

## LICENSEE EVENT REPORT (LER)

|  |        |           |  |                     |                 |       |                  |           |                |                               |                     |   |                  |       |  |                      |  |  |
|--|--------|-----------|--|---------------------|-----------------|-------|------------------|-----------|----------------|-------------------------------|---------------------|---|------------------|-------|--|----------------------|--|--|
| FACILITY NAME (1)<br>H. B. Robinson SEG Plant, Unit 2  |        |           |  |                     |                 |       |                  |           |                |                               |                     | DOCKET NUMBER (2)<br>0 5 0 0 0 2 6 1      |                  |       |  | PAGE (3)<br>1 OF 0 2 |  |  |
| TITLE (4)<br>Test of SI - High Steam Flow Coincident with Low Steam Line Pressure or Low Tave. |        |           |  |                     |                 |       |                  |           |                |                               |                     |   |                  |       |  |                      |  |  |
| 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 6  | 0 8    | 8 4       | 8 4  | 0 0 5               | 0 0             | 0 7   | 0 6              | 8 4       |                |                               |                     |   | 0 5 0 0 0        |       |  |                      |  |  |
| OPERATING MODE (9)   |        |           | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11) |                     |                 |       |                  |           |                |                               |                     |   |                  |       |  |                      |  |  |
| POWER LEVEL (10)   |        |           | 20.402(b)  |                     |                 |       | 20.406(a)        |           |                |                               | 90.73(a)(2)(iv)     |   |                  |       | 73.71(b)   |                      |  |  |
| 0 0 0  |        |           | 20.406(a)(1)(i)  |                     |                 |       | 90.36(a)(1)      |           |                |                               | 90.73(a)(2)(v)      |   |                  |       | 73.71(a)   |                      |  |  |
|  |        |           | 20.406(a)(1)(ii)   |                     |                 |       | 90.36(a)(2)      |           |                |                               | 90.73(a)(2)(vi)     |   |                  |       | OTHER (Specify in Abstract below and in Text, NRC Form 365A) |                      |  |  |
|  |        |           | 20.406(a)(1)(iii)  |                     |                 |       | X 90.73(a)(2)(i) |           |                |                               | 90.73(a)(2)(vii)(A) |   |                  |       |  |                      |  |  |
|  |        |           | 20.406(a)(1)(iv)   |                     |                 |       | 90.73(a)(2)(ii)  |           |                |                               | 90.73(a)(2)(vii)(B) |   |                  |       |  |                      |  |  |
|  |        |           | 20.406(a)(1)(v)  |                     |                 |       | 90.73(a)(2)(iii) |           |                |                               | 90.73(a)(2)(ix)     |   |                  |       |  |                      |  |  |
| LICENSEE CONTACT FOR THIS LER (12)   |        |           |  |                     |                 |       |                  |           |                |                               |                     |   |                  |       |  |                      |  |  |
| NAME<br>Carson L. Wright   |        |           |  |                     |                 |       |                  |           |                |                               |                     | TELEPHONE NUMBER<br>8 0 3 3 8 3 - 4 5 2 4 |                  |       |  |                      |  |  |
| COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)                     |        |           |  |                     |                 |       |                  |           |                |                               |                     |   |                  |       |  |                      |  |  |
| CAUSE  | SYSTEM | COMPONENT | MANUFACTURER   | REPORTABLE TO NPDOS |                 | CAUSE | SYSTEM           | COMPONENT | MANUFACTURER   | REPORTABLE TO NPDOS           |                     |   |                  |       |  |                      |  |  |
|  |        |           |  |                     |                 |       |                  |           |                |                               |                     |   |                  |       |  |                      |  |  |
|  |        |           |  |                     |                 |       |                  |           |                |                               |                     |   |                  |       |  |                      |  |  |
| SUPPLEMENTAL REPORT EXPECTED (14)  |        |           |  |                     |                 |       |                  |           |                |                               |                     | EXPECTED SUBMISSION DATE (15)             |                  | MONTH | DAY  | YEAR                 |  |  |
| YES (If yes, complete EXPECTED SUBMISSION DATE)  |        |           |  |                     |                 |       |                  |           |                |                               |                     | X NO                                      |                  |       |  |                      |  |  |

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

On June 8, 1984, with the unit shut down for a Steam Generator Replacement Outage, it was identified that the circuit for a safety injection due to high steam line flow in coincident with low steam line pressure or RCS low average temperature was not completely tested. Specifically, the contacts for relay SL-1 were not tested. The required testing will be completed prior to declaring the associated equipment operable.

8407120316 840706  
PDR ADOCK 05000261  
S PDR

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

| FACILITY NAME (1)                | DOCKET NUMBER (2) | LER NUMBER (6) |                   |                 | PAGE (3) |        |
|----------------------------------|-------------------|----------------|-------------------|-----------------|----------|--------|
|                                  |                   | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER |          |        |
| H. B. Robinson SEG Plant, Unit 2 | 0 5 0 0 0 2 6 1   | 8 4            | — 0 0 5           | — 0 0           | 0 2      | OF 0 2 |

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

On June 8, 1984, with the unit shut down for a Steam Generator Replacement Outage, it was identified that the complete circuit for the initiation of safety injection (SI) due to a high steam line flow coincident with low steam line pressure or low RCS average temperature was not being tested. Specifically, contact 4-8 of relay SL-1 was not tested. When the functional tests were initially written, verification of the output from the system was adequate to demonstrate system operability.

Relay SL-1 and redundant relay SL-2 were verified operable in an as-found condition by manual input of voltage to the coils and by a continuity check of the contacts. Relays SL-1 and SL-2 are also tested by a new Operational Surveillance Test, OST-351, Containment Spray System, however, verification of operability was not included as part of this test. The end result action of valve closure by one or both relays was verified.

Over the years, a functional test has been redefined as including testing of all components in the current's path. The functional test of this circuit was not upgraded to this new understanding of functional testing. A review of Plant records indicates that on four occasions since startup, either the SL-1 or SL-2 relays activated their respective contact, 4-8. On June 21, 1984, an inadvertent safety injection did initiate both trains and, therefore, did verify both relays and contacts to be operable in an as-found condition.

An investigation of this circuit and other similar circuits was conducted to identify any similar occurrences. Additional problems identified were:

1. Steam line isolation testing is not adequate. The closing of the Main Steam Isolation Valve (MSIV) is not adequate verification that the SL-1 and SL-2 contacts operated properly. This can only be verified visually, checking operation of relays MS-1, MS-2, and MS-3 for Train A and MS-11, MS-12, and MS-13 for Train B. These relays are controlled by SL-1 and SL-2. This is being corrected.
2. Contact 4-8 on SL-1 and SL-2 (Train A & B respectively), and contact 2-6 on SB-1 and SB-2 (Train A & B respectively), are not tested for continuity. This circuit provides SI initiation from containment pressure and steam line break protection. An addition to one of the existing routine surveillances is being made to pick up this circuit.
3. The manual reactor trip function is not verified operable on a routine basis. This was previously identified in response to NRC Generic Letter 83-20. Procedure development is scheduled to resolve this issue.
4. Test switch contacts for relay TR1 and TR1X in Train A and TR2 and TR2X in Train B are not tested for continuity after completion of the surveillance test. These are inline contacts feeding the coil of SL-1 and SL-2. This will require an addition of a step to the surveillance test. This is being corrected.



Carolina Power & Light Company

H. B. ROBINSON STEAM ELECTRIC PLANT  
Post Office Box 790  
Hartsville, South Carolina 29550

**JUL 6 1984**

Robinson File No: 13510C

Serial: RSEP/84-456

United States Nuclear Regulatory Commission  
Document Control Desk  
Washington, D. C. 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2  
DOCKET NO. 50-261  
LICENSE NO. DPR-23  
LICENSEE EVENT REPORT 84-005

Dear Sir:

In accordance with 10CFR50.73, the enclosed Licensee Event Report is submitted. This report fulfills the requirements for a written report within thirty (30) days of a reportable event and is in accordance with the format set forth in NUREG-1022, September, 1983.

Very truly yours,

R. E. Morgan  
General Manager  
H. B. Robinson SEG Plant

CLW/sr

Enclosure

cc: J. P. O'Reilly  
NRC Resident Inspector's Office  
INPO

IE22  
1/1