

# NRC INSPECTION MANUAL

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## INSPECTION PROCEDURE 37301

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### COMPARISON OF AS-BUILT PLANT TO FSAR DESCRIPTION

PROGRAM APPLICABILITY: 2513

#### 37301-01 INSPECTION OBJECTIVE

01.01 The objective of this procedure is to determine on a sampling basis that the as-built plant conforms to commitments contained in the FSAR as follows:

- a. Mechanical and fluid systems will be inspected by direct observation walk-down to determine that the physical installation is in agreement with P&ID's contained in the current FSAR system description.
- b. Walk-down inspection is to include a check of the draft technical specification surveillance test procedures to ensure that they can be accomplished with the as-built plant.
- c. Control and logic instrumentation of a portion of the selected systems will be reviewed to determine that they conform to the description of instrumentation and controls contained in the FSAR.

#### 37301-02 DEFINITIONS

02.01 Selected Systems. For the purpose of satisfying the inspection requirements of 03.01, the sampling base is defined as 50% of those systems covered by technical specifications. In the absence of a safety analysis, when available, use appropriate references such as plant specific Probabilistic Risk Analysis (PRA) to make judgments to establish the relative importance of systems including features not covered by the technical specifications. Additionally, the results of inspections conducted in accordance with 37051 should be reviewed in order to avoid duplication of systems selected.

#### 37301-03 INSPECTION REQUIREMENTS

##### 03.01 Safety System Selection

- a. For the selected systems, the inspector shall verify that the latest copy of the system field drawing(s) is in agreement with FSAR P&IDs and descriptions. For those systems where the field drawing(s) and FSAR are not in agreement identify the discrepancies between the FSAR and the system field drawings and:

1. Determine whether the design change was reviewed, processed, and implemented according to procedural controls (IE MC 70302, 02.04a).
  2. Determine whether cognizant test engineer is aware of the discrepancies and that appropriate changes have been or will be made to test procedures (70302, 02.04b and 02.04c).
  3. Determine whether any appropriate proposed changes to update the FSAR and technical specifications has been submitted or is being processed for submittal to NRR by the licensee.
  4. Determine by field observation whether component installation, including control and logic instrumentation, is as described in drawings, technical specifications and the FSAR.
- b. The inspector shall complete the following for 25% of the selected systems in 03.01a. and for 25% of the remaining systems identified in procedure 70315.
1. Determine by a system walk-down whether the as-built plant drawings are in agreement with the latest draft technical specification and the technical specification surveillances can be accomplished with the instrumentation as installed.
  2. For those systems or components whose installation is different from that described in the technical specification and/or the as-built drawing, perform verification requirements of paragraph 03.01a. above.

#### 37301-04 INSPECTION GUIDANCE

General Guidance. The inspector should become familiar with the selected systems by reviewing material contained in the FSAR including the general system description, P&IDs and the section on instrumentation and controls.

Highlight in the inspector's report all discrepancies found among the as-built plant, field drawings, technical specifications, and FSAR during the conduct of the above inspection procedures.

##### 04.01 Specific Guidance

- a. Inspection Requirement 03.01a. 10 CFR 50.55(d) requires in part, that "at or about the time of completion of the construction or modification of the facility, the applicant will file any additional information needed to bring the original application for license up to date..."

10 CFR 50.57(a)(1) states that a prerequisite for issuance of an operating license is a finding that "construction of the facility has been substantially completed, in conformity with the construction permit and the application FSAR as amended..."

- b. Inspection Requirement 03.01a.3. The intent is to determine by a walk down of the system (going hand-over-hand through the system) that the installed system is in agreement with the drawings, the proposed technical specifications, and the FSAR. This effort, where possible, should be conducted on a system after it is 90% completed. The effort should be completed at least 1 month before the OL is scheduled to be issued.

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