

Vibration Test
Preoperational Test Procedure Review
Procedure No.: 70331B
Issue Date: 1/1/79

SECTION I
INSPECTION OBJECTIVES

1. Ensure that the test procedure is technically adequate.
2. Ensure that the described test is consistent with regulatory requirements, guidance, and licensee commitments.

SECTION II
INSPECTION REQUIREMENTS

The inspector shall:

1. Obtain and review an approved copy of the test procedure(s) prior to the date scheduled for the test.
2. Review the FSAR, docketed licensee letters, SER, Technical Specifications, Regulatory Guides 1.20 and 1.68. Verify that the procedure adequately addresses NRC requirements and licensee commitments relating to vibration testing.
3. Review the Vibration Test procedure(s) per inspection procedure MC 70300B.

SECTION III

INSPECTION GUIDANCE

1. This review should insure that the vibration testing procedure adequately reflects NRC requirements and licensee commitments including evaluation of the data acquisition and reduction system. Examples of items which should be adequately examined in the review include (but are not limited to):
 - a. transducer type applicability,
 - b. transducer position on components, installed in a manner that will indicate the most probable mode of vibration as indicated by analysis,
 - c. precautions to ensure data quality,
 - d. review of components monitored (rotating and stationary), components important to safety identified,
 - e. method of data analysis,
 - f. test conditions (steady-state and/or transient modes of operation) and duration of test(s),
 - g. tabulation of specific areas which can be used to verify segments of the vibration analysis and measurement program, and become part of the permanent system documentation package,
 - h. temporary vibration restraints, if any, installed at anticipated high or excessive vibration points, or restraints installed subsequent to the start of vibration testing,
 - i. test program will be performed after the fuel is loaded, separator-dryer assembly installed if a BWR facility,
 - j. horizontal equipment vibration readings should be taken on or as near as possible to each bearing housing and always on a solid surface, including positions that are perpendicular (or radial) to the rotating shaft and axial readings that are parallel to the rotating shaft,

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- k. vertical equipment vibration readings should be taken on or as near as possible to the top motor bearing and always on a solid surface, including positions that are perpendicular (or radial) to the rotating shaft and axial readings that are parallel to the rotating shaft.