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United States Nuclear Regulatory Commission
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Gentlemen:

AUTOMATIC CONTROLS FOR HPCI PUMP SUCTION VALVE
FROM SUPPRESSION POOL, 1BJHV-F042
HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NO. NPF-57
DOCKET NO. 50-354

The purpose of this letter is to clarify PSE&G's commitment made in response to TMI Action Item II.E.4.2, Position 4 and IE Bulletin 80-06 concerning HPCI Pump Suction Valve 1BJHV-F042. A recent review of 1BJHV-F042 valve control circuitry determined that the valve could automatically reopen following reset of the HPCI isolation signal if either the Condensate Storage Tank (CST) Low Level or the Torus High level control signals are present.

TMI Action Item II.E.4.2, Position 4 and IE Bulletin 80-06 requires that deliberate operator action be taken to reopen containment isolation valves that are closed automatically following reset of the containment isolation signal. (It is noted that this valve does not close on an accident signal generated by either the Primary Containment Isolation System (PCIS) or Nuclear Steam Supply Shutoff System signals.) PSE&G, in response to the TMI Action Item II.E.4.2, IE Bulletin 80-06 and an SER Confirmatory Issue 20 (Letter dated November 20, 1985), identified that valve 1BJHV-F042 control circuitry had been modified per a Design Change Package (No. 254) to prevent the valve from reverting back to its open position after resetting the HPCI isolation signal. However, based on a recent review of the valve control circuitry, this modification installed an override pushbutton feature, and does not prevent the valve from returning to the open position if a Low Condensate Storage Tank Level or Torus High Level Control signal is present.

PSE&G has completed a Safety Evaluation in accordance with 10CFR50.59 to revise the UFSAR per the existing design configuration of valve 1BJHV-F042 control circuitry, and provide justification that this valve is not required to meet the

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requirements of TMI Action Item II.E.4.2. This evaluation has concluded that the existing 1BJHV-F042 control circuitry is acceptable-as-is and does not involve an Unreviewed Safety Question based on the following discussion.

Valve 1BJHV-F042 automatically closes upon receipt of a HPCI system isolation signal. As previously noted, this valve receives only a system isolation signal and does not close on a containment isolation signal. This valve is located on the water side of the HPCI system and is aligned to take suction from the suppression pool. The control circuitry is presently designed to automatically close valve 1BJHV-F042 upon receipt of one of several isolation signals that include high steam line flow, high area temperature, low steam supply pressure or exhaust diaphragm rupture, each of which are indicative of a break in the steam line side of the HPCI system. In the event that a steam line break did occur and a HPCI system isolation signal was initiated, valve 1BJHV-F042 would close. Following reset of the isolation signal, 1BJHV-F042 would open but not unisolate the steam line break if a Low Condensate Storage Tank Level or Torus High Level Control signal is present.

The automatic open feature ensures that a continuous source of water is available to the HPCI pump by shifting suction from the CST to the torus prior to losing suction due to low CST level. The automatic opening of valve 1BJHV-F042 is further justified on the basis that a greater margin of safety is ensured by increasing system reliability such that a supply of cooling water will be available to the HPCI pump following a design basis accident. (Refer to UFSAR Subsection 6.2.4.3.2.9.) Therefore, use of the present control circuitry is justified since a greater margin of safety is ensured by increasing the ESF system reliability for the suppression pool water source to the reactor.

The automatic open feature may be defeated by depressing the override pushbutton installed under DCP No. 254. If this is performed prior to resetting the isolation signal, the valve will not open. If the override pushbutton is depressed after resetting the signal, the valve will automatically close.

Based on the above, PSE&G will revise UFSAR Section 1.10 to reflect the existing design configuration of valve 1BJHV-F042 control circuitry, and revise the response to TMI Action Item II.E.4.2.

In NRC Safety Evaluation Report Supplement 5, Section 7.3.2.6, the NRC also identified that RCIC pump suction valve from the suppression pool (1BDHV-F031) control circuitry was also modified to meet the requirements of TMI Action Item II.E.4.2 and IE

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Bulletin 80-06. As part of the response to TMI Action Item II.E.4.2, PSE&G provided drawings identifying changes to valve 1BDHV-F031 control circuitry that had been installed under DCP No. 254. A review of the valve's control circuitry has determined that this valve does not receive a RCIC system isolation signal nor is it required. Therefore, the control circuitry that had been installed under DCP No. 254 to prevent the valve from reverting back to the open position after resetting the RCIC system isolation signal is not required. The purpose of this letter is also to correct information made in response to TMI Action Item II.E.4.2, Position 4 and IE Bulletin 80-06 concerning RCIC Pump Suction Valve 1BDHV-F031.

The control circuitry of valve 1BDHV-F031 is similar to valve 1BJHV-F042 with the exception that valve 1BDHV-F031 does not receive a RCIC system isolation signal. Valve 1BDHV-F031 is normally closed and receives an automatic open signal only on Low CST level. However, the safety function of both of these valves is the same by ensuring a continuous source of cooling water is available to the RCIC and HPCI pumps by switching suction to the torus on low CST level.

Please contact us should you have any questions regarding this submittal.

Sincerely,



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