

NRC INSPECTION MANUAL

DQASIP

INSPECTION PROCEDURE 72300

STARTUP TEST PROCEDURE REVIEW

PROGRAM APPLICABILITY: 2514

72300-01 INSPECTION OBJECTIVE

Ascertain whether uniform criteria are being applied for evaluating startup test procedures to determine their technical and administrative adequacy.

72300-02 INSPECTION REQUIREMENTS

Each procedure will be reviewed for the following:

- 02.01 Management approval is indicated.
- 02.02 Appropriate committee review is indicated.
- 02.03 Procedure format is consistent with ANSI N18.7 and Regulatory Guide 1.68.
- 02.04 Test objectives are clearly stated; verify that all FSAR commitments are included.
- 02.05 Pertinent prerequisites are identified, e.g.:
 - a. Required plant systems are specified.
 - b. Proper facility procedures are specified.
 - c. Completion of calibration checks, limit switch setting protective device setting, included where applicable.
 - d. Special supplies and test equipment are specified.
- 02.06 Special environmental conditions, if any, are identified.
- 02.07 Acceptance criteria against which the test will be judged are clearly identified and the procedure requires comparison of results with acceptance criteria.

02.08 The source of the acceptance criteria is identified, e.g.,
FSAR, technical specifications, regulatory guides, etc.

- 02.09 Initial test conditions are specified.
- a. Valve lineups.
 - b. Electrical power and control requirements.
 - c. Temporary installations (instrumentation, electrical, and piping).
 - d. Temperatures, pressures, flows.
 - e. Water chemistry.
 - f. Other.
- 02.10 The procedure includes a section listing references to appropriate FSAR sections, technical specifications, drawings, specification, codes, and other requirements.
- 02.11 Step-by-step instructions for the performance of the procedure are complete to the extent necessary to ensure that test objectives are met.
- 02.12 Spaces are provided for initialing that all items, including prerequisites, are verified as having been performed.
- 02.13 Provision is made for recording details of the conduct of the test, including observed deficiencies, their resolution, and retest.
- 02.14 Procedure requires that temporary connections, disconnections or jumpers be restored to normal, or references their control by another procedure.
- 02.15 Procedure provides for identification of personnel conducting the testing and evaluating the test data.
- 02.16 Procedure provides for quality control verification of critical steps or parameters.
- 02.17 The procedure as issued is consistent with the test description provided in the FSAR.
- 02.18 Special precautions for personnel and equipment safety are specified.
- 02.19 Detailed instructions specify testing over the full operating range and under the maximum anticipated load change of the system/component.
- 02.20 Provision is made for the data taker to indicate the acceptability of the data.
- 02.21 Performance of automatic controls, including response to step and ramp changes, is specified.

This procedure provides a standard review practice to be applied to startup test program procedures. This procedure is incorporated by reference in specific inspection procedures in the 72000 series.

03.01 All procedures should include licensee operations management review, regardless of who prepares the procedure.

03.02 The FSAR and technical specifications will identify those tests which require special committee review, and will define the committee composition.

03.03 Appendix C to Regulatory Guide 1.68 provides guidance as to procedure format.

03.08 Source of acceptance criteria is only necessary for critical variables.

03.11 Use of plant operating procedures by reference is permissible provided the operating procedures have been approved for use as described in the FSAR or as required by the technical specifications.

03.12 Signoffs of individual procedure steps should include the date, and time if significant. Initials and checkmarks or stamps may be used if they are traceable to an individual.

03.17 Deviations of tests from the test described in the FSAR, or addition or deletion of tests from those described in the FSAR, require special review, evaluation, and approval pursuant to 10 CFR 50.59.

03.18 Guidance is provided in RG 1.68, Rev. 2, Appendix A, Paragraph 2.

03.19 Guidance is provided in RG 1.68, Rev. 2, Appendix B, Paragraph 5.

03.20 Guidance is provided in RG 1.68, Rev. 2, Section C.9.

03.21 Guidance is provided in RG 1.68, Rev. 2, Appendix A, Paragraph 5.

END

¹ The last digit or digits following the 03 tells the user of this procedure specifically which inspection requirement it applies to. That is, 03.17 is specific to 02.17, etc.