

NRC INSPECTION MANUAL

HQMB

INSPECTION PROCEDURE 92720

CORRECTIVE ACTION

PROGRAM APPLICABILITY: 2515

SALP FUNCTIONAL AREA: ENGINEERING

92720-01 INSPECTION OBJECTIVE

To determine whether the licensee is effectively implementing a corrective action process that identifies, follows, and corrects conditions adverse to quality, especially with regard to determination of the cause of the problem and elimination of both problem recurrence and occurrence of similar problems.

92720-02 INSPECTION REQUIREMENTS

02.01 Confirm Sources of Problem Identification

Confirm the sources from which problem identifications arise. The sources should include:

- a. Construction, testing, or operational events.
- b. Licensee-identified problems.
- c. Quality Assurance (QA) findings.
- d. NRC inspection findings.
- e. NRC generic correspondence.
- f. Employee and other concerns.
- g. Industry operating experience.
- h. Licensee maintenance rule monitoring and periodic evaluations.

02.02 Investigation of Problems

Select at least four identified, risk significant problems from each source described in Section 02.01a-h of this procedure, as available, and investigate the licensee's response to each. Include a determination of whether the identified problem was assessed; whether the licensee's corrective action was effective, timely; and whether the licensee:

- a. Reported the initially identified problem to the appropriate plant managers and to the NRC, if required.
- b. Effectively carried out established action and responsibilities for resolving each problem in accordance with the licensee's corrective action procedure with appropriate consideration given to risk significance.
- c. Classified and assigned priorities to any problems according to the safety significance of each.
- d. Considered potential generic concerns and underlying root causes of each problem.
- e. Closed out, documented, and promulgated to others completed action, as required.

02.03 Inspection of Programs (as necessary)

For each source of problem identification that was found during the investigations described in Section 02.02 of this procedure, ensure that the licensee's program:

- a. Has adequate controls established for that source.
- b. Verifies through periodic QA audits and surveillances that the regulatory requirements and administrative policy and procedures are being implemented properly.
- c. Provides appropriate guidance for determining which events require detailed root-cause assessment or an assessment that uses human performance investigative tools.
- d. Uses a human performance evaluation system.
- e. Appropriately evaluates failures of SSCs within the scope of the maintenance rule.

92720-03 INSPECTION GUIDANCE

General Guidance

To assist the inspector with fulfilling the objective of an inspection of corrective action, this procedure outlines how to examine the licensee's corrective action activities broadly, whereas other procedures outline how to examine the licensee's performance in correcting problems in a narrow area. Part of this broad examination is to determine whether the

licensee's corrective action process is being implemented by all personnel and groups that perform activities that could impact plant safety. Under this procedure, problems include, but are not limited to, faults, failures, malfunctions, nonconformances, deficiencies, deviations, defective material and equipment, personnel errors, and incorrect or inadequate procedures. The term "problems" in this procedure is meant to be synonymous with conditions adverse to quality, and any other condition or defect that may be detrimental to plant safety.

The inspector should concentrate on corrective action activities rather than on the program and procedures. If the corrective action activities are performed effectively and the plant equipment runs reliably, the licensee's program and procedures are most likely adequate. However, if the inspector notes problems or the plant equipment is not reliable, the inspector should investigate possible causes in the areas of personnel performance or training.

To the extent practicable, the inspector should also evaluate whether the licensee has incorporated into its corrective action program the applicable requirements of the maintenance rule (10 CFR 50.65) and determine if poor equipment reliability and/or availability resulted from ineffective maintenance.

Additional guidance relative to the maintenance rule can be found in NUMARC 93-01 "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Regulatory Guide 1.160 which endorses the industry guidance, and Inspection Procedure (IP) 62706, "Maintenance Rule". When reviewing maintenance activities, the inspector should concentrate on risk significant performance examples that are a product of poor maintenance programs or implementation.

Non-safety related SSCs within the scope of the maintenance rule are not governed by the licensee's Appendix B QA program; therefore, inspectors should exercise caution when inspecting to and enforcing the maintenance rule. If significant corrective action problems are identified within the auspices of the maintenance rule, the inspector should consult with and identify any concerns to regional management who may consider a more detailed inspection in accordance with IP 62706.

Additionally, the inspector should consider the licensee's history of enforcement action in the area of corrective action. If the licensee's history of enforcement action includes a number of citations for poor corrective action, the inspector should ensure that the documented root causes have been corrected.

If inspection of the corrective action activities and personal performance or training does not yield the source of the problems, then the inspector should examine the licensee's program and procedures.

The requirement that problems (as defined in Section 03.01a of this procedure) be properly identified and corrected derives from 10 CFR Part 50, Appendix B, Criterion XVI; ANSI N18.7 - 1976; and the ANSI N45 series. These documents further require that, for significant conditions adverse to quality, the cause of the condition be determined and corrective action be taken to preclude repetition. The corrective action is required to be documented and reported to appropriate levels of management.

This procedure for a broad-based inspection of licensee corrective action should be performed as an initiative when a need for review is indicated by the identified problems (as defined in 03.01a).

When following up on items where there are implications of wrongdoing, consult the Office of Investigations for guidance after discussing the wrongdoing issues with regional managers.

Regarding the use of INPO reports and the information they contain, written guidance can be found in Inspection Procedure 71707.

Specific Guidance

03.01 Confirm sources of problem identification. Licensees may have a single or numerous corrective action processes for identifying, tracking, and resolving issues associated with a facility. For each of the following eight general areas, the licensee should have some process for dealing with corrective action. Examples of typical processes or items that may be found in each area are as follows:

- a. Construction, testing, or operational events. Events at the facility are identified in reports made to the NRC in accordance with 10 CFR 50.55(e), 10 CFR 21, 10 CFR 50.72, in licensee event reports (LERs), in the plant internal reporting process, and in station operating logs. Events that may influence operations at the facility and that have occurred at other sites are identified in NRC generic correspondence and other sources of industry operating experience. Follow-up of licensee action on confirmatory action letters is covered in Inspection Procedure 92703.
- b. Licensee-identified problems. Often a licensee has many internal systems for managing deficiencies that its facility staff identifies. These systems typically require documentation of the facility's problems in nonconformance reports, quality deficiency reports, procedure change requests, maintenance work orders, field change requests, and radiological deficiency reports.
- c. Quality Assurance (QA) findings. The QA organization performs audits and surveillances, and develops findings. Typically, the QA organization (or perhaps the offsite review committee or ISEG) performs periodic audits of the results of action taken to correct identified deficiencies affecting nuclear safety. The scope and findings of these audits may indicate the comprehensiveness and effectiveness of the licensee's corrective action process.

The review of licensee corrective action related to QA activities may overlap with reviews required by Inspection Procedures 40702 and 40704.

- d. NRC inspection findings. The administrative section of most licensee technical specifications requires that the onsite committee address and deal with each violation identified as a result of an NRC inspection.
- e. NRC generic correspondence. Review of generic correspondence activities

involves review of the licensee's responses to NRC information notices, bulletins, and generic letters.

- f. Employee and other concerns. These concerns involve licensee responses to employee concerns that are raised outside the licensee's normal line organization. Some operating plants do not have a formal system for handling allegations and employee concerns, whereas other licensed facilities handle these concerns through an ombudsman or allegation process. In addition, regional Office Allegation Coordinators track and handle allegations made to the NRC.
- g. Industry operating experience. This experience involves the licensee's follow-up to operational problems in the industry. Licensees should have a process whereby events and discoveries, as well as good practices, experienced by other organizations are investigated for applicability to its plants and adapted as applicable for plant safety. Licensees should consider industry-wide operating experience when establishing goals for SSCs monitored under 50.65(a)(1) of the maintenance rule. The licensee should also review industry-wide operating experience when making adjustments to SSC preventive maintenance programs under 50.65(a)(3).
- h. Licensee maintenance rule monitoring and periodic evaluations. If licensees cannot demonstrate that the performance (or condition) of SSCs within the scope of the maintenance rule is being effectively controlled through preventive maintenance activities, they are required to monitor SSC performance (or condition) through goal setting and corrective action activities. Licensee periodic evaluations of the maintenance rule program may also contain assessments of corrective actions associated with maintenance activities.

03.02 Investigation of Problems. Items selected for review should have been characterized as significant by the licensee. Criterion XVI of Appendix B to 10 CFR Part 50 requires cause determination and corrective action to preclude repetition only for significant conditions adverse to quality.

- a. Requirements for reporting to the NRC are established in 10 CFR Parts 20, 21, and 55; 10 CFR 50.72 and 50.73; and the licensee's technical specifications.
- b. Various licensee organizations performing activities that may impact plant safety may use individualized corrective action processes, or they may use a common, plant-wide process. Therefore, the inspection sample should include items from the various processes. When multiple corrective action processes exist onsite, the organizations' staffs should interact to ensure that all items for which corrective action needs to be performed, tracked, and trended are captured. The important questions are whether some process is implemented in all areas and whether the integrated process works effectively.
- c. The process for assigning priorities should focus on risk significance.
- d. The inspector should check that corrective action is taken in a timely fashion and that action is taken to prevent recurrence or occurrence of a similar or related

problem. Delinquent milestones should be receiving managerial attention. In addition, feedback on the corrective action should be provided to the initiator.

- e. The inspector should review the licensee's root-cause analysis of significant LER and plant operational events, including unplanned reactor trips and equipment failures, to determine the effectiveness and validity of the analysis. The root-cause analysis should identify primary causes and corrective action. In addition, the root-cause analysis should weigh the effect of generic problems on other equipment or systems. (The inspector should not avoid the pursuit of problems in the balance of plant when the analysis indicates the primary cause was in that area.) If permanent action to correct the problem takes an excessive amount of time, as in the case of significant plant modifications, for example, then interim action should be taken to control or minimize the problem until the permanent action can be implemented.

03.03 Inspection of Programs (as necessary)

- a. Ensure that each program has a level of review commensurate with the safety significance of the problems reported within it.
- b. Tracking data about quality and analyzing it for trends includes licensee identification of repetitive problems that are not readily apparent. This identification ensures that trends for repeated problems are developed, the data for them analyzed, and when necessary, improvements, replacements, and modifications to systems or equipment are made. In developing trends for quality, the licensee should consider the occurrence of problems that are related as well as those that are identical. Additionally, trends should not be exclusively for systems and equipment; trends can be invaluable to managers in identifying and correcting personnel performance issues. Communication of the results of trends to managers and these managers' involvement in resolving involved issues should also be considered. Developing trends for quality may involve any or all of the areas listed in Section 02.01 of this procedure.

c-e No inspection guidance.

92720-04 REFERENCES

ANSI N18.7 - 1976 (As committed to by the licensee)

ANSI N45.2 series standards (As committed to by the licensee)

Facility Nuclear Quality Assurance Manual

10 CFR Parts 20, 21, and 55

10 CFR 50.55(e), 50.65, 50.72, and 50.73

Criterion XVI of Appendix B to 10 CFR 50

Memorandum of February 14, 1986, from J. M. Taylor to Regional Administrators entitled, "NRC Use of Evaluation Reports." (NUDOCS accession No. 8602250196, microfiche No. 68289/200)

Inspection Procedure 71707, Operational Safety Verification

Inspection Procedure 62706, Maintenance Rule

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