

NRC INSPECTION MANUAL

INSPECTION PROCEDURE 72566

PRECITICAL TEST PROCEDURE REVIEW (RCS LEAK TEST OR PRESSURIZER EFFECTIVENESS)

PROGRAM APPLICABILITY:

72566-01 INSPECTION OBJECTIVE

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

72566-02 INSPECTION REQUIREMENTS

02.01 Pressurizer Effectiveness (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 procedure review requirements are met as described in Procedure 72300.
- c. Verify that the procedure contains acceptance criteria as follows:
 - (1) Pressurizer level control system setpoints are properly set.
 - (2) Pressurizer spray control is properly set and controls as designed.
- d. Precautions should include:
 - (1) Reactor coolant pressure maintained within limitations of the reactor coolant pressure-temperature curve.
 - (2) Maximum heatup rate for the pressurizer vessel maintained within limits.
 - (3) Maximum cooldown rate for the pressurizer vessel maintained within limits.

- (4) The auxiliary spray valve is not used unless the reactor system temperature is below a specified value.
- (5) Constant flow is maintained through each pressurizer spray line to prevent cooling below specified operating temperature.

- e. Initial conditions should include:
 - (1) Reactor in hot standby or hot shutdown modes.
 - (2) Coolant circulation system status is at > 75% flow.
 - (3) All instrumentation checkouts previously completed.
 - (4) All pressurizer heater and level controls in operation.
- f. Test conditions should include:
 - (1) Establishment of bubble and tests of automatic controls for level and pressure.
 - (2) Verification of acceptance criteria by testing.

02.02 Reactor Coolant System Leak Test (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 procedure review requirements are met as defined in Procedure 72300.
- c. Verify that the procedure contains acceptance criteria as follows:
 - (1) Primary leakage limits within specification.
 - (2) Normal losses within limits.
- d. Assure that precautions include
 - (1) Water chemistry control in accordance with operating requirements.
 - (2) Reactor coolant system maintained in steady state operation with no testing or maintenance on the circulation system, venting or draining of the RCS will not be performed and no changes will be made on the purification demineralizers during the conduct of the test.
- e. Verify that initial conditions include:
 - (1) Core loaded
 - (2) Makeup tank has sufficient level for 8 hour operation.
 - (3) Steady state temperature and pressure.
 - (4) Pressurizer filled or at normal level with the control system in equilibrium operation.
 - (5) Normal reactor coolant reactor letdown established.

f. Assure that test conditions include:

- (1) Plant in hot standby or hot shutdown mode.
- (2) Reactor coolant pump seal flow measured.
- (3) Listing of all points to be examined for leakage.

72566-03 INSPECTION GUIDANCE

General guidance is provided in R.G. 1.68, Revision 2, Appendices A, B and C.

END