

QUALITY ASSURANCE MANUAL



Franklin Research Center

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QUALITY ASSURANCE MANUAL

SECTION 14. TEST CONTROL

Section 14

Page 1 of 2

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Approved

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A. Purpose

1. To ensure that a controlled testing service program is conducted for demonstrating the proper performance and/or safety of equipment and materials. A documented test program shall be implemented to assure that the contractual requirements of the sponsor are satisfied.

B. Scope

1. Performance qualification tests encompass all of the physical evaluations of the performance of materials, equipment, and devices used in industrial plants, transportation systems, commercial establishments, and homes. The tests include, but are not limited to, performance measurements; accelerated thermal, operational and radiation aging (simulation of the degradation that occurs during normal installed life); seismic and other vibrations; fire and overheating exposures; and simulation of design-basis accident conditions, such as those in nuclear power plants. This section is applicable to those projects which contractually require the implementation of Criterion XI of 10CFR50, Appendix B, and its equivalent ANSI section.

C. Definitions

1. Performance Qualification Testing - The independent physical evaluation of the performance of materials and mechanical, electrical, and other equipment when subjected to both normal and abnormal conditions.
2. In-Date calibration is the same as Active Status referred to in QASD No. 15-1, titled "Periodic Calibration System". This status is assigned to any measuring and testing device which has been calibrated and has a recorded calibration due date that is beyond the current date.

D. Responsibility

1. The Project Manager is responsible for documenting the test program and assuring that the contractual requirements (applicable design documents, standards, codes, mandatory hold points for witness, if required) are satisfactorily implemented.

QA. 14. Test Control

2. The Project Manager is responsible for assuring that the necessary Test Procedures are prepared and approved before testing begins. This shall include all prerequisites for the test including availability of adequate test equipment and calibrated test instrumentation.
3. The Manager of Quality Assurance or his designated alternate is responsible for approving test program documentation which addresses quality-related activities; reviewing Test Procedures for the inclusion of QA contractual requirements; and auditing to assure compliance with the various requirements of this section.

E. Action

1. The Project Manager or his designee shall prepare the test plan and procedures which will assure that the contractual requirements (applicable design documents, standards, codes, etc.) are satisfactorily implemented. He shall sign all approved test plans, procedures, and shall review all purchase requisitions to ensure that applicable codes and specifications are referenced. Typically, quality-related activities will be documented by a QAP and will be approved by the Manager of Quality Assurance.
2. The Project Manager or his designee shall prepare a list of all calibrated instruments to be used in the test program and check the in-calibration (active status) of each instrument before testing begins.
3. The Project Manager shall review all test results and conclusions to certify their correctness and to assure that the test plan has been satisfied. He shall sign all paperwork which contains project reportable data.
4. The Project Manager shall include provision for assuring that all test prerequisites are satisfied, and that tests are performed under suitable environmental conditions as dictated by contractual requirements and good engineering practice.
5. The Manager of Quality Assurance, or his designee, shall monitor the testing program at periodic intervals to ensure the identification and control of test specimens; the use of approved Test Procedures, qualified test personnel, adequate environmental conditions, and calibrated instrumentation.