

14.0 Verification Programs

Verification programs include the initial test program for structures, systems, components (SSC), and design features for both the nuclear portion of the facility and the balance of the plant. The initial test program addresses major phases of testing including preoperational tests, initial fuel loading, initial criticality, low-power tests, and power-ascension tests. This program verifies that the as-built facility configuration and operation complies with the approved plant design and applicable regulations. The initial test program is described in Section 14.1 and Section 14.2.

Verification programs also include inspections, tests, analyses, and acceptance criteria (ITAAC). The process and criteria for developing ITAAC are described in Section 14.3.

14.1 Specific Information to be addressed for the Initial Plant Test Program

The initial test program, as outlined in Section 14.2, addresses the major testing phases and satisfies the relevant requirements of these regulations:

- 10 CFR 30.53 as it relates to testing radiation detection equipment and monitoring instruments.
- 10 CFR 50.34(b)(6)(iii) as it relates to information associated with preoperational testing and initial operations.
- 10 CFR 50, Appendix B, Section XI as it relates to test programs demonstrating that SSC will perform satisfactorily.
- 10 CFR 50, Appendix J, Section III.A.4 as it relates to the preoperational leakage rate testing of the reactor primary containment.
- 10 CFR 52.79 as it relates to preoperational testing and initial operations.

The following areas associated with the initial plant test program are addressed in Section 14.2:

- Summary of test program and objectives.
- Organization and staffing.
- Test procedures.
- Conduct of the test program.
- Review, evaluation, and approval of test results.
- Test records.
- Test program conformance with Regulatory Guides.

- Utilization of reactor operating and testing experience in the development of the test program.
- Trial use of plant operating and emergency procedures.
- Initial fuel loading and initial criticality.
- Test program schedule and sequence.
- Individual test descriptions.