside the PTLR curve required by Technical Specification LCO 3.4.3 RCS Pressure and Temperature Limits following the seven previous refueling outages on each unit. From October 2003 through May 2013, seven refueling outages have been conducted on each unit in which the RPV was placed under vacuum to perform fill and vent operations. LCO 3.4.3 requires that RCS pressure, temperature, and heatup and cooldown rates be maintained with the limits specified in the PTLR and is applicable at all times. Although minimum RCS temperature and heatup rates were maintained within limits, RCS pressure was lowered below 0 psig, the lowest RCS pressure value identified on the curve.

The cause of not entering LCO 3.4.3 was the condition was procedurally allowed and aligned with Operations training. In August 2003, prior to the first use of RCS vacuum fill and vent at VEGP, an engineering analysis was performed to ensure the procedure would have no adverse impact on the system. Since the analysis determined there would be no adverse impact from drawing a vacuum on the RPV, Engineering and Operations did not recognize it was necessary to revise the PTLR curves and operation with the RPV under vacuum would be outside the limits of LCO 3.4.3. Upon review of industry operating experience, the non-compliance was identified and corrective action initiated to update the PTLR curves to account for operation under vacuum conditions.

These events are of very low safety significance and resulted in no adverse effects on the health or safety of the public.

D. CAUSE OF EVENT

The direct cause of the failure to enter the LCO was the condition was procedurally allowed and aligned with training Operations personnel had received. Therefore, establishing vacuum conditions in the RCS was not recognized to be a condition that required entry into the LCO.

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

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NARRATIVE

E. SAFETY ASSESSMENT

The seven events on each unit posed no threat to public health and safety as the reactor pressure vessel performed as designed. There were no challenges to any design or safety limit. Nuclear safety was not compromised because the negative (vacuum) internal pressures identified did not cause any concerns with applicable material stresses or analysis for the VEGP reactor pressure vessel. There was no impact to the safety of the public, industrial safety or radiological safety as a result of these events.

F. CORRECTIVE ACTION

Corrective Action to revise the VEGP Pressure and Temperature Limit Report (PTLR) for Units 1 and 2 to address establishing a negative pressure (vacuum) in the reactor vessel has been completed.

G. ADDITIONAL INFORMATION

1) Failed Components:

None

2) Previous Similar Events:

None

3) Energy Industry Identification System Code:

[AB] – Reactor Coolant System

4) Other Systems Affected:

None

5) Commitment Information:

This report does not create any commitments.