

The Light company

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

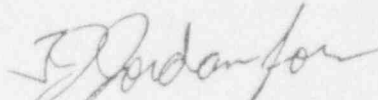
May 21, 1993
ST-HL-AE-4450
File No.: G26
10CFR50.73

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 93-015
Technical Specification Violation due to
Non-conservative Determination of Equipment Service Time

Pursuant to 10CFR50.73, Houston Lighting & Power (HL&P) submits the attached Unit 1 Licensee Event Report 93-015 regarding a Technical Specification violation due to non-conservative determination of equipment service time for the Control Room Makeup and Cleanup Filtration System. 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) 972-7138.


S. L. Rosen
Vice President,
Nuclear Engineering

GLM/sr

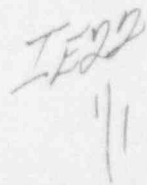
Attachment: LER 93-015 (South Texas, Unit 1)

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

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C:

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U.S. Nuclear Regulatory Comm.
Attn: Document Control Desk
Washington, D.C. 20555

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: 30.0 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)

South Texas Unit 1

DOCKET NUMBER (2)

05000 498

PAGE (3)

1 OF 4

TITLE (4) Technical Specification Violation due to
Non-conservative Determination of Equipment Service Time

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 NAME	DOCKET NUMBER
04	23	93	93	-- 015 --	00	05	21	93	FACILITY NAME	DOCKET NUMBER
										05000
										05000

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)

OPERATING MODE (9)	POWER LEVEL (10)	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
5	0	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)(vii)	OTHER
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(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)(viii)(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 NPDs	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDs

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 April 23, 1993, Unit 1 was in Mode 5 at 0% power. Plant personnel completed a reportability review which determined that in May, 1990, the Control Room Makeup and Cleanup Filtration System service time exceeded the applicable surveillance requirements. This constituted a violation of Technical Specification 4.7.7. The cause of this event was the failure to develop a run hour tracking method which accounted for operation of the cleanup fans independent of the makeup fans in Modes 5 and 6. The run times for both the cleanup and makeup fans are currently being monitored individually.

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 (MNB 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	-- 015 --	00	2 OF 4

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

DESCRIPTION OF EVENT:

On April 23, 1993, Unit 1 was in Mode 5 at 0% power. Plant personnel completed a reportability review which determined that in May, 1990, the Control Room Makeup and Cleanup Filtration System service time between charcoal adsorber samples exceeded the surveillance requirements of Technical Specification 4.7.7.

On May 19, 1990, at 0530 hours, the CRE HVAC was placed in the filtered recirculation Mode in order to satisfy the requirements of Technical Specification 3.7.7.b (Modes 5 and 6) and 3.3.3.7.b. This ventilation lineup was documented in the control room log book. This action applied from May 19, 1990, at 0457 hours until May 23, 1990, at 2030 hours. During the filtered recirculation mode, the makeup fans are not operated, and the cleanup fans are in service. The method of determining the run times for compliance with Technical Specification 4.7.7 assumed that both the makeup and cleanup fans are always in service simultaneously. Technical Specification 4.7.7. requires that a charcoal adsorber sample be analyzed for methyl iodine penetration every 720 hours of adsorber operation. If the sample results are unsatisfactory, the adsorber is replaced. If the results are satisfactory, the adsorber is considered operable until the next sample is required.

A review of accumulated makeup fan run times was performed and the 900 hour allowable time (720 hours allowed by the Technical Specification plus a 25% grace period) between charcoal adsorber samples was exceeded. As previously stated, the run times on the clean up fans were not individually monitored. However, investigation revealed that, for the time frame identified, the 11A clean up fan was run independently of the makeup fan for approximately 62 hours. These hours, when added to 866 hours which accumulated on the 11A makeup fan before the charcoal adsorber was next sampled in January 1991, exceeds the 900 hour limit of Technical Specification 4.7.7. The charcoal adsorber in question was analyzed in accordance with R.G.1.52. The analysis results were unsatisfactory and the adsorber was replaced. Due to the lack of individual monitoring on the clean up fans, an exact time period for the violation of Technical Specification of 4.7.7 cannot be determined. However, because the cleanup and makeup fans are usually operated simultaneously, it can conservatively be concluded that this violation existed from May, 1990 to January, 1991.

CAUSE OF EVENT:

The primary cause of this event was the failure to develop a run hour tracking method that accounted for possible independent operation of the cleanup fans and the makeup fans. Because review of archived ERFDADS data for determining run times is cumbersome it was decided that monitoring of the makeup fans run times alone would be sufficient.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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South Texas, Unit 1	05000 498	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 4
		93	-- 015 --	00	

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

CAUSE OF EVENT: (Cont'd)

A contributing cause of this event was inadequate administrative control. A Technical Specification change was issued on May 6, 1990, which established the new filtered recirculation mode of operation in order to resolve a contradiction which had previously existed between specifications 3.3.3.7 and 3.7.7. Technical Specification changes are performed under the provisions of IP-1.19Q, "Changes to Licensing Basis Documents". This procedure was in revision 0 when the Technical Specification change was processed. Revision 0 did not provide concise instructions for performance of interdepartmental review to assess potential impacts.

ANALYSIS OF EVENT:

Technical Specification violations are reportable pursuant to 10CFR50.73(a)(2)(i)(b). The CRE HVAC system operating in the recirculation mode as described in the Updated Final Safety Analysis Report (UFSAR) does not allow outside air to be admitted into the control room envelope. Failure to sample a charcoal adsorber which exceeded the allowable service time between samples established in Technical Specification 4.7.7 could have resulted in operation with charcoal not fully capable of removal of gaseous iodine (elemental iodine and organic iodides) from the CRE during and following accident conditions. However, these accident conditions did not exist during CRE HVAC operation with the charcoal adsorber which had exceeded the allowable service time between samples. Therefore, this event did not pose a safety concern for the control room personnel and there were no adverse radiological or safety consequences as a result of this event.

CORRECTIVE ACTIONS:

1. Upon discovery of this event, individual monitoring of the service time for both the makeup and cleanup fans was initiated. This monitoring method will be formalized in procedure OPGP03-ZE-0008, "Nuclear Air Cleaning Systems Filter Test Program Description". This procedure will be issued by June 2, 1993.
2. A review was performed to identify all of the time periods when STP could have operated the CRE HVAC system with charcoal adsorber which exceeded the allowable service time established in Technical Specification 4.7.7. This review, which included research of archived ERFDADS dates, for both units, revealed no additional instances of Technical Specification violations.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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South Texas, Unit 1	05000 498	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER
		93	-- 015 --	00
				4 OF 4

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

CORRECTIVE ACTIONS: (Cont'd)

3. A review of the plant surveillance database was performed to identify other situations where run time or other non-sequential time interval is used to determine the test schedule. No situations were identified where the tracking mechanism for conditional factors was based on an indirect monitoring method subject to missing some time intervals.
4. Procedure IP-1.19Q has been revised to provide concise instructions for the performance of interdepartmental reviews to assess potential impacts. The procedure currently requires all Technical Specification changes to be submitted to all departments on site.

ADDITIONAL INFORMATION:

There have been no previous events involving the non-conservative determination of equipment service times.