

SAFETY EVALUATION

To provide the reactor coolant system (RCS) overpressure protection when the RCS temperature is less than 280°F, DH-11 and DH-12 are open and the valve operator control power removed to provide assurance that pressure relief capacity is available using the relief valve on the decay heat removal (DHR) system. The interlock in the pressurizer heater control circuit prevents the pressurizer heaters from being energized when DH-11 or DH-12 are opened and the RCS pressure is above the setpoint which automatically closes DH-11 and DH-12. This prevents pressurization of the RCS above the interlock setpoint if DH-11 or DH-12 is closed and the control power has been inadvertently left off from the other valve. This pressurizer interlock was described in a letter to the NRC, dated April 7, 1977.

The removal of the control power from DH-11 and DH-12 after they are opened assures that these valves will remain open, providing overpressure protection to the RCS through the DHR relief valve. This control power removal also prevents damage to both decay heat pumps due to the inadvertent closure of either DH-11 or DH-12. The circuit for the removal of control power from the control room will be similar to that for DH-1A and DH-1B as shown on drawing No. 7749 E52B, sheet 60A and 60B. An alarm is actuated when DH-11 is opened and has control power to the motor operator. A second alarm is provided similarly for DH-12.

The trip setpoint and allowable valve for the decay heat isolation valve and pressurizer heaters are <438 psig and <443 psig, respectively. Referenced to the centerline of valves DH-11 and DH-12. Table 3.3-3 and the Associated Action Statements Nos. 12 and 13 Table 4.3-2, Table 3.3-4 and Surveillance requirement 4.5.2d need to be revised to reflect these new setpoints and functions. These technical specification limits assure that even with the total possible instrument string drift and inaccuracies of 51 psi, the DHR system will be isolated from the RCS before the design overpressure of the DHR system is reached.

With the above instrumentation, the requirement that both decay heat removal pumps not be operated simultaneously can be modified. License condition 2.C(3)(j) can be deleted and page 3/4 4-2 of technical specifications can be modified by deleting "decay heat removal pump switch operations", and committing to not operating more than one decay heat removal pump with their sole suction flow path through DH-11 and DH-12 unless the control power has been removed from the DH-11 and DH-12 valve operators, or manual valves DH-21 and DH-23 are opened.

Specification 3.4.2 should be changed to commit to operability of the decay heat removal system pressure relief valve DH-4849 and to removal of control power from DH-11 and DH-12 when they are open to assure the overpressure protection of the RCS. The pressurizer code safety valve is no longer required operable in modes 4 and 5 so this requirement can be deleted.

ks e/9

8001290682