

SPECIAL TEST EXCEPTIONS

3/4.10.9 NATURAL CIRCULATION TESTING PROGRAM

LIMITING CONDITION FOR OPERATION

- 3.10.9 The limitations of Specifications 3.4.1.2, 3.4.1.3, and 3.7.1.6 may be suspended during the performance of the Startup Natural Circulation Testing Program * provided:
- Operations involving a reduction in boron concentration of the Reactor Coolant System are suspended.
 - Core outlet temperature is maintained at least 10° F below Saturation temperature.
 - A reactor coolant pump shall not be started with one or more of Reactor Coolant System cold leg temperatures less than or equal to 255° F during cooldown, or 295° F during heatup, unless the secondary water temperature (saturation temperature corresponding to steam generator pressure) of each steam generator is less than 100° F above each of the Reactor Coolant System cold leg temperatures.

APPLICABILITY:

MODES 3 and 4 during Natural Circulation Testing.

ACTION:

With the Reactor Coolant System saturation margin less than 10° F, place at least one reactor coolant loop in operation, with at least one reactor coolant pump.

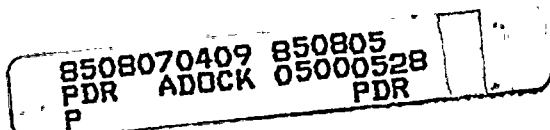
SURVEILLANCE REQUIREMENTS

- 4.10.9.1 The saturation margin shall be determined to be within the above limits by continuous monitoring with the saturation margin monitors required by Table 3.3-10 or, by calculating the saturation margin at least once per 30 minutes.

*Startup Natural Circulation Testing Program:

Natural Circulation Cooldown Test at 80% power

PALO VERDE - Unit 1



REACTOR COOLANT SYSTEM

HOT STANDBY

LIMITING CONDITION FOR OPERATION

3.4.1.2 The reactor coolant loops listed below shall be OPERABLE and at least one of these reactor coolant loops shall be in operation.*

- a. Reactor Coolant Loop 1 and its associated steam generator and at least one associated reactor coolant pump.
- b. Reactor Coolant Loop 2 and its associated steam generator and at least one associated reactor coolant pump.

APPLICABILITY: MODE 3. #

ACTION:

- a. With less than the above required reactor coolant loops OPERABLE, restore the required loops to OPERABLE status within 72 hours or be in HOT SHUTDOWN within the next 12 hours.
- b. With no reactor coolant loop in operation, suspend all operations involving a reduction in boron concentration of the Reactor Coolant System and immediately initiate corrective action to return the required reactor coolant loop to operation.

SURVEILLANCE REQUIREMENTS

4.4.1.2.1 At least the above required reactor coolant pumps, if not in operation, shall be determined to be OPERABLE once per 7 days by verifying correct breaker alignments and indicated power availability.

4.4.1.2.2 At least one reactor coolant loop shall be verified to be in operation and circulating reactor coolant at least once per 12 hours.

4.4.1.2.3 The required steam generator(s) shall be determined OPERABLE verifying the secondary side water level to be $\geq 25\%$ indicated wide range level at least once per 12 hours.

*All reactor coolant pumps may be deenergized for up to 1 hour provided (1) no operations are permitted that would cause dilution of the Reactor Coolant System boron concentration, and (2) core outlet temperature is maintained at least 10°F below saturation temperature.

See Special Test Exception 3.10.9

REACTOR COOLANT SYSTEM

HOT SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.4.1.3 At least two of the loop(s)/train(s) listed below shall be OPERABLE and at least one reactor coolant and/or shutdown cooling loops shall be in operation.*

- a. Reactor Coolant Loop 1 and its associated steam generator and at least one associated reactor coolant pump,**
- b. Reactor Coolant Loop 2 and its associated steam generator and at least one associated reactor coolant pump,**
- c. Shutdown Cooling Train A,
- d. Shutdown Cooling Train B.

APPLICABILITY: MODE 4. #

ACTION:

- a. With less than the above required reactor coolant and/or shutdown cooling loops OPERABLE, immediately initiate corrective action to return the required loops to OPERABLE status as soon as possible; if the remaining OPERABLE loop is a shutdown cooling loop, be in COLD SHUTDOWN within 24 hours.
- b. With no reactor coolant or shutdown cooling loop in operation, suspend all operations involving a reduction in boron concentration of the Reactor Coolant System and immediately initiate corrective action to return the required coolant loop to operation.

*All reactor coolant pumps and shutdown cooling pumps may be deenergized for up to 1 hour provided (1) no operations are permitted that would cause dilution of the Reactor Coolant System boron concentration, and (2) core outlet temperature is maintained at least 10°F below saturation temperature.

**A reactor coolant pump shall not be started with one or more of the Reactor Coolant System cold leg temperatures less than or equal to 255°F during cooldown, or 295°F during heatup, unless the secondary water temperature (saturation temperature corresponding to steam generator pressure) of each steam generator is less than 100°F above each of the Reactor Coolant System cold leg temperatures.

See Special Test Exception 3.10.9

PLANT SYSTEMS

ATMOSPHERE DUMP VALVES

LIMITING CONDITION FOR OPERATION

3.7.1.6 The atmospheric dump valves shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.* #

ACTION:

With less than one atmospheric dump valve per steam generator OPERABLE, restore the required atmospheric dump valve to OPERABLE status within 72 hours; or be in at least HOT STANDBY within the next 6 hours.

SURVEILLANCE REQUIREMENTS

4.7.1.6 Each atmospheric dump valve shall be demonstrated OPERABLE:

- a. At least once per 24 hours by verifying that the nitrogen accumulator tank is at a pressure \geq 400 PSIG.
- b. Prior to startup following any refueling shutdown or cold shutdown of 30 days or longer, verify that all valves will open and close fully.

*When steam generators are being used for decay heat removal.

See Special Test Exception 3.10.9

