

## LICENSEE EVENT REPORT (LER)

|  |  |        |     |           |  |  |  |                   |      |                                       |  |                   |  |           |                 |              |  |  |  |                      |     |       |  |  |  |      |                |  |  |  |  |  |                  |  |  |  |  |  |
|--|--|--------|-----|-----------|--|--|--|-------------------|------|---------------------------------------|--|-------------------|--|-----------|-----------------|--------------|--|--|--|----------------------|-----|-------|--|--|--|------|----------------|--|--|--|--|--|------------------|--|--|--|--|--|
| FACILITY NAME (1)<br>South Texas, Unit 1                                   |  |        |     |           |  |  |  |                   |      | DOCKET NUMBER (2)<br>0 5 0 0 0 4 9 8  |  |                   |  |           |                 |              |  |  |  | PAGE (3)<br>1 OF 0 4 |     |       |  |  |  |      |                |  |  |  |  |  |                  |  |  |  |  |  |
| TITLE (4)<br>Slave Relay Surveillance Deficiency Due to Personnel Error    |  |        |     |           |  |  |  |                   |      |                                       |  |                   |  |           |                 |              |  |  |  |                      |     |       |  |  |  |      |                |  |  |  |  |  |                  |  |  |  |  |  |
| 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 5 0 0 0        |  |  |  |  |  |
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| OPERATING MODE (9)<br>4  |  |        |     |           |  | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11) |  |                   |      |                                       |  |                   |  |           |                 |              |  |  |  |                      |     |       |  |  |  |      |                |  |  |  |  |  |                  |  |  |  |  |  |
| POWER LEVEL (10)<br>0 0 1 0  |  |        |     |           |  | 20.402(b)  |  |                   |      |                                       |  | 20.406(c)         |  |           |                 |              |  | 50.77(a)(2)(iv)                        |  |                      |     |       |  | 73.71(b)   |  |      |                |  |  |  |  |  |                  |  |  |  |  |  |
|  |  |        |     |           |  | 20.406(a)(1)(i)  |  |                   |      |                                       |  | 50.36(a)(1)       |  |           |                 |              |  | 50.73(a)(2)(iv)                        |  |                      |     |       |  | 73.71(c)   |  |      |                |  |  |  |  |  |                  |  |  |  |  |  |
|  |  |        |     |           |  | 20.406(a)(1)(ii)   |  |                   |      |                                       |  | 50.36(a)(2)       |  |           |                 |              |  | 50.73(a)(2)(vii)                       |  |                      |     |       |  | OTHER (Specify in Abstract below and in Text, NRC Form 366A) |  |      |                |  |  |  |  |  |                  |  |  |  |  |  |
|  |  |        |     |           |  | 20.406(a)(1)(iii)  |  |                   |      |                                       |  | X 50.73(a)(2)(i)  |  |           |                 |              |  | 50.73(a)(2)(viii)(A)                   |  |                      |     |       |  |  |  |      |                |  |  |  |  |  |                  |  |  |  |  |  |
|  |  |        |     |           |  | 20.406(a)(1)(iv)   |  |                   |      |                                       |  | 50.73(a)(2)(ii)   |  |           |                 |              |  | 50.73(a)(2)(viii)(B)                   |  |                      |     |       |  |  |  |      |                |  |  |  |  |  |                  |  |  |  |  |  |
| 20.406(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                             |  |        |     |           |  |  |  |                   |      | 5 1 1 2 9 1 7 1 2 1 - 1 8 1 6 1 2 1 8 |  |                   |  |           |                 |              |  |  |  |                      |     |       |  |  |  |      |                |  |  |  |  |  |                  |  |  |  |  |  |
| COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13) |  |        |     |           |  |  |  |                   |      |                                       |  |                   |  |           |                 |              |  |  |  |                      |     |       |  |  |  |      |                |  |  |  |  |  |                  |  |  |  |  |  |
| CAUSE  |  | SYSTEM |     | COMPONENT |  | MANUFACTURER   |  | REPORTABLE TO NRC |      | CAUSE                                 |  | SYSTEM            |  | COMPONENT |                 | MANUFACTURER |  | REPORTABLE TO NRC                      |  |                      |     |       |  |  |  |      |                |  |  |  |  |  |                  |  |  |  |  |  |
| A  |  | B      |     | E         |  |  |  |                   |      |                                       |  |                   |  |           |                 |              |  |  |  |                      |     |       |  |  |  |      |                |  |  |  |  |  |                  |  |  |  |  |  |
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| SUPPLEMENTAL REPORT EXPECTED (14)  |  |        |     |           |  |  |  |                   |      |                                       |  |                   |  |           |                 |              |  | EXPECTED SUBMISSION DATE (15)          |  |                      |     | MONTH |  | DAY  |  | YEAR |                |  |  |  |  |  |                  |  |  |  |  |  |
| <input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)   |  |        |     |           |  |  |  |                   |      |                                       |  |                   |  |           |                 |              |  | <input checked="" type="checkbox"/> NO |  |                      |     |       |  |  |  |      |                |  |  |  |  |  |                  |  |  |  |  |  |

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single space typewritten lines) (16)

On November 24, 1987 at approximately 1330 hours during the review of a slave relay surveillance procedure, it was determined that the procedure had not properly tested the continuity of a slave relay contact in Train A of the Containment Spray (CS) System which was necessary to initiate a containment spray actuation. A field change to the procedure had deleted a step which would have properly tested the slave relay contact. The Unit had entered Mode 4 on October 31, 1987 and the failure to adequately test the slave relay contact prior to entering Mode 4 was a violation of the Technical Specifications. Train A of the CS System was immediately declared inoperable and the slave relay contact was satisfactorily tested on November 25, 1987. The cause of the event was determined to be personnel error, in that the technical reviewers of the procedure misread a drawing during a supplementary procedure review just prior to the performance of the procedure and an inadequate technical verification of the ensuing field change to the procedure was conducted. To prevent recurrence of the event, the slave relay surveillance procedures for trains B and C have been reviewed to ensure that identical errors did not exist and the instrumentation and controls group technical supervisors have received training concerning the necessity of independent review of field changes.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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| South Texas, Unit 1 | 0 5 0 0 0 4 9 8 8 7 | —              | 0 1 9             | —               | 0 1      | 0 2 | OF 0 4 |

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

DESCRIPTION OF OCCURRENCE:

On November 24, 1987 at approximately 1330 hours during an engineer's review of the Solid State Protection System (SSPS) Actuation Train A Slave Relay Test surveillance procedure, it was determined that the procedure had not properly tested the containment spray (CS) actuation from the SSPS. A field change to the procedure had deleted a step which would have properly tested a CS System Train A slave relay contact necessary to initiate a CS actuation, thus placing a portion of the CS System in an untested condition.

Unit 1 had entered Mode 4 on October 31, 1987 and the failure to adequately perform the surveillance testing of the CS System slave relay contact prior to entering Mode 4 was a violation of Technical Specification 3.3.2. Train A of the CS system was immediately declared inoperable and an investigation was initiated to determine the sequence of events which resulted in the Technical Specification violation. The slave relay contact was satisfactorily tested on November 25, 1987.

The investigation concluded that on October 27, 1987 the SSPS Actuation Train A Slave Relay Test procedure was being performed for the first time in preparation for entering Mode 4. A supplementary review of each subsection of the procedure was being performed prior to the execution of that subsection. During the supplementary review of the procedure, the reviewers read a drawing incorrectly and erroneously determined that the procedure was incorrect. A field change to the procedure was initiated to delete a step which would have performed a continuity check of a slave relay contact in the CS System.

The preliminary review of the field change request by the Shift Supervisor and a technical supervisor on October 27, 1987 failed to recognize the Technical Specification violation caused by the field change. The field change was incorporated into the procedure and the performance of the procedure continued.

A review of the field change the following day, October 28, 1987, determined that the continuity check of the slave relay contact may have been erroneously removed from the test procedure by the field change. The instrumentation and controls senior specialist and the supervisor discussed the criteria for slave relay contact testing and incorrectly determined that there was no requirement for a continuity check for this slave relay contact; therefore, the relay contact was not tested before entering Mode 4.

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APPROVED OMB NO 3150-0104

EXPIRES 8/31/85

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| South Texas, Unit 1 | 0500049887        | 0              | 19                | 01              | 03       | OF 04 |

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

On November 24, 1987, the SSPS Actuation Train A Slave Relay Test procedure was being reviewed in preparation for revision and incorporation of the field changes which had been made during the first performance of the test procedure when an engineer recognized the procedural deficiency. Contrary to the earlier decision, the slave relay contact continuity check which had been deleted from the test procedure was determined to be necessary to satisfy the requirements of Technical Specification 3.3.2. The slave relay contact was necessary to perform an ESF actuation and a continuity check was required to be performed.

The NRC was notified of the violation of the Technical Specification pursuant to South Texas Project Operating License NPF-71 paragraph 2.G at 1635 hours on November 24, 1987.

CAUSE OF OCCURRENCE:

The cause of the erroneous procedural change and subsequent violation of the Technical Specifications was personnel error. The technical reviewers of the procedure misread a drawing and erroneously determined that the procedure was incorrect and an inadequate technical verification of the ensuing field change was conducted. The following day a discussion of the requirements for testing the slave relay contact incorrectly determined that the slave relay contact continuity check was not required and, as a result, the slave relay contact was not tested before entering Mode 4.

ANALYSIS OF EVENT:

There were no adverse safety or radiological consequences as a result of the event since the plant had not yet been critical and no radioactivity had been produced. The event did not result in any additional risk to the public.

This event was reportable pursuant to 10CFR50.73(a)(2)(i)(B). Train A of the CS System was in an untested condition for 24 days while the plant was in Mode 4 and, as such, the plant operated in a configuration which was prohibited by the Technical Specifications. The slave relay contact was satisfactorily tested the day following the discovery of the Technical Specification violation.

CORRECTIVE ACTION:

To prevent recurrence of this event, the following corrective actions are being taken:

1. The slave relay which had been inadequately tested by the surveillance test was properly tested on November 25, 1987.
2. The SSPS Actuation Slave Relay Test procedures for Trains B and C have been reviewed to ensure that identical errors had not been made.

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

3. The instrumentation and controls group technical supervisors have received training concerning the necessity of independent review of field changes to surveillance procedures prior to the performance of tests using field changed procedures.
4. The Train A Slave Relay Surveillance Test procedure will be revised prior to the next required surveillance.

ADDITIONAL INFORMATION:

South Texas Project Electric Generating Station (STPEGS) has had two other Technical Specification violations as a result of failure to meet the Technical Specification testing requirements. LEK 87-009, which was submitted on October 16, 1987, describes the failure to perform a required surveillance for a radiation monitor. More recently, on December 12, 1987 it was discovered that the required slave relay testing for degraded undervoltage coincident with safety injection had not been properly performed. The criteria for slave relay testing at STPEGS has been reviewed and is addressed in LER 87-026 which was submitted to the NRC on January 11, 1988.

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