Table I-1
Technical Specification Change Priority

Category 1: Required for Restart

All changes in Chapter 2.0, Safety Limits, except deletion of Neutron Flux High Negative Rate Trip and administrative/editorial changes regarding the removal of references to the RTD Bypass Manifold.

All changes in Chapter 3/4.2, Power Distribution Limits.

Administrative changes to 6.9.1.9, relative to the Core Operating Limits Report.

Change to Low Steam Line Pressure Setpoint (TS Table 3.3-4).

Category 2: Safety Analysis-Related Changes

(These changes are not required for restart, but will cause the unit to be overly conservative, and possibly limited, if not approved.)

Changes to ECCS pump performance requirements (TS 4.5.2 f & h).

Increase in Feedwater and Main Steam Isolation Times and MSIV stroke time (TS Table 3.3-5 and TS 4.7.1.4).

Category 3: Changes to provide operational flexibility or reduce the potential for spurious trips.

Removal of Neutron Flux High Negative Rate (TS Tables 2.2-1, 3.3-1, 3.3-2, and 4.3-1).

Increase in Main Steam and Pressurizer Code Safety Valve Setpoint Tolerances ~~(TS 3.4.2.1&2, TS Table 3.7-3)~~.

Category 4: Correction of errors or non-conservatisms in existing TSs.

Increase in required loops in operation in Mode 3 (TS 3.4.1.2).

Increase Cold Leg Accumulator required boron concentration (TS 3.5.1.1).

Change list of events to be reanalyzed (TS Table 3.1.1)

{ (TS 3.4.2.1, 4.4.2.1, 3.4.2.2, 4.4.2.2, Base 3/4.4.2, 4.7.1.1, Table 3.7-3, and Base 3/4.7.1.1)

consistent with the analysis of the uncontrolled bank withdrawal from subcritical or low power startup condition.

Proposed Revision to Technical Specification 3.4.2.1, & 3.4.2.2, 4.4.2.1, 4.4.2.2 & Base 3/4.4.2

This change applies to Units 1 & 2 ~~1 only~~.

This modification changes the tolerances on the pressurizer safety valve lift setpoint from ±1% to +3%,-2% in all modes of operation. These modified tolerances are for OPERABILITY; however, the valves are reset to ± 1% during surveillance testing to allow for drift.

Technical Justification

The pressurizer code safeties are not tested in place but are removed and shipped to a testing facility. The safety concerns for removal and replacement of these valves are difficult access to the work area, difficulty in lifting device rigging for valve removal/replacement, and valve transport to/from the pressurizer. Since this work is performed in a radiological environment, work activities are further complicated by anti-contamination clothing. For a conservative approach, all three valves are removed each outage for testing. The setpoint drift seen during testing would again fall under the proposed setpoint variance change. The change would possibly reduce work in the pressurizer by 66% by requiring only one valve to be tested per outage. In summary, safety benefits would be gained by less work in a dangerous environment and less radiation exposure.

The larger allowable deviation from the nominal lift setting is consistent with the licensing basis analyses. An increased pressurizer safety valve lift setpoint impacts the peak Reactor Coolant System pressure calculated for pressure increase transients. A pressure increase is the result of a heatup in the Reactor Coolant System due a mismatch between the heat generated in the reactor core and the heat removed by the secondary system. The three accident categories involving such heat transfer mismatches are the decrease in secondary heat removal, decrease in Reactor Coolant System flow rate, and reactivity and power distribution anomaly transients. The feedline break, locked rotor and rod ejection events are the limiting pressure increase transients in these three accident categories, respectively. These events have all been analyzed assuming a lift setpoint 3 percent above the nominal value. These analyses show that the peak Reactor Coolant System pressure criterion (110% of design pressure) is met for each event.

The amount by which the safety valve lift setpoint is allowed to drift downward is restricted to 2 percent of nominal in order to ensure that safety valve lift cannot preclude reactor trip on high pressurizer pressure. For DNB transients in which a high pressurizer pressure reactor trip does not prevent the lifting of

the safety valves, the effect of this reduced setpoint on the transient DNBR is evaluated. Since low pressure is conservative for DNBR analyses, it is typically assumed that the pressurizer PORVs and sprays mitigate the pressure increase due to the system heatup and thereby preclude safety valve lift. For the uncontrolled bank withdrawal at power and single rod withdrawal events, however, the operation of the pressurizer pressure control system would tend to yield an earlier reactor trip on overtemperature ΔT due to pressure compensation of the trip setpoint. The reanalysis of these events show that all acceptance criteria are met.

Proposed Revision to Technical Specification 3.5.1.1

This change applies to Units 1 and 2.

This change raises the required average cold leg accumulator boron concentration in ACTIONS c.2 and c.3 from 1500 to 1800 ppm, and bases this average on all four accumulators instead of just the limiting three. Also, in each of the ACTIONS, "pressurizer" is administratively changed to "Reactor Coolant System."

Technical Justification

Calculating the volumetric average boron concentration based on all four cold leg accumulators is valid, since, regardless of the break location, the contents of each accumulator will be emptied (either directly or indirectly) into the containment sump. A volumetric average concentration of 1800 ppm will ensure long-term subcriticality following a LOCA.

Changing "pressurizer" to "Reactor Coolant System" is administrative in nature. The change is made to reflect the instrument actually used by the plant to complete the required ACTIONS. Pressurizer pressure goes off scale low at 1700 psig, so it cannot be used to measure pressures below 1000 psig as stated in the current TS.

Proposed Revision to Technical Specification Table 3.7-3, 4.7.1.1 & Base 3/4.7.1.1

This change applies to Units 1 & 2 ~~1 only~~.

Similar to the proposed changes to Specifications 3.4.2.1, 3.4.2.2, the tolerance on the steam line safety valve lift setpoints is being raised from ±1% to ±3%.

Technical Justification

The main steam code safety valves must be tested with full steam header pressure. The testing requires removal of the manual

4.4.2.1, 4.4.2.2 & Base 3/4.4.2

This modified tolerance is for OPERABILITY; however, the valves are reset to ± 1% during surveillance testing to allow for drift.

actuation device and installation of an air motor assembly for each valve to be tested. All of these components are installed in top of the doghouses. The test code as written requires a sample of these valves to be tested at each shutdown and if test failure occurs, then the population must be expanded. If other failures occur, the test population must be further expanded. The worst setpoint drift has been approximately 10 psi. This is a failure under the present 1% criterion, but would easily satisfy 3%. In summary, the safety benefit from this change would be fewer manhours spent for testing and rework in a dangerous environment (high temperature/pressure piping, high elevation, difficult access).

The larger allowable deviation from the nominal lift setting is consistent with the licensing basis analyses. An increased safety valve lift setpoint directly impacts the Main Steam System peak pressure transients. The turbine trip, MSIV closure and uncontrolled bank withdrawal events are analyzed in order to ensure that the 110% of design pressure acceptance criterion is not exceeded.

Proposed Revision to Technical Specification 4.7.1.4

This change applies to Unit 1 only.

The permissible stroke time for the main steam isolation valves is being changed from 5 to 8 seconds.

Technical Justification

The larger allowable isolation valve stroke time is consistent with or conservative for all licensing basis safety analyses. The valve stroke time, when added to the applicable instrumentation delays, yields the overall ESF response time. As stated in the technical justification for the proposed revision to TS Table 3.3-4, this response time is input to the steam line break transient analysis. Increasing the stroke time causes the primary system overcooling to worsen due to the extended blowdown of the intact generators. Reanalysis (Reference 4) shows this Condition IV transient does not violate the imposed Condition II acceptance criterion of no DNB.

The inadvertent opening of a steam generator relief or safety valve, in terms of primary system overcooling, is essentially a small steam line break. This Condition II event exhibits steam releases markedly less than the steam line break event. Therefore, this event is bounded by the steam line break event and does not require reanalysis.
For the peak containment temperature analysis (Reference 6), increasing the main steam line isolation response time has a similar effect as the removal of the dynamic compensation in the

A decreased safety valve lift setpoint has the potential to impact the steam generator tube rupture accident. This potential impact has been evaluated, and the existing licensing basis analysis remains bounding.

(TS 3.4.2.1, 4.4.2.1, 3.4.2.2, 4.4.2.2, Base 3/4.4.2, Table 3.7-3, 4.7.1.1, and Base 3/4.7.1.1)

NO SIGNIFICANT HAZARDS ANALYSIS
INCREASE PRESSURIZER AND MAIN STEAM CODE SAFETY VALVE
SETPOINT TOLERANCES
~~(TS 3.4.2.1 & 2, Table 3.7-3)~~

The following analysis, required by 10CFR 50.91, concludes that the proposed amendments will not involve significant hazards considerations as defined by 10 CFR 50.92.

10 CFR 50.92 states that a proposed amendment involves no significant hazards considerations (NSHC) if operation in accordance with the proposed amendment would not:

1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or

2) Create the possibility of a new or different kind of accident from any previously evaluated; or

3) Involve a significant reduction in the margin of safety.

The proposed amendment will not result in a significant increase in the probability or consequences of any previously analyzed accident. The valve lift setting is challenged only after a transient has been initiated and is not a contributor to the probability of any transient or accident. The transients which involve pressure increases which would potentially challenge the safety valves have been analyzed to determine the consequences of delayed or premature valve actuation at the extremes of the new setpoint tolerances. These analyses show that all applicable acceptance criteria are met using the wider tolerances.

The proposed amendment will not result in the creation of any new accident not previously evaluated. As noted above, the setpoint tolerance only affects the time at which the safety valve opens following or during a transient, and is not a contributor to the probability of an accident.

The proposed amendment will not result in a significant decrease in a margin of safety. The limiting transient in each accident category has been analyzed to determine the effect of the change in lift setpoint tolerance on the transient. In each case, the results of the analyses met all acceptance criteria.

Based on the above, it is concluded that no significant hazard considerations exist.