SCOPING DOCUMENT

TRIAL INSPECTION PROGRAM

THREE MILE ISLAND NUCLEAR STATION - UNIT 1

Attachments:

A. Planning Sheets
B. Listing, Random Samples with Alternates
C. Cost-Benefit Analysis
D. Inspection Procedures, SSIP and Activities Outside SSIP
E. Stratified Population

Subject: Scoping document for inspection activities in the Statistical Sampling Inspection Program (SSIP) and activities considered to be outside the SSIP.

Purpose: Provide general information and outline of the total reactor safety inspection program to be conducted at the Three Mile Island Facility - Unit 1.

Scope: This document pertains to the actual inspection activities to be conducted at the Three Mile Island Facility. It provides detailed information for conducting the SSIP and specifies the inspection procedures that are to be completed for those activities considered to be outside the scope of the SSIP.

Discussion: The total possible inspection items for the Three Mile Island Facility were identified from a review of applicable NRC requirements which include license conditions, technical specifications, 10 CFR, security plan and QA plan for operation. These inspection items (population) were stratified in relation to safety importance (Attachment E) and a random sample consistent with a predetermined confidence level statement was identified. Specific inspection procedures and alternates were prepared for each element identified

in the random sample. Implementation of these procedures provides the basis for a numerical confidence level statement regarding IE capability to detect noncompliance with NRC requirements, i.e., the inspection of license compliance with NRC requirements is such that there is at least a XX% probability of detecting any licensee who is less than YY% in compliance over the period of a facility-year.

A number of the SSIP procedures include observation of activities and discussions with licensee personnel. Because these items are not performed during the complete time period of the element inspected, they cannot be used as a direct basis for the confidence level statement and should be classified as an item outside the SSIP. The addition of such items, however, results in a more conservative inspection program and is employed as a technique for verifying that licensee-documented information is factual.

It was also concluded that a number of important IE inspection activities were not amenable to the statistical sampling technique. As a result, specific inspection procedures developed for the current operating reactor inspection program (MC-2515) were adopted for use in this trial program.

Implementation Assumptions:

1. Approximately 100 man-days of direct inspection effort will be required for the trial program at Three Mile Island. This is equivalent to approximately 1.3 man-years per year of inspection effort and is consistent with the inspection effort required for the MC-2515 Inspection Program.

2. Approximately 60 man-days of direct effort will be required to complete the inspection procedures associated with the SSIP and the remaining 40 man-days will be required for inspection activities outside the scope of the SSIP.

3. Inpsection procedures for the SSIP are being developed and will be available in sufficient time for the onsite inspection program. Inspection activities outside the SSIP will be accomplished in accordance with inspection procedures developed for the MC-2515 Inspection Program.

4. Documentation of inspection findings will be in accordance with MC-1000.

5. Enforcement action relating to inspection findings will be in conformance with Chapter 0800 and will cover both SSIP activities and activities outside the SSIP.

6. The SSIP is based on a facility-year inspection effort and is scheduled to cover the period July 1, 1975 through June 30, 1976. Based on sampling frequency and the availability of licensee documents to be reviewed during the inspection, the first inspection should be tentatively scheduled for approximately September 1975.

7. Documentary evidence examined by the inspector is factual.

8. Specialist inspectors are to be used for inspection of activities considered to be outside the principal inspector's area of proficiency.

SSIP Inspection Procedures:

Specific inspection procedures have been developed for the inspection elements identified in the random sample and include the following:

| Strata | Procedures | Alternates | Totals |
|---|---|---|---|
| A | 259 | 30 | 289 |
| B | 58 | 15 | 73 |
| C | 22 | 5 | 27 |
| | 339 | 50 | 389 |

In planning the inspection, the inspector should ascertain when the complete data package for each element will be available for inspection. Attachment A contains planning sheets which may be used by the inspector to identify the optimum times for onsite inspections.

It should be noted that the most desirable time to inspect an element is immediately after the completion of the element time period. Because of the number of 3, 6, and 12-month elements, the elements in the planning sheets will tend to cluster in the months of October, January, April, and July. It is also recognized that the inspector may not able to inspect a number of the identified elements for various reasons, e.g., unexpected shutdown, refueling outage, etc. As a result, alternate inspection procedures have been prepared and must be substituted for the uninspectable elements.

Attachment B identifies the alternate elements by strata. A number of alternate elements are included in the planning sheets and are to be inspected as they become available. It should be noted that alternate elements inspected early in the year will result in a more conservative confidence statement if it is found later that they were not required to complete the sample. As a result, the number of alternates inspected on a contingency basis should be based on the inspector's knowiedge of the facility, refueling plans, etc.

A review of facility procedures is included in the SSIP. Because these elements are not bound by a specific time period, they may be inspected at any time during the year, and thus may be used to balance the inspection workload. It should be noted, however, that those procedures inspected during the year must be rechecked (briefly) at the end of the year to assure that any changes made to them during the year were consistent with NRC requirements. A similar approach is also applicable for some of the elements listed as unscheduled on the attached planning sheet.

The procedure for inspection of an element in the sample must be followed exactly, because the sampling program results are only valid to the extent that the inspection is performed consistently and completely. For example, review or examination of data, records, etc. (when specified in the procedures), means review or examination of 100% of the data or records pertinent to the time period of the element.

Selected procedures contain requirements for the inspector to interview licensee personnel, or make observations of activities in progress. Because these interviews or observations do not cover 100% of the element period, they are considered to be a sample within a sample which cannot be supported from a statistical standpoint. Therefore, adverse findings resulting from interviews or observations will be treated as items of noncompliance that were detected outside the SSIP.

Inspection Depth:

The inspector has a number of options for determining equipment status; e.g., computer print-out, calibration/test records, recorders, log books, etc. Because one of the basic assumptions of the SSIP is that the licensee's records are factual, the inspector's review should be focused on examination of the primary or best sources of information. As an example, if the process computer or continuous recorder provide adequate verification of equipment status, further review of additional records or logs may not be required. In any event, the most continuous and comprehensive records are to be examined.

Inspection Activities Outside the Scope of the SSIP:

Inspection activities outside the SSIP include the following:

1. Abnormal occurrence review and followup.
2. IE Bulletin review and followup.
3. Noncompliance/deviation followup.
4. Independent inspection effort.
5. Special outage and work problems.
6. Reactor trip records.
7. Shift-supervisor logs.
8. Records of special inspection/tests.
9. Observations of activities.
10. Minutes of onsite and offsite review committee meetings.

Audits:

1. An annual audit of the SSIP shall be performed by the Internal Audit Specialist with assistance from the Deputy Director for Field Operations, and Assistant Directors.

2. At four-month intervals after program implementation, the Assistant Director for Construction and Operations shall evaluate the SSIP and effect any required changes. Verification of the basic assumptions in developing the SSIP will be undertaken during these evaluations (Attachment C).

Management Meetings:

1. Within six months after implementation, the Regional Office should conduct a special meeting with Metropolitan Edison to determine if the utility has been adversely affected by the SSIP.

2. Other meetings with utility management may be conducted as deemed appropriate by regional supervision.

Cost-Benefit Analysis:

A formal cost-benefit analysis will be conducted after one year of program implementation at the trial facility. The ADCO shall have lead responsibility for conducting the cost-benefit analysis and shall receive support from the offices of the DDFO, Assistant to the Director, and Region I as delineated in Attachment C.

Documentation:

Documentation of inspection findings will be in conformance with existing IE policy as described in MC 1000. In addition, upon completion of each inspection, copies of the completed inspection procedures should be annotated to identify any noncompliance and forwarded to the Facility Inspection Branch.

Enforcement:

Enforcement action shall be as delineated in IE Manual Chapter 0800, Enforcement Actions, and will include both SSIP identified items and items resulting from those activities that are considered to be outside the scope of the SSIP. As each SSIP inspection procedure is completed, the inspector will make a determination relating to the compliance/noncompliance status of the inspection findings. This will be annotated on the procedure and signed by the inspector. It is recognized that the detection of items within the SSIP may prompt the inspector to review records outside the time period identified in the procedure or to review records of related activities that may result in additional items of noncompliance. These items should be identified as items of noncompliance outside the SSIP. Any differentiation as to noncompliance within or outside the scope of the SSIP will be limited to internal IE documentation.

The scope and depth of this phase of the inspection program will be consistent with the policy and practices established for the MC-2515 Inspection Program and will include the following specific procedures:

| Procedure No. | Title | Inspection Frequency |
|---|---|---|
| 30702 B | Management Meetings - As Needed | W |
| 30703 B | Entrance and Exit Interviews | Each Inspection |
| 40700 B | Review and Audits | Semiannual |
| 41701 B | Requalification Training | Annual |
| 71710 B | Review of Plant Operations | Quarterly |
| 90710 B | Review of Nonroutine Event Reports | Quarterly |
| 90711 B | Nonroutine Event Review | Annual |
| 92700 B | Licensee Event Followup | W |
| 92701 B | Followup on Inspector Identified Problem | W |
| 92702 B | Followup on Items on Noncompliance/Deviations | W |
| 92703 B | IE Bulletin/Immediate Action Letter Followup | W |
| 92704 B | Followup on Headquarters Requests | W |
| 92705 B | Followup on Regional Requests | W |
| 92706 B | Independent Inspection Effort | Each Inspection |

The foregoing procedures and the SSIP procedures are appended hereto as Attachment D.