

NRC INSPECTION MANUAL

INSPECTION PROCEDURE 72580

POWER ASCENSION TEST PROCEDURE REVIEW (TURBINE TRIP OR GENERATOR TRIP)

PROGRAM APPLICABILITY:

72580-01 INSPECTION OBJECTIVE

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

72580-02 INSPECTION REQUIREMENTS

02.01 Generator Trip (100%) 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 described in Procedure 72300.
- c. Verify that the procedure contains acceptance criteria for the following:
 - (1) Turbine overspeed.
 - (2) Turbine bypass system operates to maintain pressure within established limits.
 - (3) Pressurizer operating level.
 - (4) Opening and closing pressures for the steam system power actuated pressure relief valves.
 - (5) Pressurizer safety valves (do not lift).
 - (6) Pressurizer spray valves (open and close at specified values).

- (7) Reactor coolant temperatures/pressure (relationship remains within prescribed values).
- (8) Steam generator level transient.
- (9) Plant electrical loads (transferred as designed)

- d. Verify that precautions provide crew assignments to perform necessary manual functions to maintain safe plant limits including stationing personnel at major pipe locations to observe and report unacceptable vibrations during transients.
- e. Confirm that initial conditions require steady state operation at greater than 95% power.
- f. Verify that test conditions include:
 - (1) Data records during the transient and until steady state conditions are achieved.
 - (2) Initiation of the test by trip of the main generator output breaker.
 - (3) Examination of the data for any unusual equipment performance.
 - (4) Verification that the plant electrical loads are operating in the final expected condition.
 - (5) Restoration of the plant to normal operation using normal facility operating procedures.

02.02 Turbine Trip (100%) 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 described in Procedure 72300.
- c. Verify that the procedure contains acceptance criteria as follows:
 - (1) Reactor coolant pumps do not trip.
 - (2) Pressurizer spray valve opens and closes at the specified values.
 - (3) Pressurizer safety valves do not lift.
 - (4) Steam system power actuated pressure relief valve opens and closes at specified values.
 - (5) Reactor coolant pressure/temperature relationship remains within defined values.
 - (6) Pressurizer level to maintained within prescribed limits.
 - (7) Steam generator level remains within prescribed limits.

- (8) Turbine bypass system operates to maintain specific pressure.
- d. Verify that precautions provide for crew assignments to perform necessary manual functions to maintain safe plant conditions including stationing personnel at major pipe locations to observe and report unacceptable vibration during transients.
- e. Verify that test conditions include:
 - (1) Trip from steady state operation at greater than 95% power.
 - (2) Recording of data during transient operation and until steady state conditions are achieved.
 - (3) Examination of data for unusual equipment performance.
 - (4) Assurance that the initially operating power loads have been transferred to the expected final load condition.
 - (5) Restoration of the plant to normal operating conditions using facility operating procedures.
- f. Verify that test conditions include:
 - (1) Data records during the transient and until steady state conditions are achieved.
 - (2) Initiation of the test by trip of the main generator output breaker.
 - (3) Examination of the data for any unusual equipment performance.
 - (4) Verification that the plant electrical loads are operating in the final expected condition.
 - (5) Restoration of the plant to normal operation using normal facility operating procedures.

72580-03 INSPECTION GUIDANCE

Testing requirements for these tests should be compared with applicable provisions of Regulatory Guide 1.68, and with the test program description in the FSAR.

END