

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) St. Lucie Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 3 3 5	PAGE (3) 1 OF 0 1
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TITLE (4)
RPS Actuation on Loss of Load

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)																																																																																													
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LICENSEE CONTACT FOR THIS LER (12)
NAME: Gerald E. Walling/Technical Staff Engineer
TELEPHONE NUMBER: AREA CODE 3 0 5, NUMBER 4 6 5 - 3 5 5 0

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS
X	J J		W 1 2 0	N					
X	J I P T		F 1 2 0	N					

SUPPLEMENTAL REPORT EXPECTED (14)
 YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)
MONTH: | DAY: | YEAR: |

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On 7-26-84, while operating at 99% power, the reactor was tripped by the RPS on a loss of load signal. All automatic functions performed as designed with the exception of the Steam Bypass and Control System (SBCS) which did not fully actuate. As a result, 5 steam generator safety relief valves lifted momentarily as required. All valves reset properly and the unit was stabilized at hot standby with no other problems.

Investigation revealed that a loose nut in the vacuum trip mechanism allowed pressure to equalize across the diaphragm giving a false low vacuum condition to the DEH which tripped the turbine. The RPS then tripped the reactor on loss of load from the DEH. The nut was replaced and secured with "Loctite" and all associated trip functions tested satisfactorily.

Investigation of the SBCS revealed a failed pressure transmitter which provides a header pressure input to the "Quick Open" logic circuit of the SBCS. Without this input, the SBCS did not quick open on the trip but modulated on a Tavg control program to bring RCS to a hot standby Tavg of 532°F.

Only 4 out of 5 SBCS valves operate on Tavg control, and the valve stroke time in the modulate mode is 20 seconds, versus 3 seconds in the quick open mode, therefore the system did not react fast enough to prevent opening the S/G safety reliefs. The pressure transmitter was repaired, calibrated and returned to service. No adverse consequences to the health or safety of the public resulted from this event. The unit was returned to power operation.

IE 22
1/1



August 27, 1984
PNS-LI-84-302

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

Gentlemen:

Re: Reportable Event 84-06
St. Lucie Unit 1
Date of Event: July 26, 1984
RPS Actuation on Loss of Load

The attached Licensee Event Report is being submitted pursuant to the requirements of 10 CFR to provide notification of the subject event.

Very truly yours,

A handwritten signature in cursive script, appearing to read "J. Williams, Jr.", with a large, stylized flourish at the end.

J. W. Williams, Jr.
Group Vice President
Nuclear Energy

JWW/PLP/js

Attachment

cc: J. P. O'Reilly, Region II, USNRC
Harold F. Reis, Esquire
File 933.1

IE22
1/1