

NRC INSPECTION MANUAL

INSPECTION PROCEDURE 72512

STARTUP TEST PROCEDURE REVIEW: RCIC OR RECIRCULATION PUMP TRIP

PROGRAM APPLICABILITY:

72512-01 INSPECTION OBJECTIVE

Ascertain whether one of the identified tests is consistent with regulatory requirements, guidance, license commitments, and technical specifications.

72512-02 INSPECTION REQUIREMENTS

BWR Power Ascension Testing Procedure Review (RCIC or RECIRC Pump Trip)

02.01 Reactor Core Isolation Cooling System (Group A). If Group A procedures are selected for review, the inspector shall:

- a. Review the FSAR, DL Safety Evaluation Report, and docketed letters from the licensee and verify that the testing commitments have been included.
- b. Verify standard procedures review requirements are met as defined in Procedure 72300.
- c. Verify that the procedure contains acceptance criteria for the following:
 1. Startup from hot standby conditions and discharge of rated flow into the reactor vessel at rated pressure and temperature within a specified time
 2. Verification of maximum rated flow isolation trip
 3. Verification of overspeed trip
 4. Turbine gland seal condenser system shall prevent steam leak to atmosphere
- e. Verify that initial conditions include:

1. Steady-state reactor operations at rated temperature and pressure
2. RCIC at standby operation
3. Reactor Power at approximately 25% of design.

02.02 Recirculation - Single Pump Trip, and Two Pump Trip (Group B). If Group B Procedures are selected for review, the inspector shall:

- a. Review the FSAR, DL Safety Evaluation Report, and docketed letters from the licensee and verify that the testing commitments have been included.
- b. Verify standard procedures review requirements are met as defined in Procedure 72300.
- c. Verify that the procedure contains prerequisites and acceptance criteria for each of the following:
 1. Instrumentation is adjusted to provide an accurate conversion of individual jet pump Δp values to a summed core flow over the range of two pump operations
 2. Recirculation pump instrumentation is calibrated
 3. Loop flow from single tap and from double tap pumps agree within 3%
 4. Core flow from single tap and double tap pumps agree within 2%
 5. Individual jet pump flow variation from average pump flow is limited.
- d. Verify that the procedure provides for test performance at specific test plateaus identified in the FSAR.
- e. Verify that test conditions include:
 1. Trip from steady-state power operation
 2. Recording of transients following trip and during pump restart
 3. Recording of limiting heat transfer parameters
 4. Return to two pump operation in accord with facility operating procedures
 5. Trip of a single pump, and of both pumps simultaneously.

72512-03 INSPECTION GUIDANCE

No specific guidance furnished at this time.

END