

The Light company

Houston Lighting & Power

South Texas Project Electric Generating Station P. O. Box 289 Wadsworth, Texas 77483

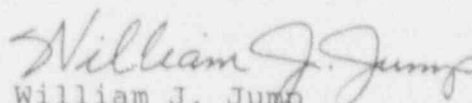
August 31, 1992
ST-HL-AE-4190
File No.: G26
10CFR50.73

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 92-009
Manual ESF Actuation of an
Auxiliary Feedwater Pump Contrary to Procedure

Pursuant to 10CFR50.73, Houston Lighting & Power (HL&P) submits the attached Licensee Event Report 92-009 regarding a manual Engineered Safety Feature (ESF) actuation of an Auxiliary Feedwater (AFW) pump contrary to procedure. This event did not have adverse impact on the health and safety of the public.

If you should have any questions on this matter, please contact Mr. C. A. Ayala at (512) 972-8628 or me at (512) 972-7205.



William J. Jump
General Manager,
Nuclear Licensing

JMP/ag

Attachment: LER 92-009 (South Texas, Unit 1)

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Houston Lighting & Power Company
South Texas Project Electric Generating Station

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Revised 10/11/91

L4/NRC/

LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555 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) 0 5 0 0 0 4 9 8 PAGE (3) 1 OF 0 4

TITLE (4) Manual ESF Actuation of an Auxiliary Feedwater Pump Contrary to Procedure

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
0 8	0 1	9 2	9 2	0 0 9	0 0 0	0 8	3 1	9 2	
								DOCKET NUMBER (7)	
								0 5 0 0 0	
								0 5 0 0 0	

OPERATING MODE (9) 1 THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5 (Chs. 1 one or more of the following) (11)

POWER LEVEL (10) <u>11010</u>	20.402(b)	20.406(c)	<input checked="" type="checkbox"/>	50.73(a)(2)(iv)	73.71(b)
	20.406(a)(1)(iii)	50.36(a)(1)		50.73(a)(2)(v)	73.71(c)
	20.406(a)(1)(iv)	50.36(a)(2)		50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 306A)
	20.406(a)(1)(v)	50.73(a)(2)(i)		50.73(a)(2)(vii)(A)	
	20.406(a)(1)(vi)	50.73(a)(2)(ii)		50.73(a)(2)(vii)(B)	
	20.406(a)(1)(vii)	50.73(a)(2)(iii)		50.73(a)(2)(viii)	

LICENSEE CONTACT FOR THIS LER (12)

NAME Charles Ayala - Supervising Licensing Engineer TELEPHONE NUMBER 5 1 1 2 9 7 2 1 - 1 8 1 2 1 8

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRRDS

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 August 1, 1992, Unit 1 was in Mode 1 at 100% power. Testing of the Solid State Protection System (SSPS) actuation train "C" slave relays was in progress. At approximately 2049 hours, the operator performing the Auxiliary Feedwater (AFW) portion of the test misread a procedure step which directed him to verify that the #13 AFW pump did not start following a relay actuation. Rather than verify the pump did not start, the operator turned the control switch on in an attempt to verify that the pump would not start. The #13 AFW pump started and discharged into "C" Steam Generator. The operator quickly realized the error and stopped the pump. The cause of this event was inattention to detail, in that the operator misread the test procedure. Corrective actions include revising the SSPS Actuation Train Slave Relay Test procedures to provide more distinction between steps which verify equipment startup and steps which require an attempted component startup and including this event into the Licensed Operator Regualification training. Additionally, other surveillance procedures were identified to ensure that equipment actuations are clearly defined and a plan of action was developed to enhance these procedures.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 600 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-830), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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

TEXT IF more space is required, use additional NRC Form 305A's (1/7)

DESCRIPTION OF EVENT:

On August 1, 1992, Unit 1 was in Mode 1 at 100% power. Unit 1 operators were performing the SSPS Actuation Train C Slave Relay Test. The Auxiliary Feedwater portion of this test requires the operator to depress and hold control switch S-238 in PUSH TO TEST. The next step requires the operator to verify that AFW Pump 13 did not start, then release the control switch and verify return to normal. The operator performing the step read the step to say that he was to verify that AFW pump 13 will not start. He then attempted to manually start AFW Pump 13 to verify that it would not start. However, the pump started and momentarily discharged into "C" Steam Generator. The operator quickly realized the error and stopped the pump.

The Shift Supervisor and the Duty Operations Manager discussed this event and determined that it was not reportable because the AFW pump was started during a surveillance test. The operators did not think that a manual start of a pump was an "actuation" as specified in 10CFR50.72(b)(2)(ii) for these conditions. Therefore, the event was not initially reported to the NRC. The event was also reviewed by the Nuclear Licensing Department two days later, however the reportability of the event was not recognized until the reportability status was questioned by the Deputy Plant Manager who brought it to the attention of the NRC Resident Inspector three days after the event. It was subsequently reviewed again by Licensing and determined that the event was reportable because the manual AFW pump start was not part of the preplanned test sequence. A notification was made to the NRC at 1306 hours on August 4, 1992.

CAUSE OF EVENT:

The cause of this event was inattention to detail, in that the operator misread the test procedure. A contributing cause was a weak procedure. The procedure being performed involved the actuation of a variety of equipment. After actuating certain relays, the operator only verifies that equipment status has or has not changed. However, after actuating other relays, the operator is required to attempt a manual start of equipment. The procedure is weak in that the wording of the different actuation verification steps are very similar. The only difference is that the word "does" or "did" is substituted for the word "will".

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LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, 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) 0 5 0 0 0 4 9 3 9 2 - 0 0 9 - 0 0 0 0 3 OF 0 4	LER NUMBER (3)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		

TEXT (If more space is required, use additional NRC Form 306A's) (17)

Although plant personnel were aware that ESF actuations are reportable, they did not consider manually starting the AFW pump an "actuation". It was thought that an "actuation" was an automatic component start or a manual component start in response to a real or perceived plant condition.

ANALYSIS OF EVENT:

The manual actuation of an Engineered Safety Feature is reportable pursuant to 10CFR50.73(a)(2)(iv). There were no adverse radiological or safety consequences as a result of this event. The AFW pump functioned as designed and no significant feedwater transients occurred.

CORRECTIVE ACTIONS:

1. A memorandum was issued by the Plant Manager to define STP policy on the reporting of unplanned ESF actuations. This policy was provided to appropriate Operations personnel and reviewed by appropriate Licensing personnel. The Operations Policy, "Preplanned ESF Actuations", has been clarified to more clearly define what constitutes an "actuation".
2. This event will be included in Licensed Operator Requalification Training, to emphasize the need for caution when performing surveillance testing. This action will be completed by February 26, 1993.
3. The operator who performed the slave relay test has been counseled concerning attention to detail.
4. The SSPS Actuation Train A(B,C) Slave Relay Test Procedures have been changed to provide more distinction between the step which verifies AFW is not running and steps which require an attempted component startup.
5. Other surveillance procedures have been identified where actuation checks are not clearly defined. A plan of action has been developed to enhance these procedures.
6. An Unplanned ESF Actuation Task Force has been initiated to evaluate plant activities to reduce the number of unplanned ESF actuations.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F-630), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, 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) 0500049892-002-0004 OF 04	LER NUMBER (5)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			

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

ADDITIONAL INFORMATION:

Previous events involving ESF actuations that have been reported within the last three years, which were attributed to inattention to detail were:

- Unit 2 LER 89-011; Inadvertent SI and Reactor Trip when a licensed operator skipped two steps in the plant heatup procedure.
- Unit 1 LER 90-001; ESF actuation due to a loss of power when a Maintenance Technician incorrectly lifted a power lead during a modification.
- Unit 1 LER 90-016; Reactor Trip due to inattention to decreasing margin to Over-temperature Delta T trip setpoint during power ascension.
- Unit 1 LER 91-004; Lockout of Standby Bus B when relay was improperly installed. Attributed to inadequate attention to work performance methods.
- Unit 1 LER 91-021; Reactor Trip when maintenance electrician touched the wrong contact while performing a continuity check.
- Unit 1 LER 92-007; Fuel Handling Building HVAC actuation when a technician entered the wrong value into radiation monitoring module RM-23A.

The generic issue of procedural deficiency has been addressed in response to a recent event which was reported as LER 92-005, entitled "Unplanned ESF Actuation Due to a Component Cooling Water Pump Start Due to Inadequate Procedure". HL&P performed an evaluation to determine which plant procedures need to be reviewed for insufficient procedural steps to operate plant equipment. It is HL&P's intent to ensure that safety related equipment manipulations are governed by written guidance. The evaluation will also consider procedures for non-safety related equipment which would impact safety related equipment.