



David R. Vineyard
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April 3, 2017

Docket Nos.: 50-321
50-366

NL-17-0521

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

Edwin I. Hatch Nuclear Plant Unit 1 & 2
Licensee Event Report 2017-001-0
Unanalyzed Conditions for a Postulated Fire Discovered During NFPA 805 Transition

Ladies and Gentlemen:

In accordance with the requirements of 10 CFR 50.73(a)(2)(ii)(B), Southern Nuclear Operating Company (SNC) hereby submits the enclosed Licensee Event Report.

This letter contains no NRC commitments. If you have any questions, please contact Greg Johnson at (912) 537-5874.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "David R. Vineyard", written over a large, stylized, cursive flourish.

David R. Vineyard
Vice President – Hatch

DRV/jcb

Enclosure: LER 2017-001-0

cc: Southern Nuclear Operating Company
Mr. S. E. Kuczynski, Chairman, President & CEO
Mr. D. G. Bost, Executive Vice President & Chief Nuclear Officer
Mr. D. R. Vineyard, Vice President – Hatch
Mr. M. D. Meier, Vice President – Regulatory Affairs
Mr. R. D. Gayheart, Fleet Operations General Manager
Mr. B. J. Adams, Vice President – Engineering
Mr. G. L. Johnson, Regulatory Affairs Manager - Hatch
RTYPE: CHA02.004

U. S. Nuclear Regulatory Commission
Ms. C. Haney, Regional Administrator
Mr. R. Hall, NRR Project Manager – Hatch
Mr. D. H. Hardage, Senior Resident Inspector – Hatch

Edwin I. Hatch Nuclear Plant Unit 1 and 2

LER 2017-001-0

**Unanalyzed Conditions for a Postulated Fire Discovered During NFPA 805
Transition**

NRC FORM 366 (06-2016)		U.S. NUCLEAR REGULATORY COMMISSION			APPROVED BY OMB: NO. 3150-0104		EXPIRES: 10/31/2018			
 LICENSEE EVENT REPORT (LER) (See Page 2 for required number of digits/characters for each block)										
(See NUREG-1022, R.3 for instruction and guidance for completing this form http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/)										
1. FACILITY NAME Edwin I. Hatch Nuclear Plant Unit 1					2. DOCKET NUMBER 05000321		3. PAGE 1 OF 4			
4. TITLE Unanalyzed Conditions for a Postulated Fire Discovered During NFPA 805 Transition										
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	03	2017	2017	- 001	- 0	04	03	2017	Edwin I. Hatch Nuclear Plant Unit 2	05000366
									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)(ii)(A)		<input type="checkbox"/> 50.73(a)(2)(viii)(A)	
			<input type="checkbox"/> 20.2201(d)		<input type="checkbox"/> 20.2203(a)(3)(ii)		<input checked="" type="checkbox"/> 50.73(a)(2)(ii)(B)		<input type="checkbox"/> 50.73(a)(2)(viii)(B)	
			<input type="checkbox"/> 20.2203(a)(1)		<input type="checkbox"/> 20.2203(a)(4)		<input type="checkbox"/> 50.73(a)(2)(iii)		<input type="checkbox"/> 50.73(a)(2)(ix)(A)	
			<input type="checkbox"/> 20.2203(a)(2)(i)		<input type="checkbox"/> 50.36(c)(1)(i)(A)		<input type="checkbox"/> 50.73(a)(2)(iv)(A)		<input type="checkbox"/> 50.73(a)(2)(x)	
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)(v)(A)		<input type="checkbox"/> 73.71(a)(4)	
			<input type="checkbox"/> 20.2203(a)(2)(iii)		<input type="checkbox"/> 50.36(c)(2)		<input type="checkbox"/> 50.73(a)(2)(v)(B)		<input type="checkbox"/> 73.71(a)(5)	
			<input type="checkbox"/> 20.2203(a)(2)(iv)		<input type="checkbox"/> 50.46(a)(3)(ii)		<input type="checkbox"/> 50.73(a)(2)(v)(C)		<input type="checkbox"/> 73.77(a)(1)	
			<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)(D)		<input type="checkbox"/> 73.77(a)(2)(i)	
			<input type="checkbox"/> 20.2203(a)(2)(vi)		<input type="checkbox"/> 50.73(a)(2)(i)(B)		<input type="checkbox"/> 50.73(a)(2)(vii)		<input type="checkbox"/> 73.77(a)(2)(ii)	
					<input type="checkbox"/> 50.73(a)(2)(i)(C)		<input type="checkbox"/> OTHER		Specify in Abstract below or in NRC Form 366A	
12. LICENSEE CONTACT FOR THIS LER										
LICENSEE CONTACT Edwin I. Hatch / Jimmy Collins – Licensing Supervisor								TELEPHONE NUMBER (Include Area Code) 912-537-2342		
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	
B	FA	CBL	N/A	Y						
14. SUPPLEMENTAL REPORT EXPECTED						15. EXPECTED SUBMISSION DATE				
<input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE)						<input checked="" type="checkbox"/> NO				
						MONTH		DAY	YEAR	
ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)										
<p>On February 3, 2017, in preparation for transitioning the Plant Hatch Fire Protection Licensing Basis from 10 CFR 50.48(b) (Appendix R) to 10 CFR 50.48(c) (NFPA 805), a weak-link and operator manual action (OMA) analysis was completed for Information Notice (IN) 92-18 type hot shorts on motor operated valves (MOVs). Examination of the current Plant Hatch Appendix R Safe Shutdown Analysis identified circuit configurations in multiple Fire Areas where an Appendix R postulated fire could impact the ability to achieve safe shutdown conditions. The cable impacts can bypass the limit and torque switches and could result in physical damage to the valves, preventing the valves from being operated from the main control room, remote shutdown panel, or locally. Hourly fire watches had already been established for the affected fire areas and Fire Action Statements were initiated to address the postulated condition for the identified MOVs.</p> <p>While these impairments represent unanalyzed conditions for Appendix R, the described scenarios are only possible given a fire has occurred in the associated Fire Areas. Plant Hatch issued a letter of intent to the NRC on October 4, 2013 to begin transition to NFPA 805 with a license amendment request (LAR) submittal date of April 4, 2018. Any identified noncompliances will be resolved during the transition process.</p>										



LICENSEE EVENT REPORT (LER) CONTINUATION SHEET

(See NUREG-1022, R.3 for instruction and guidance for completing this form
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/>)

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 e-mail to Infocollects.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 NUMBER	3. LER NUMBER		
Edwin I. Hatch Nuclear Plant Unit 1	05000-321	YEAR	SEQUENTIAL NUMBER	REV NO.
		2017	- 001	- 0

NARRATIVE

PLANT AND SYSTEM IDENTIFICATION

General Electric – Boiling Water Reactor
Energy Industry Identification System codes appear in the text as (EIS Code XX)

DESCRIPTION OF EVENT

On February 3, 2017 at approximately 1458 EST, with Unit 1 at approximately 100 percent rated thermal power and Unit 2 at approximately 88.4 percent rated thermal power, in preparation for transitioning the Plant Hatch Fire Protection Licensing Basis from 10 CFR 50.48(b) (Appendix R) to 10 CFR 50.48(c) (NFPA 805), a weak-link and operator manual action (OMA) analysis was completed for Information Notice (IN) 92-18 type hot shorts on motor operated valves (MOVs) to support the Plant Hatch Appendix R Safe Shutdown Analysis. This updated analysis identified circuit configurations in multiple Fire Areas where an Appendix R postulated fire could impact the ability to achieve safe shutdown conditions. The cable impacts can bypass the limit and torque switches and could result in physical damage to the valves, preventing the valves from being operated from the main control room, remote shutdown panel, or locally. This postulated event was identified in Fire Areas 0024 (Main Control Room), 1203F (Unit 1 Reactor Building), 1205F (Unit 1 Reactor Building), 2203F (Unit 2 Reactor Building) for the associated valves below:

1E11-F003B; RHR Heat Exchanger B Discharge MOV
1E11-F004B; RHR Pump E11 C002B Torus Suction MOV
1E11-F006B; RHR Pump 1B SDC Suction MOV
1E11-F007B; RHR Pumps B and D Minimum Flow Bypass MOV
1E11-F011B; RHR Heat Exchanger B Drain To Suppression Pool MOV
1E11-F015B; RHR LPCI Inboard Discharge MOV
1E11-F016B; Containment Spray Outboard Isolation MOV
1E11-F017B; RHR LPCI Outboard Discharge MOV
1E11-F028B; Torus Spray/RHR Test Line Outboard Isolation MOV
1E11-F047B; RHR Heat Exchanger B Inlet MOV
1E11-F048B; RHR Heat Exchanger B Bypass MOV
1E11-F049; RHR to Radwaste Discharge Isolation MOV
1E11-F068B; RHR Heat Exchanger B Service Water Flow Control MOV
1E11-F073B; RHR Service Water to RHR Cross-tie MOV
1E11-F104B; RHR Heat Exchanger B Vent MOV
1E51-F007; RCIC Steam Supply Inboard Isolation MOV
1E51-F008; RCIC Steam Supply Outboard Isolation MOV
1E51-F012; RCIC Pump Outboard Discharge MOV
1E51-F013; RCIC Pump Inboard Discharge MOV
1E51-F019; RCIC Minimum Flow Bypass to Suppression Pool MOV
1E51-F022; RCIC Pump Test Bypass Valve to Condensate Storage Tank MOV
1E51-F045; RCIC Turbine Steam Supply MOV
1E51-F046; RCIC Barometric Condenser and Lube Oil Cooler Cooling Water Supply MOV
1E51-F524; RCIC Turbine Trip and Throttle MOV

2E11-F003B; RHR Heat Exchanger B Discharge MOV
2E11-F004B; RHR Pump 2B Torus Suction MOV
2E11-F006B; RHR Pump 2B SDC Suction MOV

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

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Edwin I. Hatch Nuclear Plant Unit 1	05000-321	2017	- 001	- 0

2E11-F007B; RHR Pumps 2B and 2D Minimum Flow Bypass MOV
2E11-F011B; RHR Heat Exchanger B Drain To Suppression Pool MOV
2E11-F015B; RHR LPCI Inboard Discharge MOV
2E11-F016B; Containment Spray Outboard Isolation MOV
2E11-F017B; RHR LPCI Outboard Discharge MOV
2E11-F028B; Torus Spray/RHR Test Line Outboard Isolation MOV
2E11-F047B; RHR Heat Exchanger B Inlet MOV
2E11-F048B; RHR Heat Exchanger B Bypass Valve (MOV)
2E11-F049; RHR to Radwaste Isolation MOV
2E11-F068B; RHR Heat Exchanger B Service Water Flow Control MOV
2E11-F073B; RHR Service Water to RHR Cross-tie MOV
2E11-F104B; RHR Heat Exchanger B Vent MOV
2E51-F007; RCIC Steam Supply Inboard Isolation MOV
2E51-F008; RCIC Steam Supply Outboard Isolation MOV
2E51-F010; RCIC Pump Suction Valve From Condensate Storage Tank MOV
2E51-F012; RCIC Pump Outboard Discharge MOV
2E51-F013; RCIC Pump Inboard Discharge MOV
2E51-F019; RCIC Minimum Flow Bypass to Suppression Pool MOV
2E51-F022; RCIC Pump Test Bypass Valve to Condensate Storage Tank MOV
2E51-F029; RCIC Pump Suction Valve From Suppression Pool MOV
2E51-F031; RCIC Pump Suction From Suppression Pool Outboard Isolation MOV
2E51-F045; RCIC Turbine Steam Supply MOV
2E51-F046; RCIC Barometric Condenser and Lube Oil Cooler Cooling Water Supply MOV
2E51-F524; RCIC Turbine Trip and Throttle MOV

CAUSE OF EVENT

The postulated event was identified as part of a weak-link and OMA analysis for IN 92-18 type hot shorts. This review is being conducted as part of the Hatch transition activities from Appendix R to NFPA 805.

REPORTABILITY ANALYSIS AND SAFETY ASSESSMENT

The event is reportable per 10 CFR 50.73(a)(2)(ii)(B) as the identified circuit configurations represents unanalyzed conditions that significantly degrades plant safety due to the potential to compromise safe shutdown during a postulated fire event.

The presence of the compensatory measures, in addition to portable fire protection equipment and installed fire protection and detection equipment, ensures the safe shutdown paths are preserved until the conditions are resolved. These are postulated events which did not affect the safe operation of the plant, or the health and safety of the public. Based on this information, this event is considered to have very low safety significance.

CORRECTIVE ACTIONS

Hourly fire watches had already been established for the affected fire areas as part of previously established compensatory measures to preserve safe shutdown paths. Fire Action Statements were initiated to address the postulated condition for the identified MOVs. Plant Hatch issued a letter of intent to the NRC on October 4, 2013 to begin transition to NFPA 805 with a license amendment request (LAR) submittal date of April 4, 2018. Any identified

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

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Edwin I. Hatch Nuclear Plant Unit 1	05000-321	2017	- 001	- 0

noncompliances will be resolved during the transition process.

ADDITIONAL INFORMATION

Other Systems Affected: None

Failed Components Information:

Master Parts List Number: N/A (cables in systems E11, E51)
Raceway)

Manufacturer Code: N/A

Model Number: N/A

Type: Cables

EIIS System Code: FA (Cable

Reportable to EPIX: Yes

Root Cause Code: B

EIIS Component Code: CBL

Commitment Information: This report does not create any new licensing commitments.

PREVIOUS SIMILAR EVENTS:

LER 2015-001-01

On June 4, 2015, in preparation for transitioning the Plant Hatch Fire Protection Licensing Basis from 10 CFR 50.48(b) (Appendix R) to 10 CFR 50.48(c) (NFPA 805), an update to the Plant Hatch Appendix R Safe Shutdown Analysis (SSA) was being performed for the Unit 1 and Unit 2 Reactor Buildings, Turbine Buildings, and Diesel Generator Building. This updated analysis identified circuit configurations in several Fire Areas where an Appendix R postulated fire could impact the ability to achieve safe shutdown conditions. These are Category 1 barrier impairments. Compensatory measures were established for the affected fire areas to preserve a safe shutdown (SSD) path.

Licensing Action, Concurrence, and Verification	NMP-AD-043-F01	
	SNC	Version 2.0
	Unit S	Page 1 of 5

Letter Number: NL-17-0521 Due Date (if applicable): 4/4/2017 Click here to enter a date.

Subject: Unanalyzed Conditions for a Postulated Fire Discovered During NFPA 805 Transition

RI / Extension: JaNaye Bailey / x3722

CR/TE (if applicable) / Database (C/F/H/V): CRs 10326399, 10326401, 10326402, 10326404, and 10326405

Executive Summary: In preparation for transitioning the Plant Hatch Fire Protection licensing basis from Appendix R to NFPA 805, a weak-link and operator manual action analysis was completed for Information Notice 92-18 type hot shorts on motor operator valves (MOVs). Examination of the current Plant Hatch Appendix R Safe Shutdown Analysis identified circuit configurations in multiple Fire Areas where an Appendix R postulated fire could impact the ability to achieve safe shutdown conditions. Hourly fire watches had already been established for the affected fire areas as part of previously established compensatory measures to preserve safe shutdown paths and Fire Action Statements were initiated to address the postulated condition for the identified MOVs.

SECTION I – CORRESPONDENCE SCREENING (to be completed by RI)	YES	NO
I.1. Does this letter affect the FSAR or any other License Basis Documents? <i>If YES, complete 1.1.a. If unsure, obtain peer review from 10 CFR 50.59 qualified individual.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
I.1.a Has Section IV been completed to update each document?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I.2. Does this letter require posting per 10 CFR 19? <i>If YES, ensure posting after submittal.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
I.3. Does this letter contain Safeguards Information? <i>If YES, do NOT scan to SNC Intranet. Enter Special Handling Instructions below and review with the RA Administrative Assistant (AA).</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
I.4. Does this letter contain information to be withheld from public disclosure (for example, Proprietary or Non-Safeguards Security-Related Information)? <i>If YES, do NOT scan to SNC Intranet. If Proprietary, include appropriate affidavit. Enter Special Handling Instructions below and review with the AA.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
I.5. Does this letter contain sensitive, limited access or distribution items? <i>If YES, enter Special Handling Instructions below and review with the AA.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Special Handling Instructions for AA		
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <u>N/A</u> Administrative Assistant </div> <div style="text-align: center;"> <u>N/A</u> Date </div> </div>		
I.6. Oath or Affirmation Required? <i>If YES, ensure proper letter template is used.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
I.7. Verification Required? <i>If YES, use the guidance of NMP-AD-043.</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
I.8. External Affairs and General Counsel Consultation Required? <i>If YES, obtain concurrence signature in Section II.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>