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10CFR50.73
John L. Skolds
Vice President
Nuclear Operations

NOV 01 1991

Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Gentlemen:

Subject: VIRGIL C. SUMMER NUCLEAR STATION
DOCKET NO. 50/395
OPERATING LICENSE NO. NPF-12
LER 91-008

Attached is Licensee Event Report No. 91-008 for the Virgil C. Summer Nuclear Station. This report is submitted pursuant to the requirements of Technical Specification Section 4.4.5.5.c and 10CFR50.73(a)(2)(ii).

Should there be any questions, please call us at your convenience.

Very truly yours,

John L. Skolds

ARR:JLS:lcd
Attachment

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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Virgil C. Summer Nuclear Station										DOCKET NUMBER (2) 0 5 0 0 0 0 0 0 0 0				PAGE 1 1 OF 0 3												
TITLE (4) Steam Generator Tube Eddy Current Results - Category C-3 Applied																										
EVENT DATE (5)			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 (9)													
1	0	0	4	9	1	9	1	0	0	8	0	0	1	1	0	1	9	1	0	5	0	0	0	0	0	0
OPERATING MODE (3)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)																								
6		20.402(b)				20.408(a)				50.73(a)(2)(iv)				73.71(b)												
POWER LEVEL (10)		20.408(a)(1)(i)				50.36(a)(1)				50.73(a)(2)(iv)				73.71(a)												
0 1 0 0		20.408(a)(1)(ii)				50.36(a)(2)				50.73(a)(2)(iv)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)												
		20.408(a)(1)(iii)				50.73(a)(2)(i)				50.73(a)(2)(viii)(A)																
		20.408(a)(1)(iv)				50.73(a)(2)(ii)				50.73(a)(2)(viii)(B)																
		20.408(a)(1)(v)				50.73(a)(2)(iii)				50.73(a)(2)(ix)																
LICENSEE CONTACT FOR THIS LER (12)																										
NAME W. R. Higgins, Supervisor, Regulatory Compliance										TELEPHONE NUMBER 81013 314151-14101412																
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																										
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC																
				N																						
SUPPLEMENTAL REPORT EXPECTED (14)												EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR										
YES (if yes, complete EXPECTED SUBMISSION DATE)												X NO														
ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)																										

On October 19, 1991, at approximately 1400 hours, the preliminary results of the sixth inservice eddy current examination of the Virgil C. Summer Nuclear Station steam generators were obtained. The planned examinations included 100% of the available (i.e., not plugged) tubes in each steam generator hot leg tubesheet, utilizing Motorized Rotating Pancake Coil Eddy Current Testing. A 100% Bobbin Coil inspection of the full length tubing (Tube End Hot to Tube End Cold) was also performed. The results indicated that since more than 1% of the inspected tubes in each steam generator were defective, a C-3 inspection category, per Technical Specification 4.4.5.2, applied. When all three steam generators entered Category C-3, a prompt notification was made to the NRC Operations Center in accordance with the requirements of Technical Specification 4.4.5.5.c and 10CFR50.72(b)(2)(i).

The results of the inspections performed during the sixth refueling outage are:

Steam Generator	# of Tubes Plugged	# of Tubes Repaired
A	13	211
B	21	309
C	169	92

The Category C-3 tube degradation is localized in the tubesheet area and is the result of Primary Water Stress Corrosion Cracking (PWSCC).

Tube plugging or repair, as appropriate, was completed on November 1, 1991.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (5)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
Virgil C. Summer Nuclear Station	0 5 0 0 0 3 9 5 9 1	—	0 0 8	—	0 0	0 2 OF 0 3

TEXT (if more space is required, use additional NRC Form 305A (11/73))

PLANT IDENTIFICATION:

Westinghouse - Pressurized Water Reactor

EQUIPMENT IDENTIFICATION:Westinghouse Model D-3 Steam Generators (SG)
Reactor Coolant System - AB - E11SIDENTIFICATION OF EVENT:

Steam generator tube eddy current examinations yield inspection Category C-3 results in the hot leg tubesheet area, i.e., greater than 1% of the inspected tubes in each generator were defective with defects localized in the tubesheet area.

EVENT DATE: October 4, 1991 at approximately 0845 hours.REPORT DATE: November 1, 1991

This is the followup report to the 10CFR50.72 notification required by Section 4.4.5.5.c of the Virgil C. Summer Nuclear Station Technical Specifications. The initial notification was made as required by Technical Specifications 4.4.5.5.c upon entry into Category C-3. It was previously agreed between the NRC Resident Inspector (L. Keller) and South Carolina Electric & Gas Company (SCE&G) that only one phone call was necessary when all three steam generators entered Category C-3.

This report was initiated by Off-Normal Occurrence report 91-060.

PREVIOUS SIMILAR EVENTS:

Previous eddy current inspections have yielded similar results and have been reported to the NRC in LER 85-031 submitted on November 13, 1985, LER 87-006 submitted on May 7, 1987, LER 88-011 submitted on November 23, 1988, and LER 90-005 submitted on May 4, 1990.

CONDITIONS PRIOR TO THE EVENT:

0% Power - Sixth Refueling Outage

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8-31-85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Virgil C. Summer Nuclear Station	0 5 0 4 0 3 9 5	9 1	— 0 0 8	— 0 0	0 3	OF	0 3

TEXT (If more space is required, use additional NRC Form 365A's) (17)

DESCRIPTION OF EVENT:

The sixth inservice eddy current examination of the Virgil C. Summer Nuclear Station steam generator tubing was performed during October 1991. The examination was performed in accordance with the ASME "Boiler and Pressure Vessel Code" Section XI, 1977 edition, through Summer 1978 addenda, and as specified by Regulatory Guide 1.83, Revision 1, July 1975. The examination was performed on 100% of the available tubing (i.e., unplugged) in the inlet (i.e., hot leg) tubesheet region, utilizing Motorized Rotating Pancake Coil Eddy Current Testing techniques. A 100% Bobbin Coil inspection of the full length tubing (Tube End Hot to Tube End Cold) was also performed on available tubes.

On October 19, 1991, at approximately 1400 hours, the eddy current examinations were completed and the results yielded an inspection Category C-3 determination since more than 1% of the tubes in the hot leg tubesheet region were defective. Prompt notification was made to the NRC Operations Center upon entry into Category C-3 for the steam generators. The notification was made per the requirements of Technical Specification Section 4.4.5.5.c and 10CFR50.72(b)(2)(i). Plugging or repair of defective tubes was completed on November 1, 1991.

CAUSE OF EVENT:

The Category C-3 tube degradation is the result of Primary Water Stress Corrosion Cracking (PWSCC) in the hot leg tubesheet area.

ANALYSIS OF EVENT:

By performing tube plugging or repair in accordance with Technical Specification requirements, defective tubes were removed from service or repaired, thereby ensuring that there was no reduction in the degree of protection provided to the public.

CORRECTIVE ACTIONS:

All defective tubes were plugged or repaired in accordance with Technical Specification requirements. Subsequent inservice inspections will be performed as required by the VCSNS Technical Specifications.