



UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
Washington, D.C. 20555

INSPECTION AND ENFORCEMENT MANUAL

DQASIP

TEMPORARY INSTRUCTION 2512/07 REVISION 2

REGIONAL CONSTRUCTION ASSESSMENT TEAM INSPECTIONS

2512/07-01 PURPOSE

This temporary instruction (TI) provides for performing Regional construction assessment team inspections at nuclear power plants under construction.

2512/07-02 OBJECTIVE

Regional construction assessment team inspections evaluate the applicant's performance using an integrated inspection approach with a multidisciplinary team.

2512/07-03 RESPONSIBILITIES AND AUTHORITIES

The Regional Office is responsible for implementation of regional construction assessment team inspections, on a case-by-case basis, in accordance with the guidance of this TI. Regional Office management may elect not to use this procedure, use it in its entirety, or use only portions of this procedure, depending on the situation at the facility to be inspected.

2512/07-04 BACKGROUND

Team inspections were tried early in 1981 at eight nuclear power plants under construction. The results of those trial team inspections showed that team inspections were effective but resource intensive. Because resources are limited in the Regional Offices, team inspections are not required by the Reactor Construction Inspection Program (IE MC 2512). This TI is being issued to provide guidance to those Regional Offices that want to perform Regional construction assessment team inspections. The appendices of this TI are the same as those developed and used in the trial construction assessment team inspections (TI 2512/07 issued in 1981).

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Issue Date: 01/27/84

2512/07-05 INSPECTION CONCEPT

- 05.01 The concept of Regional construction assessment team inspections at nuclear plants under construction is based on concurrent inspections of parallel ongoing functional areas by a multi-disciplinary inspection team. The functional areas that should be considered in the determination of the applicant's program effectiveness are quality assurance, design change controls, project management, construction controls, and procurement controls. Each functional area should be inspected for effectiveness, or, as an alternative, a determination may be made from the inspection history that specific program areas are acceptable.

This TI provides guidance for Regional construction assessment team inspection of the licensee/contractor program and activities performed at the site.

- 05.02 The determination of effectiveness of each functional area is made by the following process.
- a. Define the program applicable to the functional area as delineated in the appendices to this TI. Much of this effort is done during the planning and preparation phase.
 - b. Compare the applicant's program with the criteria for an effective program. The criteria to be utilized are regulatory requirements, licensee commitments, and/or recognized practices such as Regulatory Guides, NRC staff positions, consensus standards, and NRC interpretations. If the applicant is not committed to the recognized practices and the applicant's program is inferior to the recognized practice, this is identified as an observation of applicant program weakness.
 - c. Verify that the program is implemented. This verification is performed during the site inspection by observation of work, interviews with site personnel, and documentation review.
 - d. Evaluate management involvement by interviews with management personnel and review of documentation.

The appendices to this TI provide specific guidance that should be considered in determining program effectiveness in each functional area.

2512/07-06 PROGRAM GUIDANCE

- 06/01 Program Scope and Timetable. The frequency and scope of the Regional implementation of the Regional construction assessment team program will be determined by Regional management.

06.02 Site Selection. Some factors to consider in site selection are:

- a. Inspector/supervisor impressions - subjective input should be solicited.
- b. Contractual arrangement - licensee does his own A/E, construction, use of separate A/E, and constructor use of multiple contractors.
- c. Licensee involvement.
- d. Inspection history - number of noncompliances (as a function of inspection hours).
- e. Construction status - preferably has multidiscipline work in progress.
- f. Availability of specialist team members.
- g. Results of systematic assessment of licensee performance (SALP) reviews.

06.03 Team Indoctrination/Orientation.

Inspectors assigned to inspection teams should attend an orientation session to familiarize themselves with the specific inspection concept used in the Region construction assessment team inspection program. At a minimum, the orientation shall provide an overview of the program and include:

- a. Objectives
- b. Concept of effectiveness
- c. Planning
- d. Inspection conduct
- e. Reporting

The orientation shall be conducted by the Team Leader using this TI as the primary instrument for training.

Orientation should emphasize the difference between this team inspection concept and past inspection practices and focus on applicant program effectiveness. Primary differences, or departures from existing IE programs such as observations of licensee program strengths and weaknesses, integration of findings and interfacing with licensee management should be discussed. In addition, team member assignments, inspection schedules, and special interviewing techniques should be

discussed. The need for a truly "dedicated team effort" to enhance the achievement of the regional construction assessment team inspection objectives should be emphasized.

06.04 Inspection Planning and Preparation

a. A key element for a successful team inspection is detailed planning and preparation. The objectives of planning and preparation are:

1. To identify those elements of the team concept that are applicable to the specific inspection.
2. to indoctrinate team members to the team concept.
3. To make specific functional assignments to each team member.
4. To define inspection schedules.

Before the start of the onsite inspection, the Team Leader should conduct an indoctrination for the team members of the concept and discuss the broad schedule, inspection ground rules, and areas of assignment. As the team refines the elements of the inspection by definition of priorities, inspector capabilities, and site status, detailed inspection assignments are made and parallel activities are identified.

b. Each inspector should develop a detailed inspection plan to ensure full coverage of the assigned areas of the appendices of this TI. The appendices requirements shall be supplemented as required by using applicable inspection procedures for the existing IE Manual. The team members will use the following material in planning the details of and preparing for the onsite inspection.

1. Safety analysis report - defines requirements and commitments.
2. Inspection history - inspection reports and docket file provide overview of IE activity and applicant performance and aids in developing priorities.
3. Licensee reports - reports submitted by the applicant such as 10 CFR 21 and 50.55(e) reports provide indications of applicant's program weakness.
4. Applicant manuals - arrangements should be made to obtain the project manual, quality assurance manual, topical reports, and administrative control manuals as required. These documents provide the basis of

management controls at the site and define responsibilities, authorities, interfaces, and procedural aspects of project control.

5. Organization charts - provide the inspectors with an overview of the management interfaces, communicator channels, and the identification of management personnel. Each inspector must develop an understanding of the organization and identify those managers to be interviewed.
6. NRC staff positions/interpretations/Regulatory Guides (RGs) - current NRC (NRR or IE) staff positions/interpretations/RGs define the most recent NRC concepts and should be considered in the detailed planning and acceptability of the applicant's program.
7. Consensus standards - ANSI/ASME/IEEE standards shall be used as applicable.

The planning and preparation stage should result in a detailed inspection plan which will ensure that the objectives of this TI are met. It is the responsibility of the Team Leader to integrate each team member's proposed plan/schedule/activities into an overall inspection plan and ensure coordination of the inspection.

The inspection plan may need revision as the inspection progresses and if problems are identified. The Team Leader is responsible for arranging/directing changes to the initial inspection plan.

2512/07-07 INSPECTION CONDUCT AND DOCUMENTATION

07.01 General. All team members should be dedicated for the duration of the inspection. Each day, the Team Leader should conduct a coordination meeting of all team members to discuss the day's activities and findings. Additional assignments or redirection of effort may result from these meetings.

07.02 Inspection Documentation. The inspection team will prepare for issuance by the Region an inspection report and related transmittal correspondence that documents inspection activities and findings identified during the inspection. The inspection documents will conform with existing policy.

The Regional construction assessment team inspection concept employed in this procedure includes a determination of applicant program effectiveness which means that in addition to using requirements and commitments as a basis of evaluation, the inspector will be using other criteria for which explicit

regulatory requirements may not exist, such as Regulatory Guides, staff positions, and interpretations. Therefore, in addition to inspection findings which are apparent noncompliances and deviations, the report will contain other observations which of and by themselves, or in conjunction with enforcement type findings, add up to perceived strengths and weaknesses. A finding that the applicant's program does not meet these criteria is considered as an observation of weakness or inadequacy. It is also possible that the applicant's program exceeds requirements, commitments, and these other criteria so that this program element is superior. In this situation, it would be considered as an observation of strength.

- a. Inspection Report. The cover page to the report will conform to IE MC 1005 (being revised as IE MC 0610) with the exception that the "Results" section of the inspection summary should include a summary of perceived strengths and weaknesses.

The "Details" portion of the report will also conform to IE MC 1005 (being revised as IE MC 0610) except that in addition to apparent items of noncompliance, deviations, and unresolved items which were identified, each major inspection topic area discussed will include the other observations of perceived strengths and weaknesses discussed above. The enforcement-type findings together with these other observations provide the basis for evaluation of the effectiveness of the licensee's system of controls. The writeup should identify as clearly as possible the perceived reasons that caused the weakness (or strength) to exist, and should not just repeat the weakness, per se.

- b. Transmittal Letter. The transmittal letter will conform to IE MC 1005 (being revised as IE MC 0610) with the exception that it will, as appropriate, include additional paragraphs that will address any significant weaknesses to be identified and summarized in Appendix B. The wording of the additional paragraphs should be modeled after the following:

In addition to the apparent items of noncompliance discussed above and in Appendix A. "Notice of Violation," findings of this inspection also indicate that several significant weaknesses exist in your management systems of control. These include.....

(add general discussion)

These areas are discussed in Appendix B, "Significant Inspection Findings."

- c. Appendix A, "Notice of Violation". Apparent items of noncompliance will be documented in Appendix A to the transmittal letter, and will be in accordance with IE MC 0800.
- d. Appendix B, "Significant Inspection Findings". Significant observations of weakness will be documented in Appendix B to the transmitted letter. Appendix B will identify only the major areas requiring improvement. Examples shall be included to clarify the observations. Items of noncompliance contained in Appendix A should be referenced in the discussion when they directly contribute to the conclusion of weakness or inadequacy.

2512.07-08 STATISTICAL DATA REPORTING

Current routing requirements apply. No special codes have been assigned for this program. Credit should be taken, where appropriate, for IE MC 2512 program requirements or equivalent that are completed under this program.

2512/07-09 EXPIRATION

March 1, 1986. (CN 85-16)

This TI will expire on ~~December 15, 1984~~.

2512/07-10 LIST OF APPENDICES

1. Inspection Planning Charts, Pages 1-6, Rev. 0, Undated
2. Quality Assurance Program, Pages 1-29, Rev. 1, 2/13/81
3. Design Controls, Pages 1-20, Rev 1, 2/13/81
4. Project Management, Pages 1-23, Rev. 1, 2/13/81
5. Construction Controls, Pages 1-37, Rev. 1, 2/13/81
6. Procurement Controls, Pages 1-6, Rev. 1, 2/13/81

Appendices (1-6) previously issue with TI 2512/07, Rev. 0 are to be retained for use with Revision 2 of TI 2512/07.

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