

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Virgil C. Summer Nuclear Station										DOCKET NUMBER (2) 0 5 0 0 0 3 9 5 1										PAGE (3) 1 OF 2																															
TITLE (4) Steam Generator Tube Eddy Current Examination																																																			
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 NAMES					DOCKET NUMBER(S)																																					
1	0	1	4	8	5	8	5	0	3	1	0	1	1	1	3	8	5	0 5 0 0 0																																	
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)																																																	
5		20.402(b)										20.405(c)										50.73(a)(2)(iv)										73.71(b)																			
POWER LEVEL (10)		0 0 0										20.405(a)(1)(i)										50.36(c)(1)										50.73(a)(2)(v)										73.71(c)									
		20.405(a)(1)(ii)										50.36(c)(2)										50.73(a)(2)(vii)										X OTHER (Specify in Abstract below and in Text, NRC Form 366A)																			
		20.405(a)(1)(iii)										50.73(a)(2)(i)										50.73(a)(2)(viii)(A)										Special Report																			
		20.405(a)(1)(iv)										X 50.73(a)(2)(ii)										50.73(a)(2)(viii)(B)																													
		20.405(a)(1)(v)										50.73(a)(2)(iii)										50.73(a)(2)(ix)																													
LICENSEE CONTACT FOR THIS LER (12)																																																			
NAME												TELEPHONE NUMBER																																							
A. R. Koon, Jr., Assoc. Mgr., Regulatory Compliance												8 0 3 3 4 5 7 5 2 9 9																																							
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																																																			
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPD		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPD																																									
B	A/E	I/S/G	W	1/2/0	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 14, 1985, at approximately 1800 hours, the Inservice Inspection of Steam Generator "B" identified 9 out of 700 tubes with  $\geq 40\%$  through wall indications in the area of the hot leg tube sheet. Since the inspection results fell into category C-3, a Prompt Notification was made at 1915 hours per the requirements of 10 CFR 50.72(b)2(1).

The high incidence of degradation led to a management decision to perform a 100% inspection of the hot leg tube sheet area on all 3 steam generators. The results of this examination are as follows:

STEAM GENERATOR	TUBE DEGRADATION			TOTAL TUBES PLUGGED
	*31-39%	*OVERROLL	>40%	
A	-	-	35	35
B	2	-	79	81
C	1	2	47	50

\*Preventive plugs were installed in tubes exhibiting either 31-39% through wall indications near top of tube sheet or from overroll.

An Engineering evaluation of the test results determined that the tube degradation appears to be related to stresses from improper rolling of the tubes into the tubesheet at the time of manufacture. This degradation does not cause a reduction in the degree of protection provided to the public. Tube plugging was completed November 21, 1985.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

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

TEXT (If more space is required, use additional NRC Form 366A's) (17)

On October 14, 1985, at approximately 1800 hours, the Inservice Inspection of Steam Generator "B" identified 9 out of 700 tubes with  $\geq 40\%$  through wall indications in the area of the hot leg tube sheet. Since the inspection results fell into category C-3, a Prompt Notification was made at 1915 hours per the requirements of 10 CFR 50.72(b)2(i).

The high incidence of degradation led to a management decision to perform a 100% inspection of the hot leg tube sheet area on all 3 steam generators. The results of this examination are as follows:

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B	2	—	79	81
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\*Preventive plugs were installed in tubes exhibiting either 31-39% through wall indications near top of tube sheet or from overroll.

An engineering evaluation of the test results determined that the tube degradation appears to be related to stresses from improper rolling of the tubes into the tubesheet at the time of manufacture. Tube plugging, which was completed November 21, 1985, has removed the defective tubes from service and provides assurance that there is no reduction in the degree of protection provided to the public. Tube degradation is considered as a part of plant design and analysis.

The following corrective measures have been taken by the Licensee to ensure continued structural integrity:

- 1) Eddy current inspection was performed on 100% of the hot leg tube sheet area for all three (3) steam generators.
- 2) Tubes with either through wall indications of  $>31\%$  near top of tube sheet or indications of overroll were plugged.
- 3) Inservice inspection frequency has been increased to at least once per 20 months in accordance with the requirements of Technical Specification 4.4.5.3(b).



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Dan A. Nauman  
Vice President  
Nuclear Operations

December 4, 1985

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

SUBJECT: Virgil C. Summer Nuclear Station  
Docket No. 50/395  
Operating License No. NPF-12  
LER 85-031, Revision 1

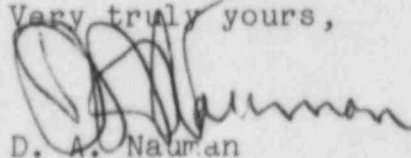
Dear Sir:

Attached is Revision 1 to Licensee Event Report #85-031 for the Virgil C. Summer Nuclear Station. This revision provides additional information on the number of tubes plugged in each Steam Generator and satisfies the Special Report requirements of Technical Specification 4.4.5.5(a).

The initial submittal of this report was made on November 13, 1985 in accordance with the requirements of 10CFR50.73(a)(2)(ii).

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

Very truly yours,



D. A. Nauman

CJM/DAN:led  
Attachment

cc: V. C. Summer	C. L. Ligon (NSRC)
O. W. Dixon, Jr./T. C. Nichols, Jr.	K. E. Nodland
E. H. Crews, Jr.	R. A. Stough
E. C. Roberts	G. O. Percival
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