

The Light company

Houston Lighting & Power, South Texas Project Electric Generating Station P. O. Box 289 Wadsworth, Texas 77483

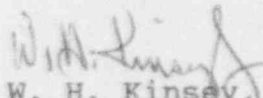
April 16, 1993
ST-HL-AE-4407
File No.: G26
10CFR50.73

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

South Texas Project
Unit 1
Docket No. STN 50-498
Licensee Event Report 93-011
Technical Specifications Violation Due to a Failure to Perform
Damper Position Verification During Required Surveillance

Pursuant to 10CFR50.73, Houston Lighting & Power (HL&P) submits the attached Unit 1 Licensee Event Report 93-011 regarding a Technical Specifications violation due to a failure to perform damper position verification during required surveillance. This event did not have an adverse effect on the health and safety of the public.

If you should have any questions on this matter, please contact Mr. J. M. Pinzon at (512) 972-8027 or me at (512) 972-7921.


W. H. Kinsey, Jr.
Vice President,
Nuclear Generation

DB/pla

Attachment: LER 93-011 (South Texas, Unit 1)

9304190254 930416
PDR ADDCK 05000498
S PDR

LER\93092001.U1

Project Manager on Behalf of the Participants in the South Texas Project

JE

C:

Regional Administrator, Region IV
Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011

Project Manager
U.S. Nuclear Regulatory Commission
Washington, DC 20555

J. I. Tapia
Senior Resident Inspector
c/o U. S. Nuclear Regulatory
Commission
P. O. Box 910
Bay City, TX 77414

J. R. Newman, Esquire
Newman & Holtzinger, P.C., STE 1000
1615 L Street, N.W.
Washington, DC 20036

D. E. Ward/T. M. Puckett
Central Power and Light Company
P. O. Box 2121
Corpus Christi, TX 78403

J. C. Lanier/M. B. Lee
City of Austin
Electric Utility Department
721 Barton Springs Road
Austin, TX 78704

K. J. Fiedler/M. T. Hardt
City Public Service
P. O. Box 1771
San Antonio, TX 78296

Rufus S. Scott
Associate General Counsel
Houston Lighting & Power Company
P. O. Box 61867
Houston, TX 77208

Institute of Nuclear Power
Operations - Records Center
1100 Circle 75 Parkway, #1500
Atlanta, GA 30339-3064

Dr. Joseph M. Hendrie
50 Bellport Lane
Bellport, NY 11713

D. K. Lacker
Bureau of Radiation Control
Texas Department of Health
1100 West 49th Street
Austin, TX 78756-3189

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNRB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

South Texas, Unit 1

DOCKET NUMBER (2)

05000 498

PAGE (3)

1 OF 06

TITLE (4)

Technical Specifications Violation Due to a Failure
to Perform Damper Position Verification During Required Surveillance

EVENT DATE (5)			LER NUMBER (6)			REPORT NUMBER (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
03	17	93	93	011	00	04	16	93	STP Unit 2	05000 499
OPERATING MODE (9) 5			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
POWER LEVEL (10) 0			20.402(b)		20.405(c)		50.73(a)(2)(iv)		73.71(b)	
			20.405(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)		73.71(c)	
			20.405(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vi)		OTHER	
			20.405(a)(1)(iii)		X 50.73(a)(2)(i)		50.73(a)(2)(vii)(A)		(Specify in Abstract below and in Text, NRC Form 366A)	
			20.405(a)(1)(iv)		50.73(a)(2)(ii)		50.73(a)(2)(vii)(B)			
			20.405(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(x)			

LICENSEE CONTACT FOR THIS LER (12)

NAME

Jairo Pinzon - Senior Engineer

TELEPHONE NUMBER (Include Area Code)

(512) 972-8027

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)	X	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
--	---	----	-------------------------------	-------	-----	------

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On March 17 1993, at 0900 hours, Unit 1 was in Mode 5 at 0% power and Unit 2 was in Mode 6 at 0% power. It was discovered that the monthly surveillance for the Fuel Handling Building (FHB) Heating, Ventilation and Air Conditioning (HVAC) Exhaust System did not verify that the FHB Outside Air Supply Relief Dampers opened when the FHB HVAC Emergency Exhaust System was actuated for the surveillance. This discovery was made while performing a walkdown verification of a new procedure about to be approved. The cause of this event is an inadequate surveillance procedure. The corrective actions for this event include testing the dampers, revising the surveillance procedures, revising the checklist for reviewing surveillance procedures, and implementing a surveillance procedure enhancement program.

LER\3092001.U1

REQUIRED NUMBER OF DIGITS/CHARACTERS
FOR EACH BLOCK

BLOCK NUMBER	NUMBER OF DIGITS/CHARACTERS	TITLE
1	UP TO 46	FACILITY NAME
2	8 TOTAL 3 IN ADDITION TO 05000	DOCKET NUMBER
3	VARIES	PAGE NUMBER
4	UP TO 76	TITLE
5	6 TOTAL 2 PER BLOCK	EVENT DATE
6	7 TOTAL 2 FOR YEAR 3 FOR SEQUENTIAL NUMBER 2 FOR REVISION NUMBER	LER NUMBER
7	6 TOTAL 2 PER BLOCK	REPORT DATE
8	UP TO 18 - FACILITY NAME 8 TOTAL - DOCKET NUMBER 3 IN ADDITION TO 05000	OTHER FACILITIES INVOLVED
9	1	OPERATING MODE
10	3	POWER LEVEL
11	1 CHECK BOX THAT APPLIES	REQUIREMENTS OF 10 CFR
12	UP TO 50 FOR NAME 14 FOR TELEPHONE	LICENSEE CONTACT
13	CAUSE VARIES 2 FOR SYSTEM 4 FOR COMPONENT 4 FOR MANUFACTURER NPRDS VARIES	EACH COMPONENT FAILURE
14	1 CHECK BOX THAT APPLIES	SUPPLEMENTAL REPORT EXPECTED
15	6 TOTAL 2 PER BLOCK	EXPECTED SUBMISSION DATE

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
South Texas, Unit 1	05000 498	9 3	0 1 1	0 0	02 ^{OF} 06

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

DESCRIPTION OF EVENT:

On March 17, 1993, at 0900 hours, Unit 1 was in Mode 5 at 0% power and Unit 2 was in Mode 6 at 0% power with refueling (core off-load) in progress. While performing walkdown verifications of the new surveillance procedures that would replace existing Fuel Handling Building (FHB) Heating, Ventilation, and Air Conditioning (HVAC) Exhaust System operability procedures, it was discovered that the existing procedures did not verify the positions of the Outside Supply Air Relief dampers, FV-9500 and FV-9500A, when the FHB HVAC Exhaust System was actuated. The dampers were required to open when the FHB HVAC Exhaust System was actuated.

An operability/reportability review was initiated and on March 18, 1993, at 0911 hours, the FHB HVAC Exhaust System was declared inoperable on Units 1 and 2 because the Outside Supply Air Relief Dampers were not tested within the interval stated in Technical Specifications 4.3.2.1 (Table 4.3-2 Item 11.B), 4.7.8a, and 4.9.12a. Unit 1 was in Mode 5, with no fuel handling activities in the FHB. Unit 2 was in Mode 6, performing core off-load activities as part of the scheduled third refueling outage (2RE03). The refueling activities were stopped at 0911 hours, pending the verification of the operability of the FHB Outside Air Supply Relief Dampers. The monthly surveillance for the FHB HVAC Exhaust System was performed on both units with the positions of the dampers verified at the correct step in the procedure. The dampers were then declared operable on both units and the Unit 2 refueling activities were resumed at 1231 hours.

CAUSE OF EVENT:

The cause of this event was an inadequate surveillance procedure being used to demonstrate the operability of the FHB HVAC Exhaust System. A definitive cause for the inadequate procedure could not be identified; however, it is believed that the Outside Supply Air Relief Dampers were not included in the surveillance procedure because the surveillance procedure was for demonstrating operability of the FHB HVAC Exhaust System and these dampers are in the FHB HVAC Supply System. Additionally, the surveillance procedure review, revision, approval, and implementation process was less than adequate in preventing this condition or identifying it at an earlier date.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (IMRB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
South Texas, Unit 1	05000 498	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	03 ^{CF} 06
		9 3	- 0 1 1 -	0 0	

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

ANALYSIS OF EVENT:

The operability of the FHB HVAC Exhaust Air System ensures that radioactive material leaking from the Emergency Core Cooling System equipment within the FHB following a Loss of Coolant Accident are filtered prior to reaching the environment. In order to satisfy this requirement, and as stated in Technical Specifications 3.7.8 and 3.9.12, the following components in the FHB HVAC Exhaust Air System shall be operable: a) two independent exhaust air filter trains, b) three independent exhaust booster fans, c) three independent main exhaust fans, and d) associated dampers.

The Outside Supply Air Relief Dampers (two dampers, each rated for 100% makeup air flow) are located in the FHB HVAC Supply System. These dampers open and allow outside supply air to come into the FHB during emergency operation. They open automatically on receiving a Safety Injection or Spent Fuel Pool exhaust high radioactivity signal, or are opened manually from the control room in case of a Loss of Offsite Power. The solenoids required to actuate these air-operated dampers, FY-9500 and FY-9500A, receive Class 1E 125V DC power. During normal operation, these dampers remain closed and prevent any outside air supply from bypassing the main supply air handling unit.

These dampers are configured such that upon receiving a Safety Injection, High Radioactivity, or manual actuation signal, a "Fail to Actuate" annunciator would alert the control room operator that the damper(s) had not automatically positioned to the required (open) position. The control room operator could then take appropriate manual actions.

This event is reportable pursuant to 10CFR50.73 (a)(2)(i). There was no threat to public health and safety as a result of this event. Although the positions of these dampers were not verified during the monthly surveillances (at least once every sixty-two days because of the staggered test basis), the positions of these dampers were being verified by another surveillance procedure that was being performed quarterly in Modes 1, 2, 3, and 4 (at least once every ninety-two days). Because these dampers were being demonstrated operable on a quarterly basis, there is a high level of assurance that these dampers would have performed their required safety function in the event of an accident.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
South Texas, Unit 1	05000 498	93	011	00	04 ^{OF} 06

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

CORRECTIVE ACTIONS:

1. The FHB Outside Air Supply Relief dampers were tested and determined to be operable on both units.
2. The FHB Exhaust System Operability surveillance procedure was revised to include verifying the positions of the Outside Air Supply Relief Dampers when the FHB Exhaust System is actuated.
3. Checklists used for reviewing revised surveillance test procedures have been changed to require a review of the procedure using design documents. This will increase the likelihood that the existing procedure review process will discover an omission of a component required to be surveillance tested.
4. HL&P is performing an Operation Procedures Enhancement Program. This program was part of the corrective action for Notice of Violation 8868-07 (HL&P letter ST-HL-AE-2977 dated February 14, 1989). The deficiency in the FHB Exhaust System surveillance procedure was discovered by this program. This program will be completed by December 31, 1993.
5. HL&P has developed a surveillance procedure enhancement program to ensure that Operations and Maintenance surveillance procedures accurately reflect the design basis and adequately perform the Technical Specification intended functions. The surveillance procedures will be enhanced on a priority basis. A group of surveillance procedures has been identified for enhancement in 1993. This group consists of surveillance procedures that have caused problems in the past or are similar to surveillance procedures that have caused problems in the past. This group of surveillance procedures will be enhanced by December 31, 1993. The remaining surveillance procedures will be enhanced by December 31, 1996.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)	PAGE (3)
South Texas, Unit 1	05000 498	YEAR	05 ^{OF} 06
		SEQUENTIAL NUMBER 9 3 - 0 1 1 -	REVISION NUMBER 0 0

TEXT (If more space is required, use additional copies of NRC Form 365A) (17)

ADDITIONAL INFORMATION:

Previous events involving incomplete Technical Specifications required surveillance due to inadequate procedures that were reported to the NRC within the last three years were:

- Unit 1 LER 90-003: "Failure to Perform a Technical Specification Required Surveillance." Attributed to a deficient procedure.
- Unit 1 LER 92-004: "Shunt Trip Contacts for Manual Reactor Trip Breakers Not Tested per Technical Specifications." Attributed to inadequate review procedure and unfamiliarity of individual(s) who developed procedure for manual reactor trip feature.
- Unit 1 LER 92-011: "Reactor Coolant Pump Undervoltage and Underfrequency Surveillance Not Performed Completely per Technical Specifications." Attributed to inadequate understanding of a Trip Actuating Device Operability Test definition.
- Unit 1 LER 92-013: "Containment Spray Channels Not Being Completely Verified as Required per Technical Specifications." Attributed to inadequate procedure review and inability of individual(s) who developed test procedure to recognize the significance of the test circuit.
- Unit 1 LER 92-017: "Feedwater Isolation Response Time Not Being Correctly Tested as Required per Technical Specifications." Attributed to inadequate surveillance test procedure developed prior to initial operation of Unit 1 and Unit 2.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
South Texas, Unit 1	05000 498	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	06 ^{OF} 06
		9 3	- 0 1 1 -	0 0	

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

ADDITIONAL INFORMATION: (Con't)

- Unit 1 LER 92-021: "Main Steam Isolation Response Time Testing Not Being Correctly Tested as Required per Technical Specifications." Attributed to failure of individual(s) who developed the surveillance test to recognize the testing requirement.
- Unit 1 LER 93-003: "Technical Specification 3.0.3 Required Shutdown of Both Units Due to Inoperable Steam Line Pressure Channels." Attributed to failure of individual(s) who developed the surveillance test to fully understand the calibration of time constants.
- Unit 1 LER 93-008: "Technical Specifications Violation Due to a Failure to Perform RCB Pressure Surveillances." Attributed to failure of individuals who developed the surveillance test to recognize the testing requirement.