

NPF-73  
REACTIVITY CONTROL SYSTEMS

Refueling Water Storage Tank (RWST)

LIMITING CONDITION FOR OPERATION

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3.1.2.8 The RWST shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 & 4.

ACTION:

With the refueling water storage tank inoperable, restore the tank to OPERABLE status within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

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4.1.2.8 The RWST shall be verified OPERABLE:

- a. At least once per 7 days by:
  1. Verifying the boron concentration is between 2400 and 2600 ppm, and
  2. Verifying a minimum usable volume of 859,248 gallons.
- b. At least once per 24 hours by verifying the RWST solution temperature is  $\geq 45^{\circ}\text{F}$  and  $\leq 50^{\circ}\text{F}$  when the RWST ambient air temperature is  $> 50^{\circ}\text{F}$  or  $< 45^{\circ}\text{F}$ .

ACCUMULATORS

LIMITING CONDITION FOR OPERATION

3.5.1 Each Reactor Coolant System accumulator shall be OPERABLE with:

- a. The isolation valve open,
- b. Between 7532 and 7802 gallons of borated water,
- c. Between 2300 and 2600 ppm of boron, and
- d. A nitrogen cover-pressure of between 585 and 665 psig.

APPLICABILITY: MODES 1, 2 and 3.\*

ACTION:

- a. With one accumulator inoperable, except as a result of a closed isolation valve, restore the inoperable accumulator to OPERABLE status within one hour or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With one accumulator inoperable due to the isolation valve being closed, either immediately open the isolation valve or be in HOT STANDBY within one hour and be in HOT SHUTDOWN within the next 12 hours.

SURVEILLANCE REQUIREMENTS

4.5.1 Each accumulator shall be demonstrated OPERABLE:

- a. At least once per 12 hours by:
  1. Verifying, by the absence of alarms, the contained borated water volume and nitrogen cover-pressure in the tanks, and
  2. Verifying that each accumulator isolation valve is open.
- b. At least once per 31 days and within 6 hours after each solution volume increase of greater than or equal to 1% of tank volume by verifying the boron concentration of the accumulator solution.

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\*Pressurizer Pressure above 1000 psig.

3/4.9 REFUELING OPERATIONSBORON CONCENTRATIONLIMITING CONDITION FOR OPERATION

3.9.1 With the reactor vessel head unbolted or removed, 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:

- a. Either a  $K_{eff}$  of 0.95 or less, which includes a 1%  $\Delta k/k$  conservative allowance for uncertainties, or
- b. A boron concentration of greater than or equal to 2400 ppm, which includes a 50 ppm conservative allowance for uncertainties.

APPLICABILITY: MODE 6<sup>(1)</sup>.

ACTION:

With the requirements of the above specification not satisfied, immediately suspend all operations involving CORE ALTERATIONS or positive reactivity changes and initiate and continue boration at  $\geq 30$  gpm of greater than or equal to 7000 ppm boric acid solution or its equivalent until  $K_{eff}$  is reduced to  $\leq 0.95$  or the boron concentration is restored to  $\geq 2400$  ppm, whichever is the more restrictive. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

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

- a. Removing or unbolting the reactor vessel head, and
- b. Withdrawal of any full length control rod in excess of 3 feet from its fully inserted position.

4.9.1.2 The boron concentration of the Reactor Coolant System and the refueling canal shall be determined by chemical analysis at least 3 times per 7 days with a maximum time interval between samples of 72 hours.

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(1) The reactor shall be maintained in MODE 6 when the reactor vessel head is unbolted or removed.