NRC FORM 366 6-1998)

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

FACILITY NAME (1)

Hope Creek Generating Station

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), U.S. Nuclear

APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001

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DOCKET NUMBER (2)

05000354

1 OF 4

TITLE (4)

Inadequate Performance of Primary Containment Integrity Verification

| EVE       | NT DAT | rE (5) | L                       | REPORT DATE (7)      |                    |                              |             | OTHER FACILIT    | IES INV  | NVOLVED (8)       |       |                             |       |  |  |
|-----------|--------|--------|-------------------------|----------------------|--------------------|------------------------------|-------------|------------------|--|-------------------|-------|-----------------------------|-------|--|--|
| MONTH     | DAY    | YEAR   | YEAR                    | SEQUENTIAL<br>NUMBER | REVISION<br>NUMBER | MONTH DAY YEAR FACILITY NAME |             |                  |  | FACILITY NAME     |       | DC                          | O5000 |  |  |
| 09        | 16     | 98     | 98                      | 006                  | 00                 | 10                           | 13          | 98               | FACILITY NAME                                    |                   |       | O5000                       |       |  |  |
| OPERATING |        | 1      | THIS REPORT IS SUBMITTE |                      |                    | ED PURSUANT TO THE REQU      |             |                  | QUIREMENTS OF 10 CFR 5: (Check one or more) (11) |                   |       |                             |       |  |  |
|           |        |        | 20.2201(b)              |                      | 20.2203(a)(2)(v)   |                              | X           | X 50.73(a)(2)(i) |  | 50.73(a)(2)(viii) |       |                             |       |  |  |
| POWER     |        | 100    |                         |                      | 20.2203(a)(3)(i)   |                              |             | 50.73(a)(2)(ii)  |  | 50.73(a)(2)(x)    |       |                             |       |  |  |
|           |        | ,00    |                         |                      | 20.2203(a)(3)(ii)  |                              |             |                  | 50.73(a)(2)(iii)                                 |                   | 73.71 |                             |       |  |  |
|           |        |        | 20.2                    | 203(a)(2)(ii)        |                    | 20.2203(a)(4)                |             |                  | 50.73(a)(2)(iv)                                  |                   | OTHER |                             |       |  |  |
|           |        |        | 20.2                    | 203(a)(2)(iii)       |                    | 50.36(c)                     | (1)         |                  |  | 50.73(a)(2)(v)    |       | pecify in Abstract below or |       |  |  |
|           |        |        | 20.2                    | 20.2203(a)(2)(iv)    |                    |                              | 50.36(c)(2) |                  |  | 50.73(a)(2)(vii)  |       | in NRC Form 366A            |       |  |  |

LICENSEE CONTACT FOR THIS LER (12)

Paul Duke, Licensing Engineer

TELEPHONE NUMBER (Include Area Code)

609-339-1466

|                 |              | COMPLETE    | ONE LINE FOR EA | ACH COMPONE  | NT F | AILURE DES | CRIBED IN | THIS REPORT | 13)     |       |                       |
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| CAUSE           | SYSTEM       | COMPONENT   | MANUFACTURER    | REPORTABLE<br>TO EPIX  |      | CAUSE      | SYSTEM    | COMPONENT   | MANUFAC | TURER | REPORTABLE<br>TO EPIX |
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| YES<br>(If yes, | complete EXI | PECTED SUBM | ISSION DATE).   | X  | NO   |            |           |             |         |       |                       |

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On September 16, 1998 at approximately 1650 hours, PSE&G discovered that containment isolation valve position verification was not being performed properly for valve 1BHV-031, a test valve located within the containment isolation boundary for the Standby Liquid Control discharge line. The procedure for PRIMARY CONTAINMENT INTEGRITY verification satisfies Technical Specification Surveillance Requirement 4.6.1.1.b by monthly position status verification in the valve status database (TRIS+) and by monthly field verification. For valve 1BHV-031, the monthly field verification was not being performed. The cause for this event was personnel error which resulted in an inadequate revision to the surveillance procedure for PRIMARY CONTAINMENT INTEGRITY verification. Corrective actions included verification that the valve was closed. This event is being reported pursuant to 10CFR50.73(a)(2)(i)(B) as an operation or condition prohibited by Technical Specifications.

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(6-1998)

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

### PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor (BWR/4)
Standby Liquid Control System - EIIS Identifier {BR/--}\*

\* Energy Industry Identification System (EIIS) codes and component function identifier codes appear as {SS/CC}

#### IDENTIFICATION OF OCCURRENCE

Event Date: December 9, 1996

Discovery Date: September 16, 1998

### CONDITIONS PRIOR TO OCCURRENCE

The plant was in OPERATIONAL CONDITION 1 (POWER OPERATIONS), at apploximately 100% of rated thermal power. There were no structures, systems, or components that were inoperable at the beginning of the event that contributed to the event.

### DESCRIPTION OF OCCURRENCE

On September 16, 1998 at approximately 1650 hours, PSE&G discovered that containment isolation valve position verification was not being performed properly for valve 1BHV-031, a test valve located within the containment isolation boundary for the Standby Liquid Control discharge line. Technical Specification Surveillance Requirement (SR) 4.6.1.1.b requires verification at least once per 31 days that all primary containment penetrations not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in position.

The procedure for PRIMARY CONTAINMENT INTEGRITY verification satisfies SR 4.6.1.1.b by monthly verification of valve position status for manual primary containment isolation valves in the valve status database (TRIS+) and also by monthly field verification. For valves located in high radiation areas outside containment, field verification may be waived based on a review of operations, maintenance and testing activities in those areas.

During a review of the surveillance procedure, it was noted that the field verification was being waived for valve 1BHV-031. The valve was listed in

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# DESCRIPTION OF OCCURRENCE (continued)

the procedure among the valves located in high radiation areas. However, valve 1BHV-031 is actually in a non-high radiation area.

Field verification was also being waived for three other valves not in high radiation areas. However, these valves are located in a locked room posted as a neutron exposure area, and waiver of the field verification was appropriate.

Failure to perform the required verification for valve 1BRV-031 until September 16, 1998 is reportable pursuant to 10CFR50.73(a)(2)(i)(B) as an operation or condition prohibited by Technical Specifications.

## APPARENT CAUSE OF OCCURRENCE

The apparent cause for this event was personnel error which resulted in an inadequate revision to the surveillance procedure for PRIMARY CONTAINMENT INTEGRITY verification. In a revision to the procedure implemented in October 1996, valve 1BHV-031, which is in a non-high radiation area, was incorrectly relocated to the list of valves in high radiation areas. Field verification of valve position may be waived for valves in high radiation areas. The basis for the procedure change was not documented, and personnel involved in preparing the revision are no longer on site.

#### SAFETY SIGNIFICANCE AND IMPLICATIONS

PRIMARY CONTAINMENT INTEGRITY ensures that the release of radioactive materials from the containment atmosphere will be restricted to those leakage paths and associated leak rates assumed in the accident analyses. This restriction, in conjunction with the leakage rate limitation, will limit the site boundary radiation doses to within the limits of 10 CFR Part 100 during accident conditions.

There were no actual safety consequences associated with this condition. Valve 1BHV-031 was verified to be locked closed on September 16, 1998. In addition, the valve was verified to be locked closed during plant shutdowns in November 1996 and November 1997. The valve's position status was verified monthly in the TRIS+ database and the valve locking device was

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# SAFETY SIGNIFICANCE AND IMPLICATIONS (continued)

controlled by the Operations Department. Valve 1BHV-031 is used for containment penetration leak rate surveillance testing. After the test is completed, the valve is checked and independently verified to be in the correct locked closed position. Since the valve was confirmed to be in the correct position, and position status was checked monthly, a valve mispositioning error is highly unlikely. This event did not affect the health and safety of the public.

## PREVIOUS OCCURRENCES

A review of previously reported events identified one instance within the last two years in which required PRIMARY CONTAINMENT INTEGRITY verification was not performed.

LER 354/95-033-04 reported an event in which certain primary containment penetration test and drain valves were not periodically verified to be closed in accordance with the requirements of TS SR 4.6.1.1.b. The valves had been omitted from the procedure that verifies primary containment integrity. The omitted valves were then added to the surveillance procedure. A review of all primary containment penetrations was performed as a corrective action for this event, and LER 354/95-033-11 reported that approximately 390 additional containment isolation valves were identified that also had not been previously verified in accordance with TS SR 4.6.1.1.b. A verification of these valves was performed promptly and the surveillance procedure was revised to include the required components. During this revision to the procedure, valve 1BHV-031 was incorrectly relocated to the list of valves in high radiation areas.

#### CORRECTIVE ACTIONS

- 1. In accordance with Technical Specification requirements, valve 1BHV-031 was verified to be closed and locked on September 16, 1998.
- 2. The surveillance procedure for PRIMARY CONTAINMENT INTEGRITY verification will be revised to ensure current area radiological conditions are assessed in determining when field verification of valve position is required. This activity will be completed by October 15, 1998.