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United States Nuclear Regulatory Commission
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Gentlemen:

CORRECTED TECHNICAL SPECIFICATION BASES PAGES FOR LICENSE AMENDMENT 133
HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NPF-57
DOCKET NO. 50-354

This letter transmits corrected Technical Specification (TS) Bases pages B 3/4 6-5, B 3/4 6-6 and B 3/4 6-7. License Amendment 132 was issued on August 28, 2001 in response to PSEG Nuclear's application dated April 11, 2001, as supplemented on June 13, 2001. Amendment 133 was issued on October 3, 2001 in response to PSEG Nuclear's application dated October 12, 2000, as supplemented on April 9, 2001. The TS Bases pages prepared for Amendment 133 did not reflect changes that were implemented as part of Amendment 132.

The corrected TS Bases pages are included in the attachment to this letter.

Should you have any questions regarding this transmittal, please contact Mr. Paul Duke at 856-339-1466.

Sincerely,

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/PRD

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Corrected Pages for Hope Creek License Amendment 133

3/4.6.3 PRIMARY CONTAINMENT ISOLATION VALVES

The OPERABILITY of the primary containment isolation valves ensures that the containment atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the containment atmosphere or pressurization of the containment and is consistent with the requirements of GDC 54 through 57 of Appendix A of 10 CFR 50. Containment isolation within the time limits specified for those isolation valves designed to close automatically ensures that the release of radioactive material to the environment will be consistent with the assumptions used in the analyses for a LOCA.

Surveillance 4.6.3.4 requires demonstration that a representative sample of reactor instrumentation line excess flow check valves are tested to demonstrate that the valve actuates to check flow on a simulated instrument line break. This surveillance requirement provides assurance that the instrument line EFCV's will perform so that the predicted radiological consequences will not be exceeded during a postulated instrument line break event as evaluated in the UFSAR. The 18-month frequency is based on the need to perform this surveillance under the conditions that apply immediately prior to and during the plant outage and the potential for an unplanned transient if the surveillance were performed with the reactor at power. The representative sample consists of an approximately equal number of EFCV's, such that each EFCV is tested at least once every ten years (nominal). In addition, the EFCV's in the sample are representative of the various plant configurations, models, sizes and operating environments. This ensures that any potentially common problem with a specific type or application of EFCV is detected at the earliest possible time. The nominal 10 year interval is based on performance testing as discussed in NEDO 32977-A, "Excess Check Valve Testing Relaxation." Furthermore, any EFCV failures will be evaluated to determine if additional testing in that test interval is warranted to ensure overall reliability is maintained. Operating experience has demonstrated that these components are highly reliable and that failures to isolate are very infrequent. Therefore, testing of a representative sample was concluded to be acceptable from a reliability standpoint.

3/4.6.4 VACUUM RELIEF

Suppression Chamber-to-Drywell Vacuum Breakers

BACKGROUND: The function of the suppression-chamber-to-drywell vacuum breakers is to relieve vacuum in the drywell. There are eight internal vacuum breakers located on the vent header of the vent system between the drywell and the suppression chamber that allow air and steam flow from the suppression chamber to the drywell when the drywell is at a negative pressure with respect to the suppression chamber. Therefore, suppression chamber-to-drywell vacuum breakers prevent an excessive negative differential pressure across the wetwell-drywell boundary. Each vacuum breaker is a self-actuating valve, similar to a check valve, which can be remotely operated for testing purposes.

A negative differential pressure across the drywell wall is caused by rapid depressurization of the drywell. Events that cause this rapid depressurization are cooling cycles, inadvertent drywell spray actuation, and steam condensation from sprays or subcooled water reflood of a break in the event of a primary system rupture. Cooling cycles result in minor pressure transients in the drywell that occur slowly and are normally controlled by heating and ventilation equipment. Spray actuation or spill of subcooled water out of a break results in more significant pressure transients and becomes important in sizing the internal vacuum breakers.

In the event of a primary system rupture, steam condensation within the drywell results in the most severe pressure transient. Following a primary system rupture, air in the drywell is purged into the suppression chamber free airspace, leaving the drywell full of steam. Subsequent condensation of the steam can be caused by Emergency Core Cooling Systems flow from a recirculation line or main steam line break, or drywell spray actuation following a loss of coolant accident (LOCA).

In addition, the waterleg in the Mark I Vent System downcomer is controlled by the drywell-to-suppression chamber differential pressure. If the drywell pressure is less than the suppression chamber pressure, there will be an increase in the vent waterleg. This will result in an increase in the water clearing inertia in the event of a postulated LOCA, resulting in an increase in the peak drywell pressure. This in turn will result in an increase in the pool swell dynamic loads. The internal vacuum breakers limit the height of the waterleg in the vent system during normal operation.

APPLICABLE SAFETY ANALYSES: Analytical methods and assumptions involving the suppression chamber-to-drywell vacuum breakers are presented in Section 6.2 and Appendix 6A of the Hope Creek UFSAR as part of the accident response of the primary containment systems. Internal (suppression chamber-to-drywell) and external (reactor building- to-suppression chamber) vacuum breakers are provided as part of the primary containment to limit the negative differential pressure across the drywell and suppression chamber walls that form part of the primary containment boundary.

The safety analyses assume that the internal vacuum breakers are closed initially and are fully open at a differential pressure of 0.20 psid. Additionally, one of the eight internal vacuum breakers is assumed to fail in a closed position. The results of the analyses show that the design pressure limits are not exceeded even under the worst case accident scenario. The vacuum breaker opening differential pressure setpoint and the requirement that all eight vacuum breakers be OPERABLE are a result of the requirement placed on the vacuum breakers to limit the vent system waterleg height. The vacuum relief capacity between the drywell and suppression chamber should be 1/16 of the total main vent cross sectional area, with the valves set to operate at 0.20 psid differential pressure. Design Basis Accident (DBA) analyses require the vacuum breakers to be closed initially and to remain closed and leak tight.