Thomas A. Lynch Vice President - Farley Southern Nuclear Operating Company, Inc. Farley Nuclear Plant Post Office Prayer 470

Post Office Drawer 470 Ashford, Alabama 36312

Tel 334.814.4511 Fax 334.814.4728



April 9, 2012

Docket Nos.: 50-348

50-364

NL-12-0557

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

Joseph M. Farley Nuclear Plant – Units 1 and 2 Licensee Event Report 2012-001-00 Seismically Qualified RWST Aligned to Non-Seismic Piping

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.

Sincerely,

T. A. Lynch

Vice President - Farley

TALWDO

Enclosure: Units 1 and 2 Licensee Event Report 2012-001-00

U. S. Nuclear Regulatory Commission NL-12- 0557 Page 2

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. B. J. Adams, Vice President - Fleet Operations

Ms. P. M. Marino, Vice President - Engineering

Mr. M. J. Ajluni, Director - Nuclear Licensing

RTYPE: CFA04.054

U. S. Nuclear Regulatory Commission

Mr. V. M. McCree, Regional Administrator

Mr. R. E. Martin, NRR Project Manager - Farley

Mr. E. L. Crowe, Senior Resident Inspector - Farley

Joseph M. Farley Nuclear Plant – Units 1 and 2 Licensee Event Report 2012-001-00 Seismically Qualified RWST Aligned to Non-Seismic Piping

Enclosure

Units 1 and 2 Licensee Event Report 2012-001-00

NRC FO	RM 366			U.S. NUCI	EAR R	EGULATO	RY COMM	ISSION	APPROVI	DOCKET NUMBER					
(10-2010)	L	ICENS)EE E'	VENT RI	≣POf	RT (LE	R)		request: dicensing pestimate of Commission infocullect and Regul Budget, Woollection on condu	80 hours. I process and to the FOLA on, Washir is resource @ latory Affairs Vashington, does not disjuct or spons	Reported les I fed back to in APrivacy Sec Ington, DC : Ington, DC : Ington DC	sons learned andustry. Send contion (T-5 F53), 20555-0001, or to the Desk Offiz, (3150-0104), of a means used by valid OMB conticts.	re incorpora mments rega U.S. Nuclea by interne- ficer, Office of Office of Man- to impose a strol number,	mandatory collection incorporated into the ents regarding burden incorporated into the ents regarding burden in Nuclear Regulatory Internet e-mail to Office of Information e of Management and mpose an information number, the NRC may add to respond to, the OF 4 VED DOCKET NUMBER 05000 364 DOCKET NUMBER all that apply) a) (2) (vii) a) (2) (viii) (A) a) (2) (viii) (B) a) (2) (viii) (B) a) (2) (viii) (B) a) (2) (x) a) (4) a) (5) a in Abstract below to Form 366A	
1. FACIL			Musler	Dlont I	Init 4								OF /		
JOSE 4. TITLE	<u></u> -	Fariey	Nuclea	ar Plant, L	mit i				U	5000 34	18		UF 4	i	
Seismically Qualified RWST Aligned to Non-Seismic Piping															
5. E	VENT D	DATE	6. 1	LER NUMBE	.A	7. REPORT DATE				OTHER FA	CILITIES INV				
молтн	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR		Farley Nuclear Plan		, Unit 2			
02	15	2012	2012	- 001 -	00	04	09	2012		FACILITY NAME			DOCKET	NUMBER	
9. OPERATING MODE 11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR§: (Check								ck all that	apply)						
1 10. POWER LEVEL 100		/EL	☐ 20.2201(d) ☐ 20.2203(a)(1) ☐ 20.2203(a)(2)(ii ☐ 20.2203(a)(2)(iii) ☐ 20.2203(a)(2)(iii) ☐ 20.2203(a)(2)(iv) ☐ 20.2203(a)(2)(v) ☐ 20.2203(a)(2)(v) ☐			2 2 5 5 5 5 5 5 5	20.2203(a)(4) 50.36(c)(1)(i)(A)			50.73(a)(2)(ii)(A) 50.73(a)(2)(ii)(B) 50.73(a)(2)(iii) 50.73(a)(2)(ii)(A) 50.73(a)(2)(v)(A) 50.73(a)(2)(v)(B) 50.73(a)(2)(v)(C)		☐ 50. ☐ 50. ☐ 50. ☐ 50. ☐ 73. ☐ 73. ☐ OTI	73(a)(2)(viii 73(a)(2)(viii 73(a)(2)(ix) 73(a)(2)(x) 71(a)(4) 71(a)(5) HER cify in Abstra	(a)(2)(viii)(A) (a)(2)(viii)(B) (a)(2)(ix)(A) (a)(2)(x) (a)(4) (a)(5) :R	
FACILITY N	14145			Military of the State St	1	2. LICENS	SEE CONT	ACT FO	R THIS I	LER					
						dfield – Principal Lice						(334) 814	EPHONE NUMBER (Include Area Code) [334] 814-4765		
			13. COM	IPLETE ONE	LINE F	OR EACH	I COMPO	NENT F	AILURE !	DESCRIB	ED IN THIS	REPORT			
CAU	CAUSE S		COMPON		NU- UAER	REPOR TO E		CA	AUSE	SYSTEM COMPON		MANU- FACTURES			
														7007761111	
	SUBMISSION					YEAR									
☐ YE	☐ YES (If yes, complete 15. EXPECTED SUBMISSION DATE) SUBMISSION DATE														
ABSTRA	CT (Lim	It to 1400	spaces. I	i.e., approxim	ately 1	5 single-sr	paced type	written I	ines)						

On February 15, 2012, with both Units 1 and 2 operating 100 percent power, it was determined that opening the boundary valve between the safety related and seismically qualified Refueling Water Storage Tank (RWST) and the non-safety related and non-seismically qualified Spent Fuel Pool Purification (SFPP) system in Modes 1-4, renders the RWST inoperable. Plant procedures had been revised in 2009 to allow opening this boundary valve in Modes 1-4 under administrative controls. The 10 CFR 50.59 safety evaluation that had been performed to support the procedure change had concluded that the administrative controls would allow the RWST to remain operable. However, in consideration of the new interpretation provided in NRC Information Notice 2012-01, it was judged that the RWST would be considered to be inoperable regardless of the administrative controls established when the RWST was aligned to non-seismic piping in Modes 1 - 4. Since the boundary valve had been opened in Mode 1 under administrative controls and the one hour completion time of Technical Specification 3.5.4 Condition B was not entered, under this recent interpretation, this represented a condition prohibited by Technical Specifications and is reportable pursuant to 10 CFR 50.73(a)(2)(i)(B). This event had no significant safety consequence since a seismic event had not occurred while the SFPP system was in service on the RWST.

NRC FORM 366A (10-2010)	ENSEE EVENT REI CONTINUATION :	•	ER) U.S. NUC	CLEAR REG	ULATOR	Y COMIV	IISSION
1. FACILITY NAME	2. DOCKET		6. LER NUMBER		3. PAGE		
Joseph M. Farley Nuclear Plant, Unit	1 05000 348	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2	of	4
The state of the s	00000 040	2012	- 001 -	00	_	OI .	7
NARRATIVE							

Westinghouse -- Pressurized Water Reactor
Energy Industry Identification Codes are identified in the text as [XX]

Description of Event

On February 15, 2012, with both Units 1 and 2 operating 100 percent power, during review of the new interpretation provided in NRC Information Notice 2012-01, it was determined that one of the items described in the information notice was applicable to the Farley Nuclear Plant (FNP). Specifically, the information notice identified a utility that had received a non-cited violation (NCV) for crediting administrative controls to close a boundary valve to isolate the non-seismic piping system from the seismically qualified Refueling Water Storage Tank (RWST) [BP and BQ]. During the review, it was recognized that, considering the information provided in NRC Information Notice 2012-01, the RWST would be considered inoperable regardless of the administrative controls established when the RWST was aligned to non-seismic piping in Modes 1 – 4.

At FNP, the RWST is seismically qualified, safety related and within the scope of the plant Technical Specifications (TS). The plant design includes the capability to align the Spent Fuel Pool Purification (SFPP) system [DA] for cleanup of the RWST. The SFPP system is a non-safety, non-seismic system that is normally isolated from the RWST by a normally closed, safety related manually operated valve.

A review of system operating procedures identified that FNP allowed the SFPP system boundary valve to be opened under administrative controls while the unit was operating in Modes 1-4 without declaring the RWST inoperable per TS LCO 3.5.4 Condition B. TS LCO 3.5.4 Condition B requires that the RWST be returned to operable status with a completion time of 1 hour. If the RWST is not returned to operable status within 1 hour, TS LCO 3.5.4 Condition C requires that the unit be placed in Mode 3 within 6 hours and in Mode 5 within 36 hours. FNP had a previous practice of aligning the seismically qualified RWST to the non-seismic SFPP system and a skid mounted Boric Acid Recovery System (BARS) for silica removal prior to refueling outages while in Modes 1 – 4. In addition, the RWST was also aligned to the non-seismic SFPP system piping during routine recirculation of the RWST to support TS required boron concentration verification. The BARS was placed in service for a period of approximately 22 days, on average, prior to each outage over the last five refueling cycles for each unit. The RWST on each unit was aligned to the SFPP system for recirculation on approximately a weekly basis for sampling purposes. Since the RWST was not declared inoperable during these periods, TS LCO actions were not entered. This resulted in operation of the units, which under the interpretation provided by NRC Information Notice 2012-01, is considered to be a condition prohibited by TS and is reportable pursuant to 10 CFR 50.73(a)(2)(i)(B).

NRC FORM 366A LICENSEE EVENT REPORT (LER) U.S. NUCLEAR REGULATORY COMMISSION CONTINUATION SHEET

		<u> </u>					
1. FACILITY NAME	2. DOCKET	6	. LER NUMBER	3. PAGE			
Joseph M. Farley Nuclear Plant, Unit 1	05000 348	YEAR		REVISION NUMBER	3	of	4
and radioar rank, orm	03000 340	2012	- 001 -	00	3	Oi.	7

NARRATIVE

Cause of Event

The direct cause of this event was an incorrect application of compensatory measures (i.e., manual operator actions) when placing the non-seismic SFPP system in service on seismically qualified systems/components (RWST) during modes of operation when they are needed to perform their safety function. Prior to the issuance of NRC Information Notice 2012-01, manual operator actions had been evaluated and deemed acceptable in accordance with procedures in place at that time. However, it has been determined that licensees cannot use compensatory measures when compromising the seismic qualification of a system/component.

Safety Assessment

This event had no significant safety consequence since a seismic event had not occurred while the SFPP system was in service on the RWST. Additionally this event did not involve a safety system functional failure since administrative controls were established and a designated operator was assigned to close the valve within a short period of time. This ensured the minimum required inventory in the RWST would have been available for accident mitigation requirements. This event would be considered low risk based on the following mitigating factors: very low frequency for a seismic initiating event; very low frequency of an accident requiring the use of the RWST safety function; operator action to isolate the non-seismic piping after a seismic initiating event; and a relatively small exposure time. The operator had sufficient response time based on a documented engineering analysis, had multiple cues, and had simple, proceduralized actions. Therefore, the health and safety of the public were not affected by this event.

It should be noted that subsequent to the NRC Information Notice 2012-01, a proposed Technical Specification (TS) was submitted that approved use of the alternate controls which were in place at the time of the event.

Corrective Action

The BARS, in service for silica removal prior to the upcoming refueling outage, was isolated from the Unit 1 RWST. All RWST alignment to non-seismic piping was suspended for both units.

Procedures on both units were revised to use the seismically qualified Containment Spray system as an alternate means of recirculating the RWST prior to sampling.

Causal analysis was initiated and corrective action to strengthen procedure guidance related to 10 CFR 50.59 implementation was entered into the corrective action program (CAP). An additional condition report was entered into the CAP to resolve this seismic issue on a permanent basis.

IRC FORM 366A LICENSI	EE EVENT REI	PORT (L	ER) U.S. NU	CLEAR REG	ULATOR	Y COMM	IISSI
1. FACILITY NAME	NTINUATION S	SUEEI	3. PAGE					
oseph M. Farley Nuclear Plant, Unit 1	05000 348	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	4	of	4	
	000000	2012	-	001	- 00			
ARRATIVE								
Additional Information								
Similar Events:								
None								