

## **POLICY ISSUE**

November 6, 1992

(NEGATIVE CONSENT)

SECY-92-377

For: The Commissioners

From: James M. Taylor  
Executive Director for Operations

Subject: MAINTENANCE INSPECTION GUIDANCE PROCEDURE IP 62703

Purpose: To submit the latest draft revision of Inspection Procedure (IP) 62703, "Monthly Maintenance Observation," to the Commission for its review.

Background: On December 2, 1991, in a memorandum from J. Taylor, EDO, to the Commissioners (SECY-91-385), the staff informed the Commission of plans for revising the maintenance inspection procedure for use during the interim period from the present until the effective date of the new maintenance rule, 10 CFR 50.65 (July 10, 1996). The staff proposed to revise this procedure to adopt the results-oriented approach directed by the Commission. The revised procedure would focus on the results achieved by a licensee's maintenance program rather than on the process used to accomplish the program. The revised procedure would also emphasize those nonprogrammatic areas of weakness found during the Maintenance Team Inspections.

In a staff requirements memorandum of December 23, 1991, the Commission advised the staff that it did not object to the staff's intention to revise and issue the maintenance inspection procedure for the interim period. The Commission also directed the staff to submit the proposed procedure to the Commission for review before issuing the procedure in final form. On April 15, 1992, the staff submitted revised draft Inspection Procedure (IP) 62703, "Monthly Maintenance Observation," to the Commission for its review.

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In a staff requirements memorandum of May 22, 1992, subsequent to its review of the draft inspection procedure, the Commission directed the staff to conduct a public workshop to obtain public comments on the revised draft IP 62703. The Commission also directed the staff to: (1) consider the applicability of the individual inspection elements (and sub-elements) and if guidance should be added or changed to improve the inspection procedure; (2) consider if the inspection elements should be grouped in a manner that would better emphasize to the inspectors that they should complete these elements as part of a larger effort to evaluate the results of a licensee's program, rather than individual process-oriented elements (similar to the illustrative example of grouped elements provided by the Commission); (3) provide its opinion on the role, if any, the inspection elements should play after implementation of the maintenance rule; and (4) comment on the need for further NRC management oversight of the inspection process during the interim period. The Commission instructed the staff to ask the public to comment on items (1), (2), and (3) listed above and to resubmit the procedure after analyzing the public comments and integrating them, as appropriate.

This paper is in response to the Commission's May 22, 1992, staff requirements memorandum.

Discussion:

The staff revised draft IP 62703 to incorporate additional guidance and to group the inspection elements, as suggested by the Commission. The staff augmented the guidance on the use of vendor maintenance recommendations in specific guidance Section 62703-03.a.7 of draft IP 62703. The staff did not add any other guidance prior to the public workshop since additional guidance would be added, if needed, to address pertinent comments gained during the public comment and workshop process. The staff also regrouped the inspection elements in a manner that would better emphasize to the inspectors that they should complete these elements as part of a larger effort to evaluate the results of a licensee's program rather than individual process-oriented elements.

Revisions to incorporate both the additional guidance and the grouping of inspection elements were completed prior to placing IP 62703 in the Public Document Room (PDR) to make it available for review prior to the public workshop.

Notice of the public workshop was published in the Federal Register on July 16, 1992. The public was asked to comment on the individual inspection elements (and sub-elements) and additional areas where clarification of the inspections guidance could be beneficial. The public was also asked to comment on the plans described in the Federal Register Notice for the preparation of inspection procedures and performance of pilot inspections for implementation of the maintenance

rule. The public was also asked to comment on these points during the public workshop.

In addition to the workshop notice published in the Federal Register, special notifications and invitations were sent to special interest groups and other nuclear industry parties.

On August 18, 1992, the staff held a public workshop to give the public an opportunity to comment on the revised draft IP 62703. Representatives from the nuclear industry and the NRC regional offices attended the workshop and commented orally. The staff also received written comments from two utilities. No representatives from other groups attended the workshop or provided written comments.

Following the workshop, the staff evaluated the comments and made appropriate revisions to the revised draft IP 62703. The more significant comments and revisions are summarized below.

- Several comments suggested revising the Inspection Objective (62703-01) and Inspection Requirements (62703-02) to make them focus more on evaluating the results of a licensee's maintenance program. The staff revised both of these sections to make them more results-oriented.
- Many comments suggested changes to clarify specific inspection requirements in Section 62703-02 or the guidance in Section 62703-03. The staff made several minor revisions to these sections to further clarify the intent. For example, the staff revised paragraph 02.01 a.6 to clarify American Society of Mechanical Engineers (ASME) code requirements; revised paragraph 02.01 a.7 to clarify that the licensee need not incorporate all vendor recommendations; revised Section 62703-03, "Troubleshooting activities," to clarify that troubleshooting activities do not necessarily have to be performed in accordance with detailed written procedures; and revised Section 03.01 a.9 to clarify oversight and quality assurance requirements for contract personnel.
- Several comments suggested either increasing or decreasing the level of detail in certain sections of the inspection procedure. The staff reviewed each of these suggestions and made revisions to the inspection procedure where appropriate. For example, the staff added the new specific guidance Section 03.01 a.5, which discusses replacement parts and deleted much of the discussion on voluntary entry into Limiting Conditions for Operation (LCO) in Section 03.01 c.1.

- The commenters also asked general questions about the NRC inspection program. These included questions about the difference between the core inspection program and the regional initiative inspection program. The staff answered these questions orally during the workshop but made no revisions to IP 62703 since these questions were not applicable to the contents of the inspection procedure.

The NRC regional offices reviewed and commented on the version of IP 62703 that was discussed at the workshop. After the workshop, IP 62703 was revised to incorporate public comments and submitted to the regional offices for their final review. The regional offices provided some additional suggestions and comments which the staff reviewed and incorporated, as appropriate, into IP 62703. Some examples of these revisions include: the addition of a sentence to the Inspection Objective Section 62703-01 to clarify that the procedure may be used for event followup; the addition of Element c.4 to the Inspection Requirement Section 02.01 to provide additional information on operations oversight of maintenance activities; and the addition of guidance to Specific Guidance Section 03.01 a.2 to clarify review of post-maintenance test deficiencies. The resultant draft version of IP 62703 is enclosed for the Commission's review.

With regard to the role, if any, the inspection elements in IP 62703 should play after implementation of the Maintenance Rule on July 10, 1996, the staff believes that any inspection procedures intended to verify the implementation of the maintenance rule should be developed after regulatory guidance has been finalized. The reasons for this were described in Commission Paper SECY-91-385 of December 2, 1991, which also stated the staff's intention to issue a new inspection procedure(s) for the maintenance rule by January 1996 or approximately six months prior to implementation of the rule. At that time the staff will consider the role, if any, the inspection elements contained in IP 62703 should play in the new inspection procedure. No verbal or written public comments were received regarding the staff's plans for preparation of inspection procedures and performance of pilot inspections for the Maintenance Rule.

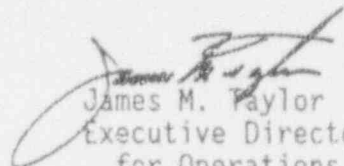
Finally, with regard to the need for further NRC management oversight of the inspection process during the interim period, the staff believes that the enhancements made to the latest revision of IP 62703 (enclosed), which included significant involvement from the Regions, and the normal direction and guidance provided by regional management, will ensure adequate oversight of the inspection process during the interim period. The revised IP 62703 will be disseminated to the regions with

emphasis on the change to a results-based focus and the need to avoid early enforcement of the Maintenance Rule.

Coordination: The Office of General Counsel has reviewed this paper and has no legal objection.

Recommendation: That the Commission:

Note the staff intends to issue the enclosed inspection procedure IP 62703, "Monthly Maintenance Observation," for use after 10 working days from the date of this paper, unless instructed otherwise by the Commission.

  
James M. Taylor  
Executive Director  
for Operations

Enclosure:  
Inspection Procedure  
IP 62703, "Monthly  
Maintenance Observation"

SECY NOTE: In the absence of instructions to the contrary, SECY will notify the staff on Monday, November 23, 1992, that the Commission, by negative consent, assents to the action proposed in this paper.

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## INSPECTION PROCEDURE 62703

## MONTHLY MAINTENANCE OBSERVATION

PROGRAM APPLICABILITY: 2515

## 62703-01 INSPECTION OBJECTIVE

To verify that maintenance activities for safety-related structures, systems, and components (SSCs) are being conducted in a manner which results in reliable operation of the plant equipment and safe operation of the plant. This procedure may be used by resident or region-based inspectors for reviewing routine maintenance activities, following an event caused by maintenance problems, or as otherwise directed by NRC management.

## 62703-02 INSPECTION REQUIREMENTS

02.01 Inspection Activities. The inspector should verify by making observations, conducting reviews, and interviewing maintenance personnel, that licensees' maintenance activities result in the reliable operation of plant SSCs and are performed in accordance with regulatory requirements. The inspector should inspect day shift and back shift maintenance activities and attempt to balance the inspections among the various functional areas (i.e., mechanical, electrical, I&C,).

- a. In order to ensure maintenance of SSCs was effective, the inspector should verify that the licensee:
  1. Ensured the operability of plant systems and components after the completion of maintenance.
  2. Properly tested and calibrated equipment before returning it to service.
  3. Properly returned to service any equipment being maintained and its associated system, including independently verifying the alignment of valves and breakers.
  4. Properly reassembled electrical equipment that is environmentally qualified after completing maintenance, surveillance, and testing.
  5. Utilized correct parts and tools.

6. Fulfilled the requirements for inspections and tests as required by applicable American Society of Mechanical Engineers (ASME) Codes for code repairs and replacements.
  7. Used approved procedures which — given the skills of the workers involved — were adequate to achieve desired results, incorporated appropriate recommendations of the equipment vendor, and addressed special maintenance activities (including emergency contingencies) such as using a freeze seal or plug. Procedures included appropriate quality control or independent verification hold points where necessary to ensure that critical work steps were performed adequately.
  8. Ensured that workers, including contractors, received sufficient training to ensure the maintenance activity was completed satisfactorily. Ensured training addressed actions to be taken in the event of emergencies such as freeze seal failures.
  9. Ensured contract workers received a level of supervision and quality assurance monitoring equivalent to that afforded licensee workers.
  10. Periodically reviewed the equipment history and maintenance records for safety significant plant equipment to identify repetitive failures or other adverse trends which may indicate ineffective or inadequate maintenance. Updated the equipment maintenance history and performance trend records to reflect the maintenance activity.
- b. Verify the following activities were conducted in a manner sufficient to assure the safety of personnel and prevent damage to plant structures, systems and components:
1. Obtained approvals and determined that appropriate safety tagout boundaries were established before initiating the work. The operations department and the maintenance workers communicated appropriately throughout the maintenance activity.
  2. Established and implemented appropriate ignition, fire prevention, and personnel safety controls.
  3. Established and implemented adequate radiological controls, including radiation work permits and appropriate as-low-as-reasonably-achievable (ALARA) reviews.
- c. Verify the following activities were conducted in a manner sufficient to assure adequate control of plant risk and, where appropriate, compliance with Technical Specification requirements:
1. Technical Specification limiting conditions for operation (LCO) were met. If the LCO was entered to perform elective maintenance, verify

that unavailability of equipment taken out-of-service was not excessive and that activities were given appropriate priority.

2. Systems and their redundant trains, were operable in accordance with TS requirements.
3. Adequate precautions were taken to preclude a loss of shutdown cooling with the reactor coolant system in a partially drained condition.
4. Adequate operations oversight was provided for maintenance or modification activities performed on or near equipment which is still in service. Contingency guidance was provided to operations personnel when sensitive maintenance activities were being performed.

02.02 Maintenance Prioritization. Review outstanding job orders to ensure that the backlog of safety-related maintenance activities is being appropriately managed by the licensee.

#### 62703-03 INSPECTION GUIDANCE

##### GENERAL GUIDANCE

##### Goals

Inspection procedure IP 62703 is a core inspection procedure listed in Appendix A of NRC Inspection Manual Chapter (MC) 2515. Core inspection procedures emphasize the observation and evaluation of ongoing facility operations and supporting activities affecting the safety function of facility structures, systems and components. Core inspection procedures are intended to monitor licensees' activities and identify any adverse trends. Regional initiative and reactive inspection procedures, listed in MC 2515, Appendix B, can be used to further investigate trends or problems identified by the core inspection procedures.

The resource estimate specified in MC 2515, Appendix A is based on recommendations of a task group of regional office and headquarters representatives. It is important for the inspector to understand that these estimates are not goals, standards, or limitations; rather they are included to assist in planning resource allocations, and will be revised periodically, as necessary. It is expected that actual hours required to complete this inspection procedure at a particular site may vary from the estimate. If an inspector believes that significantly more or less maintenance inspection hours are warranted at a specific site, regional management should be informed. The inspection program provides the Regional Administrator flexibility in the application of inspection resources to deal with issues and problems at specific plants.

Due to the need for the inspection program to cover a wide variety of inspection activities, the resource estimate allotted to IP 62703 may appear inadequate to

cover all the inspection requirements listed in section 62703-02. However, the regions have the option of allocating additional inspection hours to follow up on suspected adverse trends or problems. The NRC inspection program covers only small samples of licensee activities in any particular area. It is not intended that the inspector verify every inspection requirement (62703-02) for every maintenance activity observed. The inspectors' knowledge and experience should be used to select a sample of inspection requirements for review.

The inspector's goal should be to observe approximately four maintenance activities each month using the guidance in this inspection procedure. This should include observing some back shift maintenance activities. The inspector should not observe an insignificant maintenance activity just to meet the goal of observing four maintenance activities per month. If the licensee is not performing significant maintenance activities, the inspector should perform other inspection activities.

The inspector should consider safety significance when selecting maintenance activities for observation. Choose components that have experienced problems or activities, such as inadequate training or procedures, that have resulted in maintenance problems. The inspector should evaluate the rate of failures not just the number of failures. The plant-specific Probabilistic Risk Assessment (PRA) or Individual Plant Examination (IPE) can provide information on the safety significance of plant equipment. Appendix C to NRC Inspection Manual Chapter 2515 contains a list of risk-based inspection guides (RIGs) which provide inspection guidance for specific plants.

#### Inspection Priorities

The inspector should concentrate on inspection of maintenance activities rather than the program or procedures. The inspector may decide to observe only selected portions of maintenance activities. In those instances the inspector may wish to discuss them with maintenance personnel to obtain information about aspects of the job that the inspector did not observe, including radiological controls, fire prevention controls, and materials used. The inspector should also question maintenance personnel to determine if they are familiar with their assigned maintenance task. If the maintenance activities are performed efficiently and the plant equipment performs reliably and is capable of performing its intended functions, the licensee's program and procedures will likely be adequate. Therefore, there may be no need for the inspector to further examine the licensee's process or procedures. However, if the inspector notes problems during the observations or if plant equipment is not sufficiently reliable (or not maintained operable), the inspector may wish to examine the licensee's program, processes, and procedures to determine the cause of the problems.

#### Troubleshooting Activities

"Troubleshooting" activities are maintenance activities and should be observed periodically. While observing troubleshooting activities, the inspector should give particular attention to the use of jumper, for example and the possibility

of LCO violations. The inspector should also verify that equipment was not removed from service without proper authorization, that the activity was appropriately controlled, that the activity was successfully completed, and that the equipment was properly restored to its normal configuration after completing the activity.

#### Post-maintenance Verification

The inspector should verify that SSCs returned to service after the performance of maintenance are capable of performing their intended function. This can be accomplished by:

- Observing the equipment in operation (instrument responding to changes in plant conditions).
- Observing the tests performed on the equipment, providing they are performed with the system in a normal lineup.
- Independently verifying the alignment of valves and switches.
- Verifying that the applicable technical specification surveillance tests are re-performed after the maintenance activity is complete.

#### Enforcement Options

When writing notices of violation for maintenance activities, the NRC normally cites requirements in the technical specifications or in Appendix B to Part 50 of Title 10 of the Code of Federal Regulations, (10 CFR Part 50). Failure to conduct an evaluation before departing from commitments in the FSAR may be a violation of 10 CFR 50.59. Failure to meet commitments in responses to Notices of Violation may be a violation of 10 CFR 50, Appendix B, Criterion XVI. Other failures to meet written commitments, not amounting to a violation of a requirement, contained in safety analysis reports (SAR), Licensee Event Report, or in a licensee's response to a notice of violation, NRC bulletin, or other licensee commitment would be subject to a notice of deviation.

The new maintenance rule, 10 CFR 50.65, contains maintenance requirements that will apply to safety-related equipment and certain balance-of-plant equipment. However, this rule does not take effect until July 1996. Inspectors are cautioned not to enforce the requirements of the new rule before that date. The NRC will provide the regions with regulatory guidance and revised inspection procedures before the effective date of the new rule.

#### Shutdown Risk

Non-routine activities and the unavailability of some equipment during shutdown increase the probability of complex events which challenge operators in unfamiliar ways. Some licensees have not rigorously considered accident sequences during shutdown operations, a practice which has resulted in instances

in which instrumentation or emergency procedures could be unavailable or inadequate, and in which mitigative equipment could be unavailable.

The NRC has established relatively few explicit regulatory requirements which govern the licensee's activities during shutdown. Some plants have operability requirements in the technical specifications for equipment, while others do not. Licensees continue to report events occurring during shutdown conditions which affect their ability to remove decay heat. These events indicate the importance of carefully planning and coordinating anticipated outages of equipment, tests of systems and components, and plant conditions.

The inspector should consider shutdown risk when observing maintenance activities. The inspector should assess the licensee's plans and procedures for controlling shutdown activities and ensuring that shutdown cooling is always available when needed. While inspecting maintenance activities, the inspector should examine the effect that maintenance activity might have on shutdown risk or the loss of shutdown cooling.

The NRC issued the following communications to describe events of significance to safety which illustrate the need for increased attention by the staff of the NRC and the licensees: Generic Letter (GL) 88-17, "Loss of Decay Heat Removal," NUREG-1410 "Loss of Vital AC Power and the Residual Heat Removal System During Mid-Loop Operation at Vogtle Unit 1 on March 20, 1990," Information Notice (IN) 90-55, "Recent Operating Experience on Loss of Reactor Coolant Inventory While in a Shutdown Condition," and IN 91-22, "Four Outage Events Involving Loss of AC Power or Coolant Spills."

The NRC addressed the issue of shutdown risk in NUREG 1449, "Shutdown and Low-Power Operation at Commercial Nuclear Power Plants in the United States," dated February 1992. The NRC plans to perform inspections using temporary instruction (TI) titled "Shutdown Risk and Outage Management Inspection." Inspection hours spent reviewing shutdown risk should be charged against that TI rather than IP 62703.

#### Engineering Support

The inspector should verify that the licensee has provided an appropriate level of engineering support for maintenance activities. Not all maintenance activities require engineering involvement, but timely engineering support should always be available to the maintenance staff. Areas where engineering can provide valuable assistance include: evaluating when a repair would constitute a design change; specifying replacement parts; performing root cause analyses; and, evaluating performance trends. Delays in responding to requests for support, repetitive equipment failures, and superficial root cause analyses could indicate inadequate engineering support.

#### Systematic Assessment of Licensee Performance (SALP)

The inspections performed using IP 62703 typically provide the primary source of information for evaluating a licensee's performance in the maintenance area. The

inspector should be familiar with the contents of NRC Manual Chapter 0516, "Systematic Assessment of Licensee Performance," (SALP) and understand what type of information will be needed to assemble meaningful SALP input. The inspector should routinely document observations and findings made during the SALP cycle to facilitate the preparation of meaningful input at the end of the cycle.

### 03.01 Specific Guidance

The specific guidance listed below provides additional information intended to clarify the inspection requirements listed in paragraph 02.01. The letter designations used below correspond to the letters used in paragraph 02.01 (i.e., paragraph 03.01a.1 provides specific inspection guidance for inspection requirement 02.01a.1).

- a.1. To assess the operability of the system and components selected, the inspector should review and assess the material condition, the availability of the system, engineered safety features (ESF), and the results of surveillance and post maintenance tests. The inspector should review the list of outstanding work requests to help assess the operability of equipment.
- a.2. The inspector should determine that in testing equipment, the licensee tests important attributes of the equipment that may have been affected by the maintenance, and not just those that are tested by performing the surveillance test required in the technical specifications. The inspector should verify that post-maintenance test deficiencies are appropriately evaluated and corrected prior to returning the equipment to service. Post-maintenance testing and TS surveillance testing are usually two distinct activities. If only the TS surveillance is used after maintenance, then a close examination that the attributes of the equipment affected by the maintenance activity have been tested by the TS surveillance is appropriate.
- a.3. The inspector should determine that activities for returning equipment to service follow the guidance provided by the staff in NUREG-0737, Item I.C.6, "Guidance on Procedures for Verifying Correct Performance of Operating Activities."
- a.4. In June 1984, the Office for Analysis and Evaluation of Operational Data (AEOD) issued a report AEOD/C402, "Operating Experience Related to Moisture Intrusion in Electrical Equipment at Commercial Power Reactors." In this report, AEOD documented its study of the failures of environmentally qualified safety-related electrical devices in mild environments. Most of these failures resulted from moisture intrusion, which was often caused by the improper reassembly of enclosures following maintenance or surveillance activities. The inspector should determine that maintenance activities include adequate controls to ensure that vapor barriers, gaskets, and seals are restored to the environmentally qualified condition.

- a.5 The inspector should verify that the replacement parts are either identical to the original part or that the substitute part had a proper engineering evaluation and has been found to be a suitable substitute. Care must be taken to ensure that any replacement commercial grade hardware meets original design requirements (i.e. strength, corrosion resistance, etc.). The inspector should verify that special tools (such as torque wrenches) were used where specified in the maintenance procedures or design specifications.
- a.6 If the equipment is subject to the ASME codes, then any maintenance activity performed on the equipment may void the results of ASME code tests or inspections. The licensee must ensure that appropriate ASME code pre-service or in-service tests are re-performed as necessary to ensure code requirements are maintained. The inspector should determine if the equipment being maintained is subject to the ASME codes by reviewing the licensee's in-service inspection and testing programs. The inspector should verify that any required ASME code pre-service or in-service inspections or tests were performed as part of the maintenance activity. This could include, for example, testing to re-establish baseline data following the overhaul or repair of a code pump.
- a.7 While it is required for licensees to obtain and review vendor technical information, it is not required that all vendor recommendations be incorporated into the licensee's maintenance program. If the licensee determines that a vendor recommendation is not appropriate, the licensee may decide to disregard it. However, if equipment problems result in unacceptable loss of essential function, the inspector should determine if vendor recommendations that could have precluded the problems were adequately implemented.

The inspector should verify that the licensee has established an adequate vendor interface program which includes:

- (a) A program with the NSSS vendor as described in the Vendor Equipment Technical Information Program (VETIP), which covers all the safety-related components within the NSSS scope of supply. This program should include provisions for assuring receipt by the licensee/applicant of all technical information provided by the NSSS vendor; and
- (b) A program of periodic contact with the vendors of other key safety-related components not included in (a) above.

Additional information on this subject is provided in Generic Letter No. 90-03, "Relaxation of Staff Position in Generic Letter 83-28, Item 2.2 Part 2, 'Vendor Interface For Safety-Related Components,' dated March 14, 1990."

The inspector should determine that: adequate emergency contingency procedures are available in the event of freeze plug failure; maintenance and operations personnel have been trained in the use of these procedures; and, that personnel at the site of the freeze plug maintain adequate communication with the control room. The NRC has provided additional guidance on the use of freeze plugs in the Mechanical Section of Part 9900 of the inspection manual.

- a.8 Some special processes such as non-destructive examination and welding have formal qualification requirements. If the maintenance task being reviewed involves these activities, the inspector should verify that the personnel performing the activity are qualified. Other maintenance activities such as use of freeze plugs may or may not have specific qualification requirements. The inspector should question maintenance supervisors or management to determine if they have established any qualification requirements for the maintenance task being reviewed. If they have, the inspector should verify by reviewing qualification records, or by questioning the maintenance personnel performing the task, that these qualification requirements have been met.
- a.9 Contract personnel, including those from nuclear steam supply system (NSSS) vendors, must conform to equivalent requirements as do plant maintenance personnel. Contract personnel who work directly for regular plant staff maintenance supervisors are subject to oversight under the licensee's established quality assurance program. However, the licensee may also contract with outside vendors to complete specific tasks and to provide their own quality assurance program. In those cases, the licensee must verify that the contractors have an adequate quality assurance program. The inspector should ensure that the licensee has audited the contractor's quality assurance program and that the licensee has determined that the contract personnel are following their own quality assurance requirements.
- a.10 While conducting monthly observations of maintenance practices, the inspector should review engineering support, root cause analysis, and equipment performance trends. To identify weaknesses in these areas, the inspector should examine equipment and maintenance history records and other appropriate records such as licensee event reports for indications of repetitive failures, inadequate root cause determinations and ineffective corrective action implementation.

The inspector should also verify that the licensee's engineering staff helped resolve technical problems (where necessary) encountered while performing maintenance activities and that the maintenance activity does not constitute an unauthorized design change.

- b.1 The inspector should attempt to verify that maintenance personnel have adequately coordinated the work with operations personnel.

Verify that the maintenance personnel have obtained the necessary approval from the operations department (such as from the senior reactor operator (SRO)) on the work package or procedure prerequisite. Question the on-shift plant operating crew to verify that the operators are aware of all continuing maintenance activities that might affect plant operation. This activity would include any activity that reduces the number of redundant safety systems available in the event of an accident, or any activity that could cause a plant trip or other transient.

b.2 No specific inspection guidance.

b.3 No specific inspection guidance.

c.1 While verifying that the activities are not violations of the limiting conditions for operation (LCO), the inspector should determine if the activity involves a voluntary entry into an LCO. Although voluntary entry into an LCO is allowed, the inspector should ensure that these situations are appropriately managed by the licensee and assessed for overall impact on plant risk. The licensee's work control or equipment control program should ensure that redundant and diverse equipment is operable, and that the work activities are given appropriate priority. In addition, PM activities should be planned and coordinated to preclude frequent entry into individual LCO's. Repeatedly entering and exiting an LCO may indicate a maintenance or an equipment performance problem.

The NRC Inspection Manual, Part 9900, provides guidance for the inspector on the subject of voluntary entry into LCOs to perform maintenance.

c.2 No specific inspection guidance.

c.3 Specific inspection guidance will be provided in a temporary instruction (TI) titled "Shutdown Risk and Outage Management Inspection." For further information, the inspector should refer to that document and the discussion on shutdown risk provided in the general guidance section of this inspection procedure.

c.4 No specific inspection guidance.

03.02 Failure to promptly evaluate significant operability concerns or frequently removing important equipment from service to correct minor deficiencies may indicate improper prioritization. The inspector should verify that degraded but operable components are repaired in an expedited manner which is consistent with the need for the equipment to stay in service to perform its safety function.

62703-04     RESOURCE ESTIMATE

The resource estimate for this inspection procedure is approximately XXX hours of direct inspection effort each month.

END