

3.1 REACTOR COOLANT SYSTEM

Applicability

Applies to the operating status of the reactor coolant system when irradiated fuel is in the containment.

Objective

To specify those limiting conditions for operation of the reactor coolant system which must be met to assure safe reactor operation.

SpecificationA. Operational Components1. Reactor Coolant Loops and Coolant Circulationa. Reactor Critical

- (1) A reactor shall not be made or maintained critical unless both reactor coolant loops (with their associated steam generator and reactor coolant pump) are in operation, except 1) during low power PHYSICS TESTS or 2) as specified in 3.1.A.1.a.(2) below.
- (2) With less than the above required reactor coolant loops in operation, be in at least HOT SHUTDOWN within 6 hours.

b. Reactor Coolant System Average Temperature Above 350°F.

- (1) Reactor coolant system average temperature shall not exceed 350°F unless both reactor coolant loops (with their associated steam generator and reactor coolant pump) are OPERABLE with at least one reactor coolant loop in operation (except as specified in 3.1.A.1.b(2) and 3.1.A.1.b(3) below).
- (2) A reactor coolant loop may be inoperable for 72 hours provided STARTUP OPERATION is discontinued until OPERABILITY is restored. If OPERABILITY is not restored within the time specified, reduce reactor coolant system average temperature below 350°F within the next 6 hours.
- (3) With both reactor coolant pumps inoperable or not in operation immediately:
 - (a) De-energize all control rod drive mechanisms,
 - (b) Suspend all operations involving a reduction of RCS boron concentration,
 - (c) Establish and maintain core outlet temperature at least 10°F below saturation temperature, and
 - (d) Initiate action to restore one reactor coolant pump to OPERABLE status and operation.*

If at least one reactor coolant pump is not restored to OPERABILITY and operation within 72 hours, reduce reactor coolant system average temperature to below 350°F within the next 12 hours. While applicable, this specification supercedes 3.1.A.1.b(2).

* If the RCP shutdown or inoperability was due to preplanned work activities, such as testing, switching, or maintenance, immediate restoration action is not required, but if at least one reactor coolant pump is not restored to OPERABILITY and operation within 12 hours, reduce reactor coolant system average temperature to below 350°F within the next 12 hours.

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