

February 17, 1978

PRN-LI-78-48

Mr. James P. O'Reilly, Director, Region II  
Office of Inspection and Enforcement  
U. S. Nuclear Regulatory Commission  
230 Peachtree Street, N. W., Suite 1217  
Atlanta, Georgia 30303

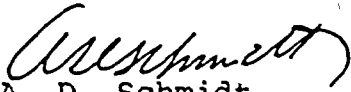
Dear Mr. O'Reilly:

REPORTABLE OCCURRENCE 335-78-7  
ST. LUCIE UNIT 1  
DATE OF OCCURRENCE: FEBRUARY 3, 1978

TECHNICAL SPECIFICATION 4.3.1.1.3  
RTD RESPONSE TIME

The attached Licensee Event Report is being submitted in accordance with Technical Specification 6.9 to provide prompt notification of the subject occurrence.

Very truly yours,

  
A. D. Schmidt  
Vice President  
Power Resources

MAS/bab

Attachment

cc: Robert Lowenstein, Esquire  
Director, Office of Inspection and Enforcement (40)  
Director, Office of Management Information and  
Program Control (3)

AO 4  
GD

LICENSEE NAME 01 F L S L S 1														LICENSE NUMBER 0 0 - 0 0 0 0 0 - 0 0														LICENSE TYPE 4 1 1 1 1										EVENT TYPE 0 1													
CATEGORY 01 CONT														REPORT TYPE T				REPORT SOURCE L				DOCKET NUMBER 0 5 0 - 0 3 3 5										EVENT DATE 0 2 0 3 7 8										REPORT DATE 0 2 1 7 7 8									

## EVENT DESCRIPTION

Technical Specification Table 3.3-2(Reactor Protective Instrumentation Response Times)																																																																															
does not include allowance for resistance temperature detector (RTD) response time,																																																																															
thereby preventing full compliance with Technical Specification 4.3.1.1.3 (response time																																																																															
testing). In addition, the RTD response times of selected channels are apparently greater																																																																															
than the 5-second value initially used by the NSSS vendor in the applicable setpoint																																																																															

SYSTEM CODE I A				CAUSE CODE B		COMPONENT CODE I N S T R U												PRIME COMPONENT SUPPLIER N		COMPONENT MANUFACTURER R 3 7 0										VIOLATION N	
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## CAUSE DESCRIPTION

The RTDs are mounted in instrument wells. Apparently, changes in the parameters																																																																															
governing the response of an RTD in an instrument well affect the overall response time.																																																																															
In addition, St. Lucie Unit 1 and other similar plants have had difficulty verifying the																																																																															

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## PERSONNEL EXPOSURES

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## PROBABLE CONSEQUENCES

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## LOSS OR DAMAGE TO FACILITY

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## PUBLICITY

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## ADDITIONAL FACTORS

See page two for continuation of Event Description and Cause Description.																																																																															
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Event Description (continued)

analysis. This is based on measurements made by a consultant in mid-January, 1978. The consultant reported the results on February 3, 1978. Although the measured response times are greater than 5 seconds, they are less than the revised value of 8 seconds contained in a proposed Technical Specification amendment which has been submitted to the NRC (see "Cause Description"). This is the first occurrence of this type at St. Lucie Unit 1. (335-78-7)

Cause Description (continued)

5-second response time assumed in the NSSS setpoint analysis. As a result of the parametric uncertainties and the measurement difficulties, the NSSS vendor had been requested in 1977 to re-evaluate the appropriate setpoints using a response time greater than 5 seconds. In December, 1977 the NSSS vendor responded with an evaluation that supported response times of up to 8 seconds. A proposal to incorporate the 8-second value in Table 3.3-2 was forwarded to the NRC by letter L-78-39 dated February 2, 1978.

All RTDs tested had response times less than 8 seconds, so no further action beyond the Technical Specification change proposal is planned at this time.