discharge line, the pool pressure boundary, and submerged structure drag loads are discussed in Section 4.1.2 of NEDC–32405P which concludes that the small increase in the setpoint pressure is well within the margin in the SRV loads defined in the Mark I Containment Long-Term Program. Therefore, power uprate does not impact the Hatch SRV load definitions used in the containment analysis, and no significant increase in the probability or consequences of an accident previously evaluated is caused by this proposed change.

H. The Limiting Condition for Operation (LCO) and SRs for the maximum reactor steam dome pressure will be increased from 1020 psig to 1058 psig. This requirement appears in LCO 3.4.10, SR 3.4.10.1, and the corresponding Bases in the Unit 1 and Unit 2 Technical Specifications.

Evaluation

As discussed in the Technical Specifications Bases and NEDC–32405P, the maximum reactor dome pressure is an initial condition of the vessel overpressure protection analysis, which assumes a fast isolation of all four main steam lines by the main steam isolation valves (MSIVs). The reactor scram signal generated directly by the valve closure is assumed defeated for this analysis. Instead, the scram signal is generated by high neutron flux. The overpressure analysis for power uprate assumed an initial dome pressure of 1058 psig, which represents an increase of 38 psig. This initial pressure was chosen approximately 2 percent above the 1035 psig steam dome operating pressure expected for power uprate operation. The analysis also included the other changes (including SRV setpoints) discussed in these proposed changes. Therefore, there is no significant increase in the probability or consequences of an accident previously evaluated.

I. The HPCI and RCIC surveillance test pressures in Units 1 and 2 Technical Specifications SRs 3.5.1.8 and 3.5.3.3, respectively, are increased 38 psi.

Evaluation

The allowable HPCI and RCIC surveillance test pressure is increased to correspond with the increase in normal reactor operating pressure and LCO/SR on maximum reactor pressure that accompanies power uprate. (As discussed in Item H above, the LCO on reactor steam dome pressure is increased 38 psi.) The change is needed to ensure that pressure and power reductions are not required to perform surveillance testing. The requested changes will allow the quarterly demonstration of the HPCI and RCIC systems' capability to perform at normal reactor operating pressures, which meets the original intent of the Technical Specifications.

The HPCI and RCIC systems have been evaluated and demonstrated to be capable of injecting design flow rate at the higher reactor pressure as discussed in Sections 4.2 and 3.8 of NEDC–32405P and in Reference 2.

Therefore, these changes will ensure that power uprate operation will not cause a significant increase in the probability or consequences of an accident previously evaluated.

J. Bases Changes

Several changes to the Hatch Units 1 and 2 Technical Specifications Bases are proposed for consistency with the power uprate safety analyses. These proposed changes are in addition to the Bases changes corresponding to proposed changes A through I.

i. The main steam line flow differential pressure setpoints (Bases Section B 3.3.6.1.c) and the HPCI/RCIC high flow differential pressure setpoints (Bases Section B 3.3.6.3.a and B 3.3.6.4.a) are changed for both units.

The allowable values (in percent of rated) will not change for power uprate operation. However, the actual differential pressure will change due to the increase in steam flow and pressure.

ii. The HPCI and RCIC upper design pressure in Bases Sections B 3.5.1 and B 3.5.3, respectively, is increased 34 psi for both units

The Bases changes support the design of these high pressure systems to pump rated flow from approximately 150 psig up to a pressure associated with the first group of SRV setpoints. This proposed design pressure conservatively considers the 30 psi higher nominal setpoints and 3 percent setpoint drift. The capability of the HPCI and RCIC systems to deliver design flows at these pressures is discussed in Reference 2, and was reviewed by GE for the Unit 1 and Unit 2 systems.

Note that the upper design pressure for HPCI and RCIC is different from the surveillance test pressure for HPCI and RCIC discussed previously in item I. The maximum surveillance test pressure corresponds to reactor operating pressure, since the surveillance test is performed when the unit is operating. The HPCI and RCIC upper design pressure reflects the capability to inject water to the vessel following a reactor scram and isolation.

iii. The peak post accident containment pressure (P_a) is changed to 49.6 psig (Unit 1) and 45.5 psig (Unit 2). These values appear in Bases Sections B 3.6.1.1, B 3.6.1.2, and B 3.6.1.4 in each unit's Technical Specifications.

Section 4.1.1.3 of NEDC–32405P discusses the peak short-term containment pressure response which was recalculated for power uprate conditions. Containment pressure and temperatures remain below design limits and are essentially unchanged.

iv. The main condenser offgas gross gamma activity rate limit of 240 mci/second will not be changed for power uprate. A statement that the current limit is conservative for power uprate conditions was added to Bases Section 3.7.6 for both units.

The Bases derive the current 240 mci/second limit using a rated core thermal power limit of 2436 MWt. A slightly higher limit could be justified using the uprated power level. However, adequate margin exists with the current limit.

v. The inservice hydrostatic and leak testing pressures shown in Bases Section 3.10.1 are increased 33 psi and 30 psi, respectively. This change affects each unit's Bases.

This change is a direct result of the 30 psi increase in normal operating pressure proposed for power uprate. The leakage test is normally performed at operating pressure and the hydrostatic test at approximately 110 percent of operating pressure.

The above Bases changes Items i–v have been evaluated and will not increase the probability or consequences of an accident previously evaluated.

2. Will the changes create the possibility of a new or different kind of accident from any accident previously evaluated?

Evaluation

The Operating License changes in power level and the associated Technical Specifications changes discussed previously will not create the possibility of a new or different kind of accident from any accident previously evaluated, as summarized below.

Equipment that could be affected by power uprate was evaluated. No new operating mode, safety-related equipment lineup, accident scenario, or equipment failure mode were identified. The full spectrum of accident considerations defined in RG 1.70 was evaluated, and no new or different kind of accident was identified. Uprate uses already-developed technology and applies it within the capabilities of existing plant equipment in accordance with presently existing regulatory criteria to include NRC-approved codes, standards, and methods. GE has designed BWRs of higher power levels than the uprated power of any of the currently operating BWR fleet, and no new power dependent accidents have been identified.

The Technical Specifications changes required to implement power uprate require only minor modifications to the plant's configuration. All changes were evaluated and found to be acceptable.

3. Will the changes involve a significant reduction in the margin of safety?

A. Rated Thermal Power is increased to 2558 MWt on page 3 of the Unit 1 Operating License, page 4 of the Unit 2 Operating License, and in Section 1.1 (Definitions) of the Unit 1 and Unit 2 Technical Specifications.

Evaluation

The events analyzed in the FSAR were re-evaluated to demonstrate that power uprate can be implemented without exceeding any regulatory limit. Because the applicable safety analysis criteria and limits are satisfied for power uprate, the margin of safety associated with the safety limits and other limits identified in the Technical Specifications will be maintained.

As discussed in NEDC–32405P, the safety margins prescribed by the Code of Federal Regulations are maintained by meeting the appropriate regulatory criteria. Similarly, the margins provided by the application of the ASME design criteria are maintained. Section 11.4.2 of NEDC–32405P discusses the effects of power uprate on safety margins for the following:

Fuel thermal limits Design basis accidents and the challenges to fuel, containment, and radiological releases. Transient analyses. Non-LOCA radiological releases. Environmental consequences.

These evaluations conclude that applicable safety analysis criteria and limits are