

# The Light company

Houston Lighting & Power

P.O. Box 1700 Houston, Texas 77001 (713) 228-9211

October 14, 1988  
ST-HL-AE-2818  
File No.: G02.04  
10CFR2.201

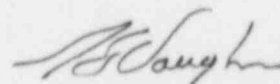
U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

South Texas Project Electric Generating Station  
Unit 1  
Docket No. STN 50-498  
Response to Notice of Violation 88li-01

Houston Lighting & Power Company (HL&P) has reviewed Notice of Violation 498/8811-01 dated September 21, 1988. HL&P concurs that the cited violation occurred. This violation was fully addressed as the subject of attached Licensee Event Report 88-016, "Inoperable Feedwater Flow Transmitters Due to a Procedural Deficiency".

The corrective actions associated with this report have been completed and reviewed by an NRC inspector. The Licensee Event Report will be addressed and closed in Inspection Report 498/8870.

If you should have any questions on this matter, please contact Mr. M. A. McBurnett at (512) 972-8530.



G. E. Vaughn  
Vice President  
Nuclear Plant Operations

GEV/RAF/nl

Attachment: Licensee Event Report 88-016

8810250405 881014  
PDR ADOCK 05000498  
Q PDC

NL.88.284.01

A Subsidiary of Houston Industries Incorporated

IE01  
1/1

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Revised 06/15/88

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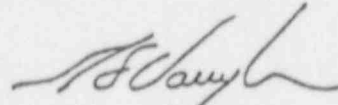
March 10, 1988  
ST-HL-AE-2550  
File No.: G26  
10CFR50.73

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

South Texas Project Electric Generating Station  
Unit 1  
Docket No. STN 50-498  
Licensee Event Report 88-016 Regarding  
Inoperable Feedwater Flow Transmitters Due to a Procedural Deficiency

On February 9, 1988, Houston Lighting & Power (HL&P) notified the NRC of a reportable event regarding the discovery of Feedwater Flow Transmitters which were isolated rendering the required number of channels for Excess Cooldown Protection inoperable. The event did not have any adverse impact on the health and safety of the public. In accordance with 10CFR50.73 HL&P submits the attached Licensee Event Report (LER 88-016).

If you should have any questions on this matter, please contact Mr. C.A. Ayala at (512) 972-8628.



G. E. Vaughn  
Vice President  
Nuclear Plant Operations

GEV/BM/eg

Attachment: Licensee Event Report 88-016  
Regarding Inoperable Feedwater Flow  
Transmitters Due to a Procedural  
Deficiency

NL.LER88016

A Subsidiary of Houston Industries Incorporated

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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) South Texas, Unit 1	DOCKET NUMBER (2) 050004918	PAGE (3) 1 OF 04
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LE (4)  
Inoperable Feedwater Flow Transmitters Due To A Procedural Deficiency

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)
02	09	88	88	016	00	03	10	88			05000
											05000

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11)

OPERATING MODE (8) 3	20.402(b)	20.406(e)	80.73a(2)(iv)	73.71(b)
	20.406(a)(1)(i)	80.36(a)(1)	X 80.73a(2)(v)	73.71(c)
	20.406(a)(1)(ii)	80.36(a)(2)	80.73a(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.406(a)(1)(iii)	X 80.73a(2)(ii)	80.73a(2)(vii)(A)	
	20.406(a)(1)(iv)	80.73a(2)(iv)	80.73a(2)(vii)(B)	
	20.406(a)(1)(v)	80.73a(2)(iv)	80.73a(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME Charles A. Ayala - Supervising Licensing Engineer	TELEPHONE NUMBER	
	AREA CODE 5112	NUMBER 91721-816218

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS
D									

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)

At approximately 1612 hours on February 9, 1988, with Unit 1 in Mode 3, a licensed Shift Technical Advisor discovered during performance of Pre-Critical Feedflow/Steamflow transmitter calibrations, that seven (7) out of twelve (12) feedflow transmitters had been isolated. This resulted in operating the unit with less than the minimum channels operable as required by Technical Specifications. Limiting Condition for Operation (LCO) statement 3.0.3 was entered at approximately 1620 hours on February 9, 1988. The seven (7) isolated feedwater flow transmitters were returned to service at approximately 1717 hours that same day and the cooldown required by 3.0.3 was terminated. Investigation revealed that the flow transmitters had been isolated for a hydrostatic test of the sensing lines on April 30, 1987, and had never been returned to service. The cause of this occurrence was a program deficiency in that surveillance testing was allowed prior to formal acceptance of system configuration control by the Nuclear Plant Operations Department. Actions to prevent recurrence include reviewing status of plant systems lined up prior to system turnover, ensuring Technical Specification required instruments are in service, and incorporating procedure changes to ensure instrumentation is in service prior to mode changes.

NL.LER88016

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
South Texas, Unit 1	05000498888	01	6	000	2	OF 04

KT If more space is required, use additional NRC Form 288A-1 (17)

DESCRIPTION OF OCCURRENCE:

At approximately 1612 hours on February 9, 1988 with Unit 1 in Mode 3, during pre-critical testing of the feedflow and steamflow instruments, a licensed Shift Technical Advisor discovered an isolated feedflow transmitter. He immediately informed the licensed Shift Supervisor of the condition. The Shift Supervisor directed the I&C Technician, who was with the Shift Technical Advisor, to restore the transmitter to service and to check the remaining eleven (11) transmitters. Six (6) additional feedflow transmitters were found isolated. The Shift Supervisor ordered all testing halted and entered LCO action statement 3.0.3. I&C was directed to restore the six (6) transmitters to service and the cooldown was terminated at approximately 1717 hours on February 9, 1988, after the Main Feedwater Flow transmitters were verified operable. The NRC was notified of this event at approximately 1834 hours on February 9, 1988.

Between April 24, 1987 and April 28, 1987, calibration of seven (7) of twelve (12) Main Feedwater Flow transmitters was completed as part of the surveillance testing program. These instrument calibrations were the primary method to ensure that valve alignments were correct and the instruments were functioning.

Hydrostatic testing was performed by Startup on the twelve (12) Main Feedwater Flow transmitter sensing lines on April 30, 1987. At that time, Startup had jurisdictional control of the system. To protect the transmitters, isolation valves at the transmitters were closed prior to the hydro. These valves were not reopened when the system was restored. Between May 1, 1987 and June 8, 1987, calibration of the remaining five (5) Main Feedwater Flow transmitters was completed and the instruments placed in service.

Between May 7, 1987 and May 20, 1987, Main Feedwater system valve lineups were implemented. Only the root valves were aligned and verified open at that time. The transmitter isolation valves were not included in this alignment. The system was accepted from Startup by Nuclear Plant Operations on June 6, 1987.

On November 4, 1987 the Main Feedwater valve lineup procedure was revised to include requirements for placing all instruments in service as applicable. Valve lineups were not performed per this revision by Plant Operations because the system had apparently been operating with no previous alignment problems and because calibration procedures ensured that all Technical Specification required instrumentation was operable.

Prior to the discovery of the isolated Main Feedwater Flow transmitters on February 9, 1988, Unit 1 entered Mode 3 on three (3) occasions: November 22, 1987, January 30, 1988 and February 7, 1988.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
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If more space is required, use additional NRC Form 266A (11/77)

The feedwater flow transmitters were not detected as isolated as the plant operators would not have seen sufficient flow for the indication to register. This indication has a range of 0 to  $5 \times 10^6$  lb/hr and is intended for use with the plant at power. Flows in these lines experienced during this plant startup would be a maximum of  $1 \times 10^5$  lb/hr., which is in the bottom 2% of the indication.

The Main Feedwater Flow Channels are part of the Excess Cooldown Protection System. This system is designed to protect against the adverse effects of excessive primary side cooldown.

CAUSE OF OCCURRENCE:

The root causes of this event are:

1. A program deficiency in that in this case, surveillance testing was allowed to be performed prior to acceptance of a system by Plant Operations.
2. Plant Operations procedures did not require the performance of I&C surveillance procedures to verify operability of instrumentation associated with Reactor Trip System/Engineered Safety Features (RTS/ESF).

ANALYSIS OF EVENT:

The feedwater flow transmitters which were isolated in this event are not part of any primary reactor protection scheme for which credit is taken in any FSAR Chapter 15 accident analysis. As such, their inoperable status had no impact on the health and safety of the public. However, since the affected transmitters were designated as safety related components, HL&P has conservatively determined that its event was reportable pursuant to 10CFR50.73(a)(2)(v). In addition, Unit 1 had not achieved critical operations and no fission product inventory was present.

Programmatic safeguards were in place to detect the inoperable status of the instruments prior to criticality.

Because the feedwater flow transmitters are required by Technical Specification 3.3.2 Table 3.3-3 to be demonstrated operable prior to entry into Mode 3, and more than the minimum channels were out of service, Action Statement 3.0.3 was entered and the event was reportable pursuant to 10CFR50.73(a)(2)(i)(b).

CORRECTIVE ACTION:

The following corrective actions have been taken to prevent recurrence of the event:

1. Plant Operations has reviewed the status of plant systems under their jurisdiction and has reperfomed any line ups that were completed prior to formal system turnover to Nuclear Plant Operations Department.

NL.LER88016

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)  outh Texas, Unit 1	DOCKET NUMBER (2)  0   5   0   0   0   4   9   8	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8   8	-   0   1   6	-   0   1	0   4	OF	0   4

If more space is required, use additional NRC Form 2064's (17)

2. Chemical Operations has reviewed the status of the Quality Related plant systems under their jurisdiction and has reperformed valve line ups as needed.
3. Technical Specification required instrumentation has been verified in service.
4. The performance of Technical Specification instrumentation verification checklists was incorporated into the Plant Heat-Up procedure.

ADDITION INFORMATION:

No previous similar events have occurred at STPEGS concerning valve misalignment due to startup testing.

NL.LER88016