

The Light company

Houston Lighting & Power

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

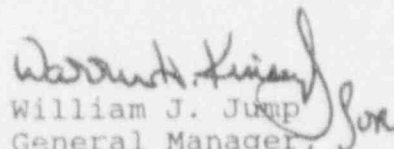
September 23, 1992
ST-HL-AF-422b
File No.: G26
10CFR50.73

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20545

South Texas Project
Unit 1
Docket No. STN 50-498
Licensee Event Report 92-011
Regarding the Reactor Coolant Pump Undervoltage and Underfrequency
Surveillance Not Performed Completely per Technical Specifications

Pursuant to 10CFR50.73, Houston Lighting & Power (HL&P) submits the attached Licensee Event Report 92-011 regarding the reactor coolant pump undervoltage and underfrequency surveillance not performed completely per Technical Specifications. This event did not have an 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 myself at (512) 972-8530.


William J. Jump
General Manager,
Nuclear Licensing

VJM/ag

Attachment: LER 92-011 (South Texas, Unit 1)

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Houston Lighting & Power Company
South Texas Project Electric Generating Station

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File No.: G26
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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: 600 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)

050004981 OF 04

PAGE (3)

TITLE (4)

Reactor coolant Pump Undervoltage and Underfrequency
Trip Not Tested Completely, per Technical Specifications

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)										
0	8	2	4	9	2	9	2	0	1	1	0	0	0	9	2	3	9	2	South Texas, Unit 2	050004981

OPERATING MODE (9)

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 50.61 (Check one or more of the following) (11)

POWER LEVEL (10)

093

20.402(b)

20.405(c)

50.73(a)(2)(iv)

73.71(b)

20.405(a)(1)(i)

50.36(a)(1)

50.73(a)(2)(v)

73.71(c)

20.405(a)(1)(ii)

50.36(a)(2)

50.73(a)(2)(vi)

OTHER (Specify in Abstract below and in Text, NRC Form 366A)

20.405(a)(1)(iii)

X 50.73(a)(2)(i)

50.73(a)(2)(vii)(A)

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)(ix)

LICENSEE CONTACT FOR THIS LER (12)

NAME

TELEPHONE NUMBER

Charles Ayala - Supervising Licensing Engineer

5112972-18628

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

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

SUPPLEMENTAL REPORT EXPECTED (14)

EXPECTED SUBMISSION DATE (15)

MONTH DAY YEAR

If yes, complete EXPECTED SUBMISSION DATE:

X NO

(16) Limit to 1400 spaces. (17) approximately fifteen single space typewritten lines (18)

On August 24, 1992, Units 1 and 2 were in Mode 1, with Unit 1 at 93% power and coasting down, and Unit 2 at 100% power. The Surveillance Review Task Force identified that the performance of the Reactor Coolant Pump (RCP) Undervoltage (UV) and Underfrequency (UF) Trip Actuating Device Operability Test (TADOT) surveillance procedures did not verify the bistable status monitoring (BSM) lights operability. The cause of this event is due to the writers and authorities who approve Field Changes (FCs) not identifying the need to verify the BSM lights, which were required to be tested per the Technical Specifications. This was due to inadequate understanding of the definition of TADOT by the individuals involved. This event occurred as a result of FCs in the Spring of 1990. The FCs (also a contributing factor) allowed the removal of verification of a portion of the RCP UV and UF circuitry and the BSM lights from the test procedure. This allowed the surveillance test to be incomplete and allowed entry into Mode 1, following the outage, with only a partially proven channel. Corrective actions include: verification of operability of BSM lights in both units, revision of BSM acceptance criteria of the surveillance procedure, performance of RCP TADOTS that are scheduled during outages while the plant is in Mode 5 and prior to Mode 1, a clear definition of TADOT will be formally documented and presented to appropriate personnel for training, and revision of the procedure to limit the use of FCs for changing acceptance criteria.

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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 (F-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) 0500049892-011-0002 of 04	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	

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

DESCRIPTION OF EVENT:

On August 24, 1992, Unit 1 and 2 were in Mode 1, with Unit 1 at 93% power and coasting down, and Unit 2 at 100% power. The Surveillance Review Task Force identified a deficiency with the adequacy of channel operability verification in the performance of the Reactor Coolant Pump (RCP) Undervoltage (UV) and Underfrequency (UF) Trip Actuating Device Operability Test (TADOT) surveillance procedures. These requirements are established by Technical Specification 3/4.3.1.

The RCP UV and UF relays operate input relays that supply input signals to Train R and Train S logic cards in the Solid State Protection System (SSPS), which in turn provides the required 2 of 4 logic to open the Reactor Trip Breakers. This input signal is proven when the bistable status monitoring (BSM) lights are verified operable in the performance of the UV and UF TADOTS. These TADOTS are scheduled on a quarterly frequency for staggered testing of the RCPs. However, when scheduled during unit outage periods, the Proteus computer, the plant annunciator or BSM lights would at times be unavailable for testing. As such, procedure Field Changes (FCs) were written in the Spring of 1990 to accommodate testing the UV and UF relays during outages when the components were unavailable to allow testing to proceed. These FCs also added a step allowing the performer to mark the BSM light verification, the annunciator verification and the computer point verification Not Applicable (N.A.) when those devices were not available for testing. These FCs removed the verification of the BSM lights operability from the acceptance criteria of each procedure. It was not recognized that deleting verification of the BSM lights would result in noncompliance with the Technical Specifications. This practice allowed entry into Mode 1 following the outage with only a partially proven channel.

Reviews of past UV and UF TADOT surveillances on RCPs confirmed that BSM light verifications were marked as N.A. for several channels during previous plant outages.

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LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.6 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)

DOCKET NUMBER (2)

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South Texas, Unit 1

0 5 0 0 0 4 9 8 9 2 - 0 1 1 - 0 0 0 3 OF 4

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

CAUSE OF EVENT:

The writers and authorities who approve FCs did not identify the need to verify the BSM lights which were required to be tested per the Technical Specifications. This was due to inadequate understanding of the definition of a TADOT by the individuals involved. A contributing factor was the FC which allowed the removal of the acceptance criteria from the test procedure. The FCs to procedures in 1990 allowed the removal of verification of a portion of the RCP UV and UF circuitry and the BSM lights from the test procedure.

ANALYSIS OF EVENT:

Failure to properly perform the RCP UV and UF TADOT is reportable pursuant to 10CFR50.73(a)(2)(i)(B) since both units operated in an untested condition in violation of Technical Specification 4.3.1.1. The partial performance of the RCP UV and UF TADOT performed under the current surveillance program as well as the testing of the RCP UV and UF trip actuating device under the preoperational test program provide confidence in the operability of the RCP UV and UF trip actuating device. During normal power operations, a direct current undervoltage trip coil on each reactor trip breaker is normally energized. For a reactor trip, the removal of power to the undervoltage coils opens the breakers. Opening either of two series connected breakers interrupts the power from the rod drive motor generator sets, and the control rods fall, by gravity, into the core. The rods cannot be withdrawn until the trip breakers are manually reset. The trip breakers cannot be manually reset until the abnormal condition that initiated the trip is corrected. This event did not result in additional risk to the public or adversely affect the ability to safely shut down the plant.

CORRECTIVE ACTION:

1. The BSM verification was placed back into the acceptance criteria of the surveillance procedure.
2. The BSM lights were verified operational since the outages in both units.
3. RCP TADOTS that are scheduled to be completed during subsequent outages will be conducted while the plant is in Mode 5 and prior to Mode 1. This is to ensure that the BSM lights are available for the RCP TADOT and after any work on them in the outage.

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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 (F-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)

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South Texas, Unit 1

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

CORRECTIVE ACTION: (Con't)

4. A clear definition of TADOT will be formally documented by October 15, 1992. Training on this definition will be provided to appropriate plant personnel via training bulletin to be issued by October 29, 1992.
5. The procedure governing FCs (OPGP03-ZA-0002) will be revised to control the use of FCs for changing acceptance criteria by November 30, 1992.

ADDITIONAL INFORMATION:

The Surveillance Review Task Force effort is a corrective action from an earlier Licensee Event Report (LER) 92-004. As a result, an in-depth review of the ESFAS and reactor trip surveillance procedures for one train of one unit will be performed to ensure they adequately meet Technical Specification requirements. Several LERs have previously been submitted documenting inadequate surveillance test procedures.

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