

The Light company

Houston Lighting & Power

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

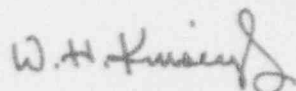
April 2, 1993
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File No.: G02.04
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U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

South Texas Project
Unit 1 and 2
Docket Nos. STN 50-498; STN 50-499
Reply to Notice of Violation 9236-01
Regarding Failure to Adhere to Technical
Specification (TS) Requirement

Houston Lighting & Power Company (HL&P) has reviewed Notice of Violation 9236-01 dated March 5, 1993, and submits the attached reply.

If you have any questions, please contact Mr. C. A. Ayala at (512) 972-8628 or me at (512) 972-7921.



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DNB/pla

Attachment: Reply to Notice of Violation 9236-01

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A Subsidiary of Houston Industries Incorporated

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Houston Lighting & Power Company
South Texas Project Electric Generating Station

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I. Statement of Violation:

Failure to Adhere to Technical Specification (TS) Requirements

Paragraph 2.C.2 of South Texas Project Facility Operating Licenses NPF-76 and NPF-80 state, in part, that Houston Lighting & Power Company shall operate the facility in accordance with the TS, which is Appendix A of the license.

Contrary to the above, the licensee failed to adhere to the requirements of Technical Specifications five times. The specific sections that were violated are listed below:

- A. In accordance with TS 4.0.2, each surveillance requirement shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25 percent of the specified surveillance interval. TS 4.6.3.3 requires the isolation time of each power-operated or automatic valve be determined to be within its limits when tested pursuant to TS 4.0.5. TS 4.0.5 provides the requirements for inservice inspection and testing of American Society of Mechanical Engineers (ASME) Code Class 1, 2, and 3 components.

Contrary to the above, reactor containment supplemental purge exhaust outside Containment Isolation Valve A1-HC-FV-9776 was not surveillance tested within the required time interval, which expired on January 4, 1993.

- B. TS 3.3.1, Table 3.3-1, Reactor Trip System Instrumentation, Item 8, lists the minimum number of operable channels for overtemperature differential temperature for operation in Modes 1 and 2 as three of four channels.

Contrary to the above, on January 5, 1993, the licensee failed to maintain the minimum number of overtemperature differential temperature channels operable. Loops 3 and 4 were out of service simultaneously, with Unit 1 in Mode 1 operation.

- C. TS Table 4.3-1, Reactor Trip System Instrumentation Surveillance Requirements, Item 2.a, requires a power range neutron flux high setpoint channel calibration be performed each day.

Contrary to the above, a channel calibration was not performed on Unit 1 Power Range Neutron Flux Channel NI-43 on January 8, 1993.

- D. TS 3.3.3.7, Chemical Detection Systems, Action a (Unit 1), states that with one chemical detection system inoperable, restore the inoperable system to operable status within 7 days or place the affected channel in its tripped condition.

Contrary to the above, the licensee twice failed to maintain an inoperable channel (XE-9326), which had been out of service for over 7 days, in the tripped condition, on December 9 and 12, 1992.

- E. TS 4.3.3.7, states that each chemical detection system shall be demonstrated operable by performance of a channel check at least once per 12 hours.

Contrary to the above, Unit 2 Toxic Gas Monitor XE-9326 was not channel checked between October 15 and December 10, 1992, because the operators were unaware that the data displayed on the host monitor was erroneous data.

These five examples constitute one Severity Level IV Violation. (Supplement I) (498;499/9236-01)

II. Houston Lighting & Power Position:

HL&P concurs that the cited violation occurred. Each of the five examples is separately addressed below.

III. Reason for Violation:

- A. The reactor containment supplemental purge exhaust outside Containment Isolation Valve was not surveillance tested within the required interval because the plant surveillance database incorrectly showed that the Reactor Containment Building System Valve Operability Test procedure could only be performed in Modes 5 and 6. The surveillance test was not performed because the plant was in Mode 1 when the surveillance test was scheduled.
- B. Two channels of Overtemperature Delta Temperature (OTDT) were inoperable during Mode 1 operation of Unit 1 because the Reload Initial Start-up Testing procedure lacked sufficient direction regarding coordination of the test activities.

- C. The channel calibration of Unit 1 Power Range Neutron Flux Channel NI-43 was not performed within the required interval because the calibration procedure did not specify the appropriate action to take if one NI channel is inoperable during calibration. A contributing factor to this event was that a log entry was not made to note performance of the channel calibration. In addition, shift operating personnel believed that the performance of a channel check in lieu of a channel calibration was sufficient to return the channel to operable status. An additional factor was that an Operability Tracking Log entry was not made when the NI-43 axial flux difference surveillance extended past the end of two shifts.
- D. The Unit 1 Toxic Gas Monitor XE-9326 was not maintained in a tripped condition as required by Technical Specification 3.3.3.7 because the design of the Toxic Gas Monitoring System did not adequately address this requirement. Although the system design provided a method for meeting the Technical Specification requirement for tripping the monitor after seven days of inoperability, this feature was not preserved during deenergization and subsequent reenergization of the equipment, such as occurred during troubleshooting activities.
- A contributing cause was that the design did not adequately consider the need to accommodate interruption of power and performance of maintenance on the monitor while maintaining the logic in a tripped condition.
- Another contributing cause was the inadequate testing. The testing after installation verified that all alarms and actuations functioned properly, but did not test the ability of the monitor to maintain its tripped state when a loss of power occurred.
- E. The Unit 2 Toxic Gas Monitor XE-9326 surveillance requirement was not performed within the required interval because of a faulty modem. The modem was not properly relaying data from monitor XE-9326 to the Emergency Response Facility Data Acquisition Display System (ERFDADS), from which the surveillance requirement data was obtained.

IV. Corrective Actions:

- A. The reactor containment supplemental purge exhaust outside Containment Isolation Valve was satisfactorily surveillance tested on January 7, 1993. HL&P determined that the event was reportable and notified the NRC Operations Center on January 13, 1993 and submitted Unit 1 Licensee Event Report 93-04 on February 11, 1993.

The desktop instruction for the plant surveillance coordinator has been changed to include revising the plant condition mode on the surveillance scheduling sheets if an engineering evaluation has been performed that indicates a change in performance mode is required.

To address the generic implications of this event, HL&P has reviewed the Pump and Valve Inservice Test (IST) plan to ensure that valves classified as cold shutdown valves have test procedures that specify plant modes consistent with the IST plan. Inconsistencies were noted for valves in the Main Steam System and Feedwater System. Some valves in these systems were conservatively being tested in more modes than specified in the IST Plan. The IST Plan, surveillance database, and test procedures will be made consistent for the supplemental purge supply and exhaust Containment Isolation Valves, Main Steam System valves, and Feedwater System valves by June 30, 1993.

- B. Corrective maintenance was completed on Power Range Neutron Flux Instrument NI-44, and the Loop 4 OTDT bistables were restored to normal. The Loop 3 OTDT bistables were tripped to comply with Technical Specification 3.3.1 and 3.3.2. Loop 4 OTDT was declared operable and Unit 1 exited Technical Specification 3.0.3. Recalibration of the Loop 3 OTDT was completed on January 8, 1993. HL&P determined that the event was reportable and submitted Unit 1 Licensee Event Report 93-001 on February 3, 1993.

This event will be reviewed by the Unit 2 Operations Crews prior to the end of the upcoming refueling outage. Additionally, this event will be discussed during Licensed Operator Initial Training and Regualification Training by July 16, 1993.

The Reload Initial Start-Up Testing procedure will be revised to provide specific guidelines for the coordination of test activities by May 10, 1993.

To minimize the chance of a setpoint exceeding its computed trip setpoint by more than the 1.7% delta-T span, an evaluation will be performed by May 10, 1993 to consider the risks and benefits of setting the 100% Loop delta-T's to a conservative value prior to unit start-up following a refueling.

To address generic implications, the Reload Initial Start-up Testing procedure will be reviewed by May 10, 1993 to determine if additional tests include precautionary measures designed to minimize entry into a Limiting Condition of Operation.

- C. The channel calorimetric was performed satisfactorily and NI-43 was restored to operability on January 9, 1993. HL&P determined that the event was reportable and submitted Unit 1 Licensee Event Report 93-002 on February 8, 1993.

The Post Maintenance Testing Manual has been revised to ensure that the calorimetric and channel checks are completed prior to returning an inoperable NI channel to service. The channel calorimetric procedure will be revised prior to startup of either unit to ensure that calorimetrics are performed for NIs being returned to service. To address the generic implications of this event, a review will be performed by June 26, 1993, to determine if other at-power surveillance procedures exist that test multiple channels in a single procedure which could cause a similar problem.

A Training Bulletin has been issued to discuss procedural requirements regarding operator log and surveillance requirements. This event will be included in Licensed Operator Regualification Training by July 16, 1993.

Shift turnover sheets will be modified by April 19, 1993, to ensure that Operability Tracking Log entries have been generated for ongoing surveillances prior to shift turnover.

- D. The leads on Toxic Gas Monitor XE-9326 were lifted to place the monitor in a "hard" trip on December 12, 1992. HL&P determined that these events were reportable and notified the NRC Operations Center on December 9 and 12, 1993, and submitted Unit 1 Licensee Event Report 92-020 on January 8, 1993.

A switch will be installed to ensure positive control of the trip function of the monitors. The switch will be added to the Toxic Gas Monitors in Unit 1 by the end of the current outage and in Unit 2 by the end of the Spring 1993 refueling outage.

Administrative controls have been developed which provide instructions to have the leads lifted for Toxic Gas Monitors as the acceptable method of meeting Technical Specification 3.3.3.7.a until the trip switch is installed.

To address generic implications of this event, HL&P will perform a review of modifications which may have similar implementation deficiencies. This review will be completed by June 30, 1993. Programmatic changes that are discovered during this review will be implemented as necessary.

- E. The faulty modem was replaced and the Unit 2 Toxic Gas Monitoring System was verified to be operating properly. HL&P determined that this event was reportable and submitted Unit 2 Licensee Event Report 92-009 on January 14, 1993.

A modification will be implemented during the Spring 1993 Unit 2 refueling outage that will upgrade the Unit 2 Toxic Gas Monitoring system. In the interim, the Operator Log procedure for Unit 2 has been changed to require that the surveillance data be taken from the analyzer printer instead of ERFDADS.

The Operator Log procedure has been changed for Unit 1 to include a note that informs the operators that the toxic gas monitor indication should vary slightly due to the sensitivity of the monitor. Indication that does not vary slightly should be interpreted as being faulty, thus warranting further action. This revision also included the printer as an alternate data collection point which may be used to satisfy the logs. The Unit 2 portion of the procedure will be effective after the completion of the toxic gas monitor modification.

To address the generic implications of this event, a Failure Modes and Effects Analysis has been completed for the new Toxic Gas Monitoring System to identify any additional problems with the system. The analysis did not identify any additional technical discrepancies or fault in the design of the control circuit.

V. Generic Implications:

Due to other events similar to those discussed in this letter, HL&P is developing a program to enhance the surveillance procedures. The Surveillance Procedure Enhancement program will incorporate good human factors principles as well as ensuring that the surveillance procedures accurately reflect the design basis and adequately perform their intended function. The surveillance procedures will be enhanced on a prioritized 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.

VI. Date of Full Compliance:

HL&P is in full compliance.