

444 South 16<sup>th</sup> Street Mall Omaha, NE 68102-2247

LIC-12-0143 September 25, 2012

U.S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555-0001

Reference:

Docket No. 50-285

Subject:

Licensee Event Report 2012-018, Revision 0, for the Fort Calhoun

**Station** 

Please find attached Licensee Event Report 2012-018, Revision 0, dated September 25, 2012. This report is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B).

There are now new commitments being made in this letter.

If you should have any questions, please contact me.

Sincerely

Louis P. Cortopassi,

Vice President and CNO

LC/epm/rjr

Attachment

E. E. Collins, Jr., NRC Regional Administrator, Region IV

L. E. Wilkins, NRC Project Manager

J. C. Kirkland, NRC Senior Resident Inspector

NRC FOR	RM 366			U.S. NUC	LEAR R	EGULATO	RY COMM	ISSION	APPRO	VED BY OMB: N	O. 3150-0104	E	XPIRES	: 10/31/2013		
(10-2010)	LIC	(See r	everse	/ENT F for requi	red nur	nber of	ER)	 	request: icensing estimate Commis nfocolle and Reg Budget, collection not con	ed burden per re: 80 hours. Rep g process and fed e to the FOIA/Prision, Washingto ects.resource@nrc yulatory Affairs, NE Washington, DC n does not display duct or sponsor, tion collection.	orted lessons back to industry vacy Section (1, DC 20555-6.20v, and to the 205-00s. If a mera a currently valid	learned are v. Send comm T-5 F53), U.S. -0001, or be Desk Office 50-0104), Office ans used to I OMB control	incorpora ients rega S. Nuclea y interna r, Office of ce of Mar impose a number,	ated into the arding burden ar Regulatory et e-mail to of Information nagement and in information the NRC may		
									2. DOCKET NUMBER 3. PAGE							
4. TITLE			Fort (	Calhoun	Station					05000285		1	OF 4			
4. IIILE		Cor	ntainme	nt Air Coo	oling Un	its Opera	ted Outs	ide of To	echnic	al Specificati	ons during (	Cycle 26				
5. E	VENT D	ATE	6. LER NUMBER			7. REPORT DATE			8. OTHER FACILI							
MONTH	MONTH DAY YEAR		YEAR	SEQUENTI NUMBER		MONTH	DAY	YEAR		CILITY NAME			DOCKET NUMBER 05000			
07	27	2012	2012	018	- 0	09	25	2012	FACIL	ITY NAME				NUMBER 5000		
9. OPER	ATING	MODE	11.	THIS REF	ORT IS	SUBMITTE	D PURSI	JANT TO	THE	REQUIREMEN <sup>*</sup>	TS OF 10 CFF	§: (Check	all that	apply)		
5 <b>10. POWER LEVEL</b> 0			$\begin{array}{ c c c c c } \hline & 20.2201(b) & & & & & & & \\ \hline & 20.2203(a)(3)(i) & & & & & \\ \hline & 20.2203(a)(3)(ii) & & & & \\ \hline & 20.2203(a)(2)(i) & & & & \\ \hline & 20.2203(a)(2)(i) & & & & \\ \hline & 20.2203(a)(2)(ii) & & & \\ \hline & 20.2203(a)(2)(iii) & & & \\ \hline & 20.2203(a)(2)(iii) & & & \\ \hline & 20.2203(a)(2)(iv) & & & \\ \hline & 20.2203(a)(2)(v) & & \\ \hline \end{array}$			(3)(ii) (4) (i)(A) (ii)(A) (ii)(A) (iii) (ii)(A)	□ 50.73(a)(2)(i)(C)       □ 50.73(a)(2)(vii)         □ 50.73(a)(2)(ii)(A)       □ 50.73(a)(2)(viii)(A)         □ 50.73(a)(2)(ii)(B)       □ 50.73(a)(2)(viii)(B)         □ 50.73(a)(2)(iii)       □ 50.73(a)(2)(ix)(A)         □ 50.73(a)(2)(iv)(A)       □ 50.73(a)(2)(x)         □ 50.73(a)(2)(v)(A)       □ 73.71(a)(4)         □ 50.73(a)(2)(v)(B)       □ 73.71(a)(5)         □ 50.73(a)(2)(v)(C)       □ OTHER         □ 50.73(a)(2)(v)(D)       Specify in Abstract below or in NRC Form 366A					i)(A) i)(B) i(A) act below				
					1	2. LICENS	SEE CON	TACT FO	R THIS	S LER						
FACILITY N	IAME					Matzke						ONE NUMBER 402-53		,		
13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT																
CAUSE		SYSTEM	CON	COMPONENT MANU- FACTURI					USE SYSTEM COMP		COMPONENT	FACTUR				
14			4. SUPPLEMENTAL REPORT EXPECTED							15. EXP		MONTH	DAY	YEAR		
⊠YE				e 15. EXPECTED SUBMISSION DATE)					NO SUBMISSION 1				21	13		
ABSTRA	CT (Lim	it to 1400	spaces,	i.e., approx	imately 1	5 single-s <sub>l</sub>	paced type	ewritten li	nes)							
con Sta	tainme tion bei	nt air coo	oling an condition	d filtering	system ed by Te	was oper echnical S	rated outs Specificat	side its d	esign ing th	the recovery of basis during of at operating of inted.	cycle 26 resu					

### LICENSEE EVENT REPORT (LER) CONTINUATION SHEET

#### U.S. NUCLEAR REGULATORY COMMISSION

1. FACILITY NAME	2. DOCKET	6		3. PAGE			
Fort Callegin Station	05000285	YEAR	SEQUENTIAL NUMBER	REV NO.	2	OF	4
Fort Calhoun Station		2012	- 018 -	0			4

#### **NARRATIVE**

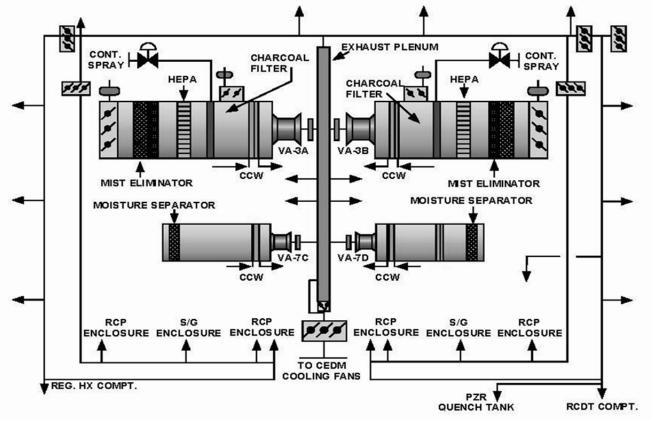
#### BACKGROUND

#### **System Description**

The containment air cooling and filtering system (CACFS) is designed to perform a nuclear safety function of filtering and cooling the containment building atmosphere during normal plant operation and accident conditions. During accident conditions, the CACFS is designed to limit the leakage of airborne activity from the containment and reduce containment pressures in the event of a LOCA. During normal plant operations, CACFS cools the containment atmosphere and provides filtration required prior to personnel access.

The CACFS consists of four air handling units each with a fan and heat exchanger. They discharge to a common plenum. There are two types of units. Two units (VA-3A, VA-3B) have filtering capacity while the other two air cooling units (VA-7C, VA-7D) do not have filtering capacity. The air cooling units are similar in design to the cooling and filtering units but do not include mist eliminators, HEPA filters, or charcoal filters. License Amendment No. 255 approved the change where the CACFS components are combined into a train consisting of one containment air filtering and cooling unit, and one containment cooling unit that are associated to the same emergency diesel generator. Therefore, the two trains of containment air cooling and filtering components are: (VA-3A and VA-7C) which are associated with diesel generator DG-1 and (VA-3B and VA-7D) which are associated with diesel generator DG-2

Below is a partial plant drawing of the CACFS components discussed in the Event Description.



(10-2010)

## LICENSEE EVENT REPORT (LER) U.S. NUCLEAR REGULATORY COMMISSION CONTINUATION SHEET

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#### NARRATIVE

Technical specifications 2.4 and 3.6(3)g divide the four air handling units into two independent trains, each with 100% capacity that are to be shown to operate within +/- 10% of design flow on a refueling surveillance interval.

#### **EVENT DESCRIPTION**

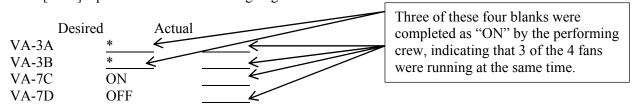
On July 27, 2012, while performing NRC Inspection Manual Chapter 0350 checklist reviews, the recovery engineering team identified that the CACFS was operated outside its design basis during cycle 26 resulting in Fort Calhoun Station (FCS) being in a condition prohibited by Technical Specifications during that operating cycle. The review of Condition Report (CR) 2009-6610 identified that on the previous day VA-7C and VA-7D failed the acceptable pressure drop range of 3.3 to 5.0 inches water column (WC) as specified in surveillance test IC-ST-VA-0013

Under Steps 7.3 and & 7.4 of the referenced surveillance is a note which states "\*It is desired to have one fan in the ON position to minimize back pressure during VA-7C/D test". The following step (7.3.1 or 7.4.1) has Operations place fan combinations in service with desired and actual fan combinations. The desired position category allows Operations to interpret the note found above the step (3.4.1 or 7.4.1) (see below).

The test was re-performed a day later and during the re-test during the 2009 refueling outage the note was interpreted incorrectly and both VA-3A and VA-3C were left running during the individual testing of the VA-7C and VA-7D units. Running this fan configuration increases backpressure, reducing measured flow, resulting in what appeared to be a successful test. What was not recognized at the time was that the test violated train separation of the containment cooling fans, therefore, the FCS failed to meet the surveillance testing requirements and was outside the conditions described in technical specifications. The step is shown below:

#### 7.3 [7.4] Pressure Drop of VA-7C (Data Sheet 3)

**NOTE**: \* It is desired to have one fan in ON position to minimize back pressure during VA-7C/D test. 7.3.1 [7.4.1] Operations ensure following alignment:



This condition is being submitted pursuant to: 10 CFR 50.73(a)(2)(i)(B), Any operation or condition which was prohibited by the plant's Technical Specifications.

#### CONCLUSION

A cause analysis is in-process. When completed, this LER will be supplemented.

#### CORRECTIVE ACTIONS

A cause analysis is in-process. When completed, this LER will be supplemented.

#### NRC FORM 366A

(10-2010)

# LICENSEE EVENT REPORT (LER) U.S. NUCLEAR REGULATORY COMMISSION CONTINUATION SHEET

1. FACILITY NAME	2. DOCKET	6		3. PAGE			
Fort Callegue Station	05000285	YEAR	SEQUENTIAL NUMBER	REV NO.	4	OF	4
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#### **NARRATIVE**

#### SAFETY SIGNIFICANCE

A cause analysis is in-process. When completed, this LER will be supplemented.

#### SAFETY SYSTEM FUNCTIONAL FAILURE

This event does not result in a safety system functional failure in accordance with NEI-99-02.

#### PREVIOUS EVENTS

A cause analysis is in progress. Previous Events will be determined from the results of the cause analysis.