

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9003090158      DOC. DATE: 90/03/02      NOTARIZED: NO      DOCKET #  
 FACIL: 50-389 St. Lucie Plant, Unit 2, Florida Power & Light Co.      05000389  
 AUTH. NAME      AUTHOR AFFILIATION  
 SAGER, D.A.      Florida Power & Light Co.  
 RECIP. NAME      RECIPIENT AFFILIATION  
                                  Document Control Branch (Document Control Desk)

SUBJECT: Special rept: on 900104, emergency diesel generator 2A failure.

DISTRIBUTION CODE: IE22D      COPIES RECEIVED: LTR | ENCL | SIZE: 2  
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR	ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	ENCL
	PD2-2 LA	1	1	PD2-2 PD	1	1
	NORRIS, J	1	1			
INTERNAL:	ACNW	2	2	ACRS	2	2
	AEOD/DOA	1	1	AEOD/DSP/TPAB	1	1
	AEOD/ROAB/DSP	2	2	DEDRO	1	1
	NRR/DET/ECMB 9H	1	1	NRR/DET/EMEB9H3	1	1
	NRR/DET/ESGB 8D	1	1	NRR/DLPQ/LHFB11	1	1
	NRR/DLPQ/LPEB10	1	1	NRR/DOEA/OEAB11	1	1
	NRR/DREP/PRPB11	2	2	NRR/DST/SELB 8D	1	1
	NRR/DST/SICB 7E	1	1	NRR/DST/SPLB8D1	1	1
	NRR/DST/SRXB 8E	1	1	<u>REG FILE</u> 02	1	1
	RES/DSIR/EIB	1	1	RGN2 FILE 01	1	1
EXTERNAL:	EG&G WILLIAMS, S	4	4	L ST LOBBY WARD	1	1
	LPDR	1	1	NRC PDR	1	1
	NSIC MAYS, G	1	1	NSIC MURPHY, G.A	1	1
	NUDOCS FULL TXT	1	1			

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,  
 ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION  
 LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR 37 ENCL 37

IA-2



P.O. Box 14000, Juno Beach, FL 33408-0420

L-90-70

MARCH 02 1990

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D. C. 20555

Gentlemen:

Re: St. Lucie Unit 2  
Docket No. 50-389  
Date of Event: January 4, 1990  
Special Report on Diesel Generator Failure

The attached Special Report is being transmitted pursuant to the requirements of Technical Specification 4.8.1.1.3 to provide notification of a 2A Emergency Diesel Generator failure.

Very truly yours,

*D. A. Sager*  
D. A. Sager  
Vice President  
St. Lucie Plant

DAS/GRM/slh

Attachment

cc: Stewart D. Ebnetter, Regional Administrator, USNRC Region II  
Senior Resident Inspector, USNRC, St. Lucie Plant

9003090158 900302  
PDR ADOCK 05000389  
S PIC

*JEZ*  
*11*

## NRC SPECIAL REPORT

### DIESEL GENERATOR NON-VALID FAILURE

At 2209 hours on January 3, 1990, the St. Lucie 2A Emergency Diesel Generator (EDG) was started for a monthly surveillance run. The EDG started in 8.17 seconds, within the required 10 seconds. After attaining proper speed and being synched the grid, the EDG experienced load control problems; these were characterized by erratic response and wide load swings. The 2A EDG was shut down for investigation of the problem. Trouble shooting revealed some loose connections in the governor load sensor circuit. Also, relay 52X1 was observed to provide erratic contact; contact resistance on the relay varied between the normal 0 ohms and approximately 100 ohms.

Corrective actions: The loose connections were tightened. Also, Plant Work Orders (PWO) were written to inspect all four EDG sets for loose connections. A replacement relay 52X1, with an acceptable 0 ohm contact resistance, was installed.

At 0440 hours on January 4, the 2A EDG was again started. The start time was 8.2 seconds. The EDG operated properly and a very good surveillance run followed.

This problem was evaluated to be a non-valid failure per Regulatory Guide 1.108 C.2.e.2, because the affected governor circuitry was the droop section. The droop circuitry is only used for surveillance testing; in the event of a Loss of Offsite Power, the governor control is isochronous. This failure mode was such that the governor control was swapped over to its safety function mode of operation. At no time during this event was the EDG unable to perform its design safety function.

Failure summary: There have been three valid failures of the 2A EDG in the last 100 starts: September 2, 1987; January 12, 1988; and April 6, 1989. The surveillance frequency remains as once per 31 days, which is in conformance with Regulatory Position C.2.d of Regulatory Guide 1.108.