## REACTOR COOLANT SYSTEM

#### BASES

INSERT

A

## 3/4.4.2 SAFETY VALVES (Continued)

During operation, all pressurizer Code safety valves must be OPERABLE to prevent the RCS from being pressurized above its Safety Limit of 2735 psig. The combined relief capacity of all of these valves is greater than the maximum surge rate resulting from a complete loss of load c juming no Reactor trip until the first Reactor Trip System Trip Setpoint is reached (i.e., no credit is taken for a direct Reactor trip on the loss of load) and also assuming no operation of the power-operated relief valves or steam dump valves.

Demonstration of the safety valves' lift settings will occur only during shutdown and will be performed in accordance with the provisions of Section XI of the ASME Boiler and Pressure Code.

### 3/4.4.3 PRESSURIZER

The limit on the maximum water volume in the pressurizer assures that the parameter is maintained within the normal steady-state envelope of operation assumed in the SAR. The limit is consistent with the initial SAR assumptions. The 12-hour periodic surveillance is sufficient to ensure that the parameter is restored to within its limit following expected transient operation. The maximum water volume also ensures that a steam bubble is formed and thus the RCS is not a hydraulically solid system. The requirement that a minimum number of pressurizer heaters be OPERABLE enhances the capability of the plant to control Reactor Coolant System pressure and establish natural circulation.

## 3/4.4.4 RELIEF VALVES

The power-operated relief valves (PORVs) and steam bubble function to relieve RCS pressure during all design transients up to and including the design step load decrease with steam dump. Operation of the PORVs minimizes the undesirable opening of the spring-loaded pressurizer Code safety valves. Each PORV has a remotely operated block valve to provide a positive shutoff capability should a relief valve become inoperable. The PORVs and their associated block valves are powered from Class 1E power supply busses.

The PORVs are equipped with automatic actuation circuitry and manual control capability. The PORVs are considered OPERABLE in either the automatic or manual mode for the following reasons:

- No credit is taken in any FSAR accident analysis for automatic PORV actuation to mitigate the consequences of an accident.
- (2) No Surveillance Requirement (ACOT or TADOT) exists for verifying automatic operation.
- (3) The required ACTION for an inoperable PORV(s) (closing the block valve) conflicts with any presumed requirement for automatic actuation.

SEABROOK - UNIT 1 9509190039 950912 PDR ADDCK 05000443 PDR B 3/4 4-2

Amendment No. 16

#### Insert A:

During plant operations in Mode 5, it is conservative and consistent with Technical Specifications that the OPERABLE pressurizer safety valve may be removed from its flange and continue to meet the intent of this Specification. The removal of the pressurizer safety valve will afford the reactor coolant system equivalent or superior protection as an overpressure device. This will also allow the removal of the three pressurizer safety valves to be used as a gravity vent path in place of removing the pressurizer manway when the plant is at reduced inventory conditions.

# IV. RETYPE OF PROPOSED CHANGES

The enclosed retyped pages reflect the currently issued version of Bases. Revision bars are provided in the right margin to designate a change in the text.

## REACTOR COOLANT SYSTEM

### BASES

## 3/4.4.2 SAFETY VALVES (Continued)

During plant operations in MODE 5, it is conservative and consistent with Technical Specifications that the OPERABLE pressurizer safety valve may be removed from its flange and continue to meet the intent of this Specification. The removal of pressurizer safety valve will afford the reactor coolant system superior overpressure protection. This will also allow the removal of the three pressurizer safety valves to be used as a gravity vent path in lieu of removing the pressurizer manway when the plant is at reduced inventory conditions.

During operation, all pressurizer Code safety valves must be OPERABLE to prevent the RCS from being pressurized above its Safety Limit of 2735 psig. The combined relief capacity of all of these valves is greater than the maximum surge rate resulting from a complete loss of load assuming no Reactor trip until the first Reactor Trip System Trip Setpoint is reached (i.e., no credit is taken for a direct Reactor trip on the loss of load) and also assuming no operation of the power-operated relief valves or steam dump valves.

Demonstration of the safety valves' lift settings will occur only during shutdown and will be performed in accordance with the provisions of Section XI of the ASME Boiler and Pressure Code.

### 3/4.4.3 PRESSURIZER

The limit on the maximum water volume in the pressurizer assures that the parameter is maintained within the normal steady-state envelope of operation assumed in the SAR. The limit is consistent with the initial SAR assumptions. The 12-hour periodic surveillance is sufficient to ensure that the parameter is restored to within its limit following expected transient operation. The maximum water volume also ensures that a steam bubble is formed and thus the RCS is not a hydraulically solid system. The requirement that a minimum number of pressurizer heaters be OPERABLE enhances the capability of the plant to control Reactor Coolant System pressure and establish natural circulation.

### 3/4.4.4 RELIEF VALVES

The power-operated relief valves (PORVs) and steam bubble function to relieve RCS pressure during all design transients up to and including the design step load decrease with steam dump. Operation of the PORVs minimizes the undesirable opening of the spring-loaded pressurizer Code safety valves. Each PORV has a remotely operated block valve to provide a positive shutoff capability should a relief valve become inoperable. The PORVs and their associated block valves are powered from Class 1E power supply busses.

The PORVs are equipped with automatic actuation circuitry and manual control capability. The PORVs are considered OPERABLE in either the automatic or manual mode for the following reasons:

(1) No credit is taken in any FSAR accident analysis for automatic PORV acutation to mitigate the consequences of an accident.

SEABROOK - UNIT 1

## REACTOR COOLANT SYSTEM

### BASES

## 3/4.4.4 RELIEF VALVES (Continued)

- (2) No Surveillance Requirement (ACOT or TADOT) exists for verifying automatic operation.
- (3) The required ACTION for an inoperable PORV(s) (closing the block valve) conflicts with any presumed requirement for automatic actuation.

## 3/4.4.5 STEAM GENERATORS

The Surveillance Requirements for inspection of the steam generator tubes ensure that the structural integrity of this portion of the RCS will be maintained. The program for inservice inspection of steam generator tubes is based on a modification of Regulatory Guide 1.83. Revision 1. Inservice inspection of steam generator tubing is essential in order to maintain surveillance of the conditions of the tubes in the event that there is evidence of mechanical damage or progressive degradation due to design, manufacturing errors, or inservice conditions that lead to corrosion. Inservice inspection of steam generator tubing also provides a means of characterizing the nature and cause of any tube degradation, so that corrective measures can be taken.