

3/4.9 REFUELING OPERATIONS

3/4.9.1 BORON CONCENTRATION

LIMITING CONDITION FOR OPERATION

3.9.1.a The boron concentration of all filled portions of the Reactor Coolant System and the refueling canal shall be maintained uniform and sufficient to ensure that the more restrictive of the following reactivity conditions is met; either:

(1) A K_{eff} of 0.95 or less, or

(2) A boron concentration of greater than or equal to 2000 ppm.

3.9.1.b The valves listed in Table 3.9-1 shall be in their positions required by Table 3.9-1.
APPLICABILITY: MODE 6.

ACTION:

- a. With the requirements of the ^{3.9.1.a} above specification not satisfied, immediately suspend all operations involving CORE ALTERATIONS or positive reactivity changes and initiate and continue boration at greater than or equal to 30 gpm of a solution containing greater than or equal to 7000 ppm boron or its equivalent until K_{eff} is reduced to less than or equal to 0.95 or the boron concentration is restored to greater than or equal to 2000 ppm, whichever is the more restrictive.

SURVEILLANCE REQUIREMENTS

4.9.1.1 The more restrictive of the ~~above two~~ reactivity conditions shall be determined prior to:

of specification 3.9.1.a

- Removing or unbolting the reactor vessel head; and
- Withdrawal of any control rod in excess of 3 feet from its fully inserted position within the reactor vessel.

4.9.1.2 The boron concentration of the Reactor Coolant System and the refueling canal shall be determined by chemical analysis, at least once per 72 hours.

to be within the limits of specification 3.9.1.a

4.9.1.3 At least once per 31 days, verify that the valves listed in Table 3.9-1 are secured in their positions required by Table 3.9-1.

b. With the requirements of specification 3.9.1.b not satisfied, immediately suspend all operations involving CORE ALTERATIONS or positive reactivity changes, and initiate action to return the valve(s) to the position required by Table 3.9-1.