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May 25, 1994
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U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

South Texas Project
Unit 1
Docket No. STN 50-498
Reply to Notice of Violation 94012-01
Regarding Failure to Follow Procedure Requirements

Houston Lighting & Power has reviewed Notice of Violation 94012-01, dated April 25, 1994, regarding a failure to follow procedure requirements during the performance of a Protection System Logic Train "S" Functional Test, and submits the attached reply.

If you have any questions please contact Mr. S. M. Head at (512) 972-7136 or me at (512) 972-7239.

Lee W Myers

L. W. Myers
Plant Manager,
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Attachment: Reply to Notice of Violation 94012-01

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Reply to Notice of Violation 94012-01

I. Statement of Violation:

Technical Specification 6.8.1.a requires, in part, that written procedures shall be established, implemented, and maintained, including the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Section 8.b of Appendix A recommends that specific procedures for each surveillance test, inspection, or calibration listed in the Technical Specifications should be written. This requirement was implemented, in part, by Plant Surveillance Procedure 0PSP03-SP-0005S, Revision 3, "SSPS Logic Train S Functional Test."

A note in Plant Surveillance Procedure 0PSP03-SP-0005S, that precedes Step 5.3.3, stated that, unless noted, all of the following steps are conducted at Protection System Logic Train S, Local Cabinet SSPS-ZRR008, logic test panel.

Plant Surveillance Procedure 0PSP03-SP-0005S, Precaution 3.6 required that, if testing was terminated for any reason, the shift supervisor would be notified immediately.

Contrary to the above, the following two examples of failure to follow procedure requirements were identified:

1. On March 10, 1994, reactor operators performed all of Steps 5.3 through 5.17 at Protection System Logic Train R, Local Cabinet SSPS-ZRR001, logic test panel.

2. On March 10, 1994, reactor operators terminated the test prematurely to recover from working on the wrong train and did not inform the shift supervisor.

This is a Severity Level IV violation (Supplement I).

II. Houston Lighting & Power's Position:

Houston Lighting & Power concurs that the violation occurred.

III. Reason for Violation:

The violation involves the Reactor Operators' failure to follow procedures. The reasons for this failure are that the Operators were inattentive to detail in the procedure and did not apply self-checking to ensure that actions were performed on the correct component. Furthermore, when the Reactor Operators realized that they had been testing in the wrong logic cabinet and started to recover, they failed to contact the Shift Supervisor as the procedure required them to do. This failure appears to have occurred because they assumed that the directions from the Shift Supervisor would be to restore the train being tested to a normal condition and document the wrong train event.

The circumstances that encompass this violation contain a broader set of causes which relates to management controls and expectations on activities which should be performed during Mid-Loop operations. The Unit was in Mid-Loop and a solid state protection system logic train "S" functional surveillance test was being performed. The Operators unknowingly performed the test in the wrong train. During the Operators' attempt to recover from performing the surveillance incorrectly, an unrelated inadvertent Safety Injection actuation occurred.

The following facts are relevant to the understanding of the cited violation.

The surveillance procedure was conducted satisfactorily through step 5.1.8 which required verification in the train "R" logic cabinet. At this point, the Reactor Operators failed to recognize that the procedure required a transition to Protection System Logic train "S" logic cabinet and continued subsequent testing in the "R" logic cabinet. The cause for not following the procedure was inattention to detail and not applying self-checking to ensure the intended actions were performed on the correct component.

At procedure step 5.18, the Reactor Operators perceived that the procedure could not be completed as written because the note preceding step 5.18 directed the following steps to be conducted in the Protection System Logic train "S" logic cabinet. The Operators stopped the test and called an Instrumentation & Controls Supervisor to determine if testing could be conducted in two logic trains concurrently. The Instrumentation & Control Supervisor confirmed that two logic trains should not be tested concurrently.

The Operators still did not realize that they were in the wrong train. The Operators then informed the Shift Supervisor of an apparent procedure problem since they could not be in two logic trains concurrently. The communication between the Shift Supervisor, the Mid-Loop Coordinator and the Reactor Operators conducting the test only addressed whether a typographical error existed in the procedure. The conclusion was that the procedure was not in error and it could be conducted as written. The Shift Supervisor and the Mid-Loop Coordinator were still not aware that testing was being conducted in the incorrect logic cabinet. The lack of a questioning attitude on the part of the shift management during this discussion caused them to not fully understand the ramifications of the Operators' question concerning the procedure and detracted from their ability to detect this wrong train event.

Instruction from the Shift Supervisor as understood by the Reactor Operators was to continue the test. Upon returning to the logic cabinet, the Reactor Operators determined that they had conducted testing in the wrong train. The Operators did not contact Shift Supervision upon discovering the wrong train event as required by procedure because they assumed that direction from the Shift Supervisor would be to restore the train being tested to a normal condition and document the wrong train event.

With respect to stated violations, the Reactor Operators performing the test did not meet management's expectations for procedural compliance and self-checking. The broader management issues associated with this event were discussed in a Management Meeting with the NRC on March 16, 1994.

IV. Corrective Actions:

Action was taken in accordance with the Houston Lighting and Power Constructive Discipline Program for individuals involved in the event whose performance did not meet expected standards.

The following actions have been taken or will be taken to address the broader issues of this event and to prevent recurrence:

1. Operations personnel involved in the test were removed from the watchbill pending completion of the investigation. (Complete)

2. The event was discussed with the oncoming shifts in both Units. (Complete)

3. Lessons learned briefings were conducted with operating crews in both Units by involved personnel prior to assuming shift duties. (Complete)

4. Expanded administrative controls have been implemented to screen activities on actuation risk systems or procedures prior to use. (Ongoing)

5. Comprehensive screening of surveillance tests is being performed for actuation risk and incorporation of requirements for pre-test briefings/supervisory oversight based on specific risk. (Ongoing)

6. High-and medium-risk activities that are scheduled will be reviewed and management attention will be increased. (Ongoing)

7. Management lessons learned from this event were provided to site managers for discussion with their personnel stressing the significance of this event. (Complete)

8. The Mid-Loop procedure will be revised to incorporate lessons learned regarding surveillance procedure performance and challenges to shutdown cooling. This procedure will be revised prior to its next use.

V. Date of Compliance:

HL&P is in full compliance.