

APPENDIX D

PLANT STATUS

A. OBJECTIVES AND PHILOSOPHY OF PLANT STATUS ACTIVITIES

The reactor oversight process recognizes that resident inspectors have a specific responsibility, outside of inspection activities, to be aware of plant conditions on a routine basis. This appendix provides guidance regarding these plant status activities.

Resident inspectors' knowledge of plant activities and status is important in the risk-informed inspection process for determining how to select and implement the appropriate baseline inspection procedures. Plant status activities will focus on being aware of emergent plant issues, potential adverse trends, current equipment problems, and ongoing activities, including their impact on plant risk. Based on the knowledge gained through the plant status review, the inspectors are expected to make adjustments to their inspections so that they can inspect activities which are of higher risk-significance.

The resident inspector should transition into the appropriate inspection procedure whenever their effort shifts from collecting status information to evaluating a potential inspection issue. The inspector should transition into the appropriate inspection procedure if the information collection activity will exceed about ½ hour for any single issue.

The frequency of the plant status review effort will be determined by the inspector based on current plant conditions and activities. Inspectors should use plant specific risk information to determine what systems and activities are of higher risk significance given the present plant configuration.

B. CONTROL ROOM WALKDOWN

The purpose of the control room walkdown is to help enable the inspector to stay current of plant status as well as to identify unexpected plant conditions that warrant additional inspection under the baseline inspection program. Evaluate the status of the safety or risk important systems by observing the indicated parameters and equipment configuration indications on the control boards. This walkdown is intended to be general (not detailed) in nature.

Look for system components that are in unexpected configurations or parameters that are at unexpected values based on the operational mode of the plant. In addition, note whether any adverse plant parameter trends exist and whether the licensee is aware of the trends. Identify whether the plant is in any technical specification (TS) limiting conditions for operation (LCOs), whether the TS action statements are being met, and that TS requirements and license conditions are being met. In the control room or other appropriate locations, review visible portions of radiation monitor indication that could provide indication of an apparent uncontrolled release.

Review control room logs, equipment out-of-service or clearance logs, chemistry logs, standing orders, and night orders several times each week to become aware of potential

risk-related problems that occurred since the previous review. Determine whether the logs appropriately reflect the plant status observed during the control board walkdown and whether TS requirements are being met. A review of the operator shift logs and standing orders may provide insights regarding equipment operability. Pursue any operability concerns using Inspection Procedure (IP) 71111.15, "Operability Evaluations" and report primary-to-secondary leakage in steam generators which are greater than 3 gpd to NRC headquarter staff. For additional information on the reporting requirements, see "Inservice Inspection Activities" procedure, 71111.08.

In addition, to ensure that RCS leakage detection instrumentation including alarms are working properly, the inspector should verify that the licensee:

1. Monitors the containment atmosphere particulate radioactivity instruments, the containment sump flow/level instruments, the containment atmosphere gaseous radioactivity instruments, and/or any plant-specific instrumentation to indicate potential RCS leakage.
2. Is taking appropriate actions for degraded or inoperable leak detection instrumentation including alarms.
3. Periodically performs the inventory balance check when there is an unidentified leakage.
4. Is trending unidentified leak rates and taking appropriate corrective action for adverse trends. If there are any adverse trends, it should be brought to the licensee management attention as well as regional management.
5. Pays particular attention to changes in unidentified leakage.

C. STATUS MEETINGS

Select and attend licensee meetings that provide an overall status of the plant and pertinent ongoing activities. These meetings could include the licensee's plan of the day meeting, shift turnover meeting, emergent work meeting, equipment prioritization meeting, and corrective action document review meeting.

The purpose of attending the status meetings is to gather information about overall site activities in order to determine what activities will be or are being conducted so that inspection resources can be appropriately focused on those activities with the higher safety significance.

D. PLANT TOURS

On a weekly basis, tour accessible areas of the plant containing safety significant structures, systems, and components (SSCs) within the scope of the maintenance rule, areas that contain significant radiological hazards, and areas with important physical

security equipment. Focus on areas of the plant that inspectors have not entered while performing other inspections on a weekly basis.

During changing plant conditions (plant refueling or maintenance outages), the frequency and scope of plant status tours may be increased to tour areas not normally accessible and to observe equipment in an abnormal lineup.

Plant tours should occasionally include off-site and on-site emergency response facilities, and independent spent fuel storage facilities. In addition, the inspector may accompany a plant operator performing equipment rounds to gain insights regarding undocumented plant deficiencies, work arounds, or temporary modifications.

The purpose of the tours is to provide an independent perspective of ongoing plant activities that may affect plant performance in the cornerstones. In performing the tours the inspector should keep in mind the integrated effect of plant problems on plant safety. Areas to note include:

1. Plant activities are taking place that may affect the operability of the required SSCs and/or increase plant risk.
2. The overall status of plant SSCs, including general material condition or the installation of unauthorized modifications that could affect the SSC's function. Pursue any unauthorized or temporary modification deficiencies using IP 71111.23, "Temporary Plant Modifications." Pursue any operator workaround concerns using IP 71111.16, "Operator Workarounds."
3. Fire hazards that could increase risk, and overall status of fire protection equipment.
4. Status of on-site and off-site emergency response facilities.
5. Status of physical security equipment.
6. The status of doors to locked high radiation areas and required radiation postings. Pursue any deficiencies that may impact the Occupational Exposure Control Effectiveness Performance Indicator using IP 71151, "Performance Indicator Verification."
7. Any leakage involving radioactive liquids or gases. Pursue any unmonitored release paths that may impact the Radiological Effluent Occurrence Performance Indicator using IP 71151, "Performance Indicator Verification."
8. Status of remote or alternate shutdown panel areas, including locally required procedures, materials, or communications equipment needed to perform any required actions from these areas.

E. PROBLEM IDENTIFICATION

Review the licensee's corrective action entries and documents. The purpose of reviewing entries in the corrective action system is to verify that issues are being entered properly (e.g., unplanned or repetitive TS action statement entries should be entered into the licensee's corrective action system); to be knowledgeable of the licensee's disposition of issues with respect to operability and reportability; to verify that there was an evaluation of safety/risk significance and priority for resolution; and to use the insights gathered from the licensee's problem identification process to help focus the baseline inspection activities. IP 71152, "Identification and Resolution of Problems," has additional information on how to conduct inspections of problem identification and resolution activities.

Periodically observe licensee management's review of plant deficiencies by attending meetings such as the plant operations review committee (PORC) and off-site nuclear review board meetings. The inspector should be knowledgeable of major findings from licensee self-assessment activities.

END