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John L. Skolds
Vice President
Nuclear Operations

March 11, 1994
RC-94-0072

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 94-003

Attached is Licensee Event Report No. 94-003 for the Virgil C. Summer Nuclear Station. This report is submitted pursuant to the requirements of 10CFR50.73(a)(2)(ii)(B) and 10CFR21.2(c).

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

Very truly yours,

John L. Skolds

RJB:lcd
Attachment

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NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Virgil C. Summer Nuclear Station	0 5 0 0 0 3 9 5	1 OF 0 3

TITLE (4)

Level Switches for Fuel Oil Day Tank Level Not Seismically Qualified

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(S)
0 2	0 9	9 4	9 4	0 0 3	0 0	0 3	1 1	9 4		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	7 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(a)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(a)(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)	
		20.405(a)(1)(iv)	X 50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	10CFR21
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
J. R. Proper Supervisor, Nuclear Licensing & Operating Experience	AREA CODE 8 0 3 3 4 5 - 4 0 8 8

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	
B	D C	L S	M 0 4 0	Y							

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)

This report is being submitted pursuant to the requirements of 10CFR50.73(a)(2)(ii)(B) and 10CFR21.2(c). At 1718 hours, February 9, 1994, a condition was identified for the Emergency Diesel Generators (EDGs) where seismic qualification could not be verified for the level switches providing automatic control of the fuel oil day tank level. The subject switches were manufactured by MAGNETROL,INC.(EIIS-M040) model A-103F-MPG-TDM-S1M3DC-S1M3DC. The EDGs are supplied by Colt-Pielstick (Coltec Industries/EIIS-C470) and the day tank and associated level switches were provided as seismically qualified components. One hour notification as required by 10CFR50.72(b)(1)(ii)(B) was made at 1759 hours, February 9, 1994. A Station Order (SO 94-04) was immediately issued directing that an operator be dispatched should a seismic event occur and take manual control of the fuel transfer pump. The switch associated with "A" EDG was replaced February 11 and the switch associated with "B" EDG was replaced February 13, 1994, with seismically qualified components.

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

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

PLANT IDENTIFICATION:

Westinghouse - Pressurized Water Reactor

EQUIPMENT IDENTIFICATION:

EDG Fuel Oil Day Tank Level Switch - EIIS - M040

IDENTIFICATION OF EVENT:

This report is being submitted pursuant to the requirements of 10CFR 50.73 and satisfies the requirements of 10 CFR 21.2(c). A condition was identified for the Emergency Diesel Generators (EDGs) where the seismic qualification can not be verified for the level switches providing automatic control of the fuel oil day tank level.

EVENT DATE: February 9, 1994

REPORT DATE: March 11, 1994

This report was initiated by Off-Normal Occurrence Report 94-011.

CONDITIONS PRIOR TO THE EVENT:

70% Power - MODE 1

DESCRIPTION OF EVENT:

At 1718 hours, February 9, 1994, a condition was identified for the EDGs where the seismic qualification cannot be verified for the level switches providing automatic control of the fuel oil day tank level. The subject switches were manufactured by MAGNETROL INC., model A-103F-MPG-TDM-S1M3DC-S1M3DC, and supplied as seismically qualified components with the EDGs by Coltec Industries (formerly Colt). The fuel oil day tank level switches, ILS05411 and ILS05421, provide the start and stop signals for the diesel fuel oil transfer pumps (XPP-4A and 141A/XPP-4B and 141B).

CAUSE OF EVENT:

The cause of this event is due to a failure of the supplier to adequately document the seismic qualification of the level switches. The seismic qualification report for the EDG fuel oil day tank skid provided acceptance of the entire skid package, but did not specifically address the qualification or analysis for the level switches. When the specific documentation for the level switches was requested, the supplier was unable to provide the information based upon their present records. At this point, the licensee considered the qualification for the switches to be indeterminate, and immediate corrective action was taken.

ANALYSIS OF EVENT:

If the plant were in a condition requiring operation of the EDGs (i.e., loss of power to ESF buses), and a seismic event were to occur which resulted in failure of the fuel oil day tank level switches, assuming no operator action was taken, the EDGs could have run out of fuel after one hour of operation. The fuel oil day tanks are maintained at a minimum level of 300 gallons to insure sufficient fuel for one hour of operation. The level switches for the fuel oil day tank provide start and stop signals for the diesel fuel oil transfer pumps (XPP-4A and 141A/XPP-4B and 141B). With the day tank level greater than 450 gallons, both of the associated pumps are off. With the level between 250 and 350 gallons, one transfer pump should be in operation. If the level is less than 250 gallons, both transfer pumps should be operating. The failure of the level switches would have prevented the automatic operation of the transfer pumps.

Should a seismic event have occurred and operator action taken in response to Main Control Board (MCB) alarms, the EDGs would have remained operable. With 60 minutes of fuel in the day tank, a day tank low level alarm annunciates on the MCB. With 35 minutes of fuel in the day tank, a day tank low-low level alarm annunciates on the MCB. Operator action of manually starting the transfer pumps would have prevented the loss of the EDGs. The pumps are designed to allow for continuous operation with an overflow return from the day tanks to the underground storage tanks.

IMMEDIATE CORRECTIVE ACTION:

Station order (SO 94-04) was initiated which required an operator to be stationed in the immediate area to manually control day tank level until the level switches were replaced with seismically qualified switches. Notification to NRC Operation Center was made at 1759 hours, February 9, 1994, in accordance with 10 CFR 50.72(b)(1)(ii)(B).

ADDITIONAL CORRECTIVE ACTIONS:

Work requests were initiated to replace the switches with seismically qualified switches. The day tank "A" switch was replaced on February 11, and the day tank "B" switch was replaced on February 13, 1994.