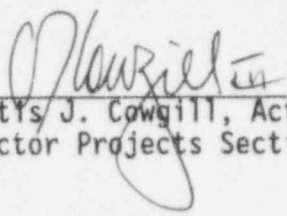


U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

Report No.: 95-80  
Docket No.: 50-333  
License No.: DPR-59  
Licensee: New York Power Authority  
P.O. Box 41  
Lycoming, New York 13093  
Facility: James A. FitzPatrick Nuclear Power Plant  
Location: Scriba, New York  
Dates: May 1, 1995 through May 12, 1995  
Inspectors: E. Carpenter, Project Manager, NRR  
G. Hunegs, Senior Resident Inspector, Indian Point 2  
E. Knutson, Resident Inspector, Ginna  
D. Weaver, Reactor Systems Specialist, AEOD

Approved by:

  
Curtis J. Cowgill, Acting Chief  
Reactor Projects Section 1B, DRP

6/29/95  
Date

Scope: Announced team inspection to evaluate the effectiveness of the FitzPatrick processes for identifying, resolving, and preventing issues that degrade the quality of plant operations. Included in this inspection was a review of selected management oversight processes and an examination of recent staff initiatives to improve overall station performance.

Results: The NRC assessment is summarized in the Executive Summary. Details are provided in the full inspection report.

## EXECUTIVE SUMMARY

### James A. FitzPatrick Nuclear Power Plant

#### Inspection Report No. 50-333/95-80

**Corrective Action and Root Cause Programs:** The licensee had taken several significant actions to address the plant performance deficiencies that were identified in the previous Systematic Assessment of Licensee Performance report.

The corrective action program was considered to be well-structured. Based on plant and equipment walkdowns, the threshold for identification of problems was determined to be acceptable. The root cause analysis process was effectively used and appropriately identified the root causes of events. However, corrective actions were not always fully effective in preventing the recurrence of some problems. For example, some analyses appeared to be narrow in focus and did not comprehensively address long-term corrective actions.

**Operating Experience (OE) Feedback:** The process used to screen, evaluate, track, assess and develop necessary corrective action is well-defined. A dramatic reduction in the number of items that the licensee considered overdue was noted. Overall, the operating experience program was improved. However, the team concluded that the licensee's reviews were not always comprehensive in that some aspects of the OE were not reviewed or that similar licensee problems were not considered. Additionally, licensee audits had not identified these weaknesses.

**Self Assessment:** Several formal self assessment programs have been established including the management observation program, independent assessment and quality assurance. In these areas, the quality assurance audits were assessed to be improved, but there did not always appear to be an adequate resolution to identified problems. Value is added by the management observation program. The Performance Enhancement Review Committee program was a strength in that it provides a method for timely management involvement with and communication of performance issues.

The Results Improvement Program was considered to be a good initiative and it appears that senior management has continued to emphasize the program.

**Management Processes:** Daily supervisor meetings, plant leadership team (PLT), daily department management meetings, and plant operation review committee meetings were effective in helping to ensure that personnel were aware of overall plant status and to establish expectations, standards and priorities. The meetings were well controlled and conducive to providing focused attention to issues. Of particular note was the system engineer presentation program, which was considered to be a useful initiative.

The Operations Review Group contributed positively to plant performance.

The inspectors concluded that the SPEAKOUT program appeared to have the attributes of a solid program.

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### ATTACHMENT

#### 1. Exit Meeting Attendees

NOTE: The NRC inspection manual procedure or temporary instruction that was used as inspection guidance is listed for each applicable report section.

## DETAILS

### 1.0 CORRECTIVE ACTION PROGRAMS AND ROOT CAUSE EVALUATIONS

The stated purpose of the licensee's corrective action program is, "to improve upon the safe, reliable and efficient generation of electricity through timely problem identification, thorough assessment, and implementation of effective corrective actions to prevent recurrence." The elements of the program are problem identification, assessment of significance and priority, determination of cause, implementation of timely corrective actions to prevent recurrence, and tracking corrective actions. Periodic trending is performed to determine the effectiveness of these processes.

#### 1.1 Previous Systematic Assessment of Licensee Performance Report

The Systematic Assessment of Licensee Performance (SALP) Report for the period ending April 9, 1994 discussed several positive aspects of plant operations at FitzPatrick, but also brought attention to several areas where additional efforts to resolve some previous performance deficiencies required management attention. These areas included housekeeping, longstanding equipment problems, material condition, and the impact of the backlog of engineering and technical services work. In the operations area, heightened awareness on the part of operations and management of minor procedural deficiencies and attention to detail was warranted. There were some instances of inadequate procedural adherence, poor work control, and untimely corrective actions in the maintenance area. Additionally, procedural adherence problems continued to occur in the radiation protection area. Backlogs in both the Site Engineering and Technical Services organizations adversely affected their ability to promptly resolve some existing or emerging issues.

The inspectors reviewed several actions developed by the license to improve performance for deficiencies identified in the previous SALP report. Action has been taken and programs have been established and/or revised to address the weaknesses identified in the SALP. The inspectors noted that the deficiencies discussed in the SALP report have corrective actions assigned in the plant action commitment tracking system (ACTS). In addition to the specific ACTS items that have been assigned, the major areas that the licensee is trying to address are, 1) reduce the backlog of corrective maintenance work requests, 2) improve human performance by emphasizing procedure adherence and self-checking, and 3) improve processes for engineering and radiation protection.

The deviation and event reporting and analysis programs have been enhanced to provide more focus on personnel error. Personnel error rates by department are tracked on the quarterly trend report. Several recent trend reports were reviewed to assess the effectiveness of these corrective actions. These reports showed that personnel errors are still a major contributor to performance deficiencies, but that progress has been made.

To improve procedure compliance, several programs are evident. An aspect of the procedure upgrade program is to help ensure compliance through improved procedure clarity. The management observation program is an internal appraisal program designed to reinforce plant standards, and identify and correct deficiencies. Tailgate meetings are weekly department meetings to

discuss standards, expectations, and lessons learned. Training has been conducted to emphasize the expected work practices, including procedure adherence, procedure errors, attention to detail, and self checking. Management attention to reduce personnel errors is ongoing.

The team concluded that the licensee had taken several significant actions to address the plant performance deficiencies that were identified in the SALP.

## 1.2 Deviation and Event Reporting Process

The deviation and event reporting process was implemented in April 1993, and its purpose is to provide a single entry process to identify problems and to take timely corrective action to prevent recurrence. The governing instruction for this system is administrative procedure (AP)-03.02, "Deviation and Event Reporting." The procedure provides instruction for initiation, classification, and initial review of abnormal conditions or abnormal events through deviation/event reports (DERs). DERs are initiated to identify abnormal events or deviations from expected results, and to evaluate the impact of abnormal events at other plants in order to prevent the event at the facility. The DER program provides a method to initiate a process for corrective action for abnormal or adverse conditions. The program defines the actions to take for notification of events, operating events and near misses. DERs are screened by operations personnel for reportability and operability, reviewed by management, screened by the Operations Review Group, reviewed by the Plant Leadership Team, and evaluated. Trending is also conducted. The work planning process is integrated with the DER process.

### 1.2.1 Deviation/Event Report Review

#### Internal System/Component Cleanliness Control

The team reviewed completed DER 94-1233, which addressed a high incidence of foreign material in the reactor vessel that occurred during the 1994/95 refueling outage. The team considered this problem to have potential safety impact because fuel failure can be caused by debris intrusion into the reactor coolant system. The team noted that a pre-outage brief had been conducted on industry operating experience regarding poor foreign material exclusion (FME) practices.

DER 94-1233 noted 12 prior DERs that addressed specific foreign material exclusion incidents involving the reactor vessel. Subsequent investigation identified an additional 44 relevant DERs, which were added for evaluation under DER 94-1233. Corrective action was tracked under ACTS 13828.

The licensee concluded that the majority of the reactor vessel FME problems were the result of the core shroud repair that was being performed by a contractor. The licensee considered the causes of these problems were:

- The need to perform simultaneous operations using remote operators in a small working space (the reactor vessel annulus);
- Inexperienced contract workers; and,

- Application of new repair techniques that had not been fully proven through actual application.

As a result of Performance Enhancement Review Committee review, a number of near-term corrective actions were initiated:

- A stand-down was ordered to review procedures and work practices, and to reinforce management's expectations with regards to reactor cavity/refueling pool FME requirements;
- The roles and responsibilities of refueling floor supervisors, coordinators, and monitors were reviewed with these personnel;
- Entry control to the foreign material exclusion zone was tightened;
- Upper level contractor management was brought in to improve contractor performance; and,
- Additional experienced personnel were added to the shroud repair teams.

In addition, the licensee verified that all materials that had been introduced into the reactor cavity were identified and either removed or analyzed for their effect on reactor safety. However, given that the high incidence of FME problems was associated with a one-time maintenance activity (the core shroud repair), no long-term corrective action was developed. ACTS 13828 was closed on March 13, 1995, and DER 94-1233 was closed on March 15, 1995.

The team considered that the licensee's actions in response to reactor vessel FME problems that occurred during the 1994/95 refueling outage adequately addressed specific deficiencies. The team reviewed the licensee's loose parts analysis and safety evaluation, and concluded that the potential effects of the foreign materials that remained in the reactor vessel had been adequately addressed. However, the team considered that closure of DER 94-1233 was premature, in that long-term corrective action apparently had not been thoroughly examined. The team noted that the licensee made a similar observation in their first quarter 1995 self-assessment report (JORG-95-195, dated May 3, 1995), stating that, "FME DER evaluations performed to date have only addressed the effect of specific FME events, through lost parts analysis and safety evaluation. Why there were so many FME events this outage and what should be done to prevent them in the future has not been addressed." Additionally, in Quality Assurance Surveillance Report, SR-1759, "Foreign Material Exclusion," dated March 30, 1995, 11 recommendations to improve FME controls were presented. At the time of this inspection, the licensee was in the process of reviewing the recommendations of these reports.

#### **A-Emergency Diesel Generator Output Breaker Trip During Surveillance Testing**

On the morning of May 9, 1995, operators were performing surveillance test ST-9B, "EDG Full Load Test and ESW Pump Operability Test." When the operator closed the A-Emergency Diesel Generator (EDG) onto its associated 4160-volt bus (bus 10500, normally supplied by either the main generator or offsite power) and adjusted the A-EDG controls to assume electrical load, the

generator did not respond as anticipated. Although output current increased, the generator watt meter remained at zero and bus 10500 voltage increased. While the operator continued attempts to increase load on the generator, another operator independently attempted to lower bus voltage. While these adjustments were in progress, the A-EDG output breaker (breaker 10502) tripped. The surveillance test was stopped and the A-EDG was declared inoperable. The event was reported in DER 95-0844.

The licensee established an event review team to investigate the breaker trip. Written statements were obtained from personnel that had been involved in the test. The team developed an extensive troubleshooting plan to verify the operability of individual components and to confirm that no equipment damage had occurred as a result of the transient. No equipment problems were identified as a result of this testing. During a subsequent test start of the A-EDG, the team noted that the initial generator output voltage was higher than normal. Generator voltage was returned to normal by use of the voltage control switch, indicating that the voltage regulator was operating properly. Since adjustment of generator output voltage can only be made with the EDG operating (that is, voltage had not been changed during the course of troubleshooting), the observed high generator output voltage had existed at the time of the breaker trip. Such a mismatch between generator and bus voltage would have produced high current, but no real load on the generator (as was observed during the event), and could have caused the breaker to trip due to overcurrent.

The event review team concluded that operator error was the most likely cause of the breaker trip. The EDG governor control switch (used to control real load) and the voltage control switch are located one above the other on the control panel, and have identical handles. The surveillance test procedure directs the operator to assume load on the EDG, as soon as the output breaker is closed, by operating the governor control switch. Since the meters that provide indications of this adjustment are located on a vertical panel above the control switch, the operator typically is not looking at the switch during such an adjustment. The team concluded that the operator had inadvertently positioned his hand on the voltage control switch rather than the governor control switch when attempting to assume load on the generator. Raising generator voltage prior to having assumed any real load resulted in circulating current between the generator and the bus. By lowering bus voltage, the second operator increased the voltage difference, thereby increasing the current flow. Between these two actions, current flow reached the overcurrent trip setpoint and caused the A-EDG output breaker to trip.

Based on this conclusion, along with the results of troubleshooting and operational testing, the A-EDG was returned to service on May 10, 1995. As a precaution against a possibility that an intermittent equipment problem had caused or contributed to the event, the monthly surveillance test frequency was increased to weekly for a one month period. Additional corrective action included: a procedure change directing the operator to open the EDG output breaker if similar abnormal indications are observed; evaluation of the desirability of changing the shape of one of the two control switch handles; evaluation of the need for additional operator training; and briefings on the event to operations department personnel. Corrective actions were in progress

at the close of this inspection, and the event was scheduled to be discussed by the Performance Enhancement Review Committee.

The team concluded that the corrective action program had been effectively employed in dealing with the inadvertent trip of the A-EDG output breaker. Equipment operability was thoroughly addressed and resulted in the A-EDG being promptly returned to service. Performance issues, revealed during the course of equipment troubleshooting, were also appropriately considered, and, within the period of this inspection, promptly addressed.

Based on plant and equipment walkdowns, the threshold for identification of problems was determined to be acceptable. The DER process was determined to be an effective component of the corrective action program. Review of DERs showed that examination of significant events and issues had been generally good. Review of routine corrective actions reports indicated that the level of review was appropriate to the significance of the issue and that the reviews were generally completed in a timely fashion. However, corrective actions were not always fully effective in preventing the recurrence of some problems. For example, in some cases, the analyses appeared to be narrow in focus and did not comprehensively address long-term corrective actions.

### 1.3 Root Cause Analysis

Administrative Procedure AP-03.03, "Deviation and Event Analysis," provides the methodology for evaluating deviations and events, identifying their causes and recommending corrective action to prevent their recurrence. The procedure is extensive and provides a clear process for determining the fundamental causes of events. Human performance and equipment failure evaluations are clearly described. A "Root Cause Analysis Report Form" is included as an attachment and provides a solid extensive format to identify causes. Root cause analysis (RCA) provides an in-depth evaluation of the causes of DERs. The RCA consists of 5 phases: investigation; analysis; human performance evaluation; cause validation; and recommended corrective actions. Procedure 1 provides guidance on the method to complete the RCA. The inspectors reviewed several completed RCAs and determined that the process was effectively used and appropriately identified the root causes of events.

## 2.0 OPERATING EXPERIENCE (OE) FEEDBACK

### 2.1 OE Review Program

The licensee's OE program includes the review of a comprehensive list of NRC, INPO and vendor documents. Each document is initially screened for applicability to the licensee. The screening process promptly and conservatively selects documents for a detailed evaluation. The goal set for the screening process is to complete the initial screening in ten days. OE documents slated for evaluation are tracked by initiating a DER. An Action Commitment Tracking System (ACTS) item is simultaneously opened to allow middle management to track the status of the evaluation. Overdue ACTS items are reviewed by upper management on a weekly basis as a minimum. The goal for completion of the evaluation process is 30 days from assignment. Evaluations



are conducted by responsible licensee personnel and should address each concern raised in OE documents and provide the licensee's response.

There were 16 program items open for evaluation at the time of the inspection. Twelve of these items exceeded the site's goal of completing evaluations within 30 days. Most of the overdue evaluations were just a few weeks beyond the due date; however, there was one item still open from 1993 and two from 1994. These numbers represent significant improvement over the number of open items reported in the annual audit of the OE program conducted on January 20, 1995. There were 20 pre-1994 evaluations and 15 evaluations started in 1994 open at the time of the audit. The reduction of open items reflects increased management attention to the OE program.

### **2.1.1 Review of Specific OE Issues**

#### **High Pressure Coolant Injection Rupture Disc Failure**

General Electric Service Information Letter (GE SIL) 580, dated May 6, 1994, was received by the licensee on May 18 and screened on May 19. The evaluation was assigned a due date of June 18 and was completed on June 29. The evaluation was deficient in that it did not recommend a review of a Technical Specification Limit covered by the SIL. The SIL addressed changes in the design bases for a Technical Specification setpoint for pressure switches in the HPCI and RCIC systems. Specifically, the SIL raised concerns about the setpoint of the pressure switches that sense pressure between the exhaust line rupture diaphragms of both the HPCI and RCIC systems. The team concluded that the licensee did not fully evaluate the additional design bases information contained in the SIL with respect to setpoints and their Technical Specifications. The licensee has opened Technical Specification Change Request (TSCR) 95-007 to review this issue.

#### **Damaged Fuel Bail During Refueling Operations**

The team reviewed INPO Significant Event Report (SER) 94-04 issued March 16, 1994. The SER was received on March 17 and screened on March 18. The evaluation assigned due date was April 20, the evaluation was completed on April 19. The SER is titled "Human Performance Problems During Reactor Core Component Handling Activities." This SER contained a review of several industry events related to fuel handling. The SER listed 6 lessons learned from these events. The licensee evaluation looked at the specific details of each event, but it did not evaluate the recommendations contained in the lessons learned. The team noted that a critique of a fuel handling event that occurred at FitzPatrick on February 22, 1995 specified causes similar to those covered in the lessons learned of SER 94-04.

### **2.1.2 Licensee Audits of the OE Program**

The inspector reviewed the two most recent annual audits of the OE program conducted by the Quality Assurance (QA) Department. The inspector also reviewed the most recent Quarterly Assessment of the OE program conducted by the Operating Experience Coordinator (OEC).

QA Audit No. 94-04J, dated March 21, 1994, assessed the OE program during 1993. The audit consisted of comparing a checklist of attributes to a sample of 10 OE documents. The audit concluded that the program was effective. However, the inspector identified several weaknesses in this audit. The audit did not comment on the large number of overdue evaluations open at the time, nor did it contain an in-depth analysis of any of the evaluations that were completed.

QA Audit 95-03J, dated February 21, 1995 constituted an improvement over the 1994 audit. Audit 95-03J looked at a larger cross-section of documents and also contained more in-depth comments. The inspector noted an improved safety perspective by the auditor. The issue of overdue evaluations was addressed in some detail, and the potential impact of these overdue evaluations was addressed.

The inspector reviewed the most recent Quarterly Assessment performed by the OEC. The Quarterly Assessment was completed April 6, 1995, and covered the 4th quarter of 1994. The Quarterly Assessment also reviewed the licensee's response to SER 94-04 and concluded that no deficiencies existed. The inspector noted that the guidance for both the Annual Audit and the Quarterly Assessment contains an item to assess the adequacy of evaluations. The guidance in each case directs the auditor to verify that each concern raised in the OE document is addressed by the evaluation, but this was not done.

In summary, the team concluded that overall, the OE program had improved. Improvements were noted in the reduction of outstanding evaluations, the initial screening process, and the tracking mechanisms. However, the team concluded that the licensee's reviews were not always comprehensive in that some aspects of the OE were not reviewed or that similar licensee problems were not considered. Also, licensee audits had not identified these weaknesses.

### 3.0 SELF-ASSESSMENT

There are several programs that FitzPatrick uses for self-assessment processes, including management observations, quality assurance program, independent assessment, performance enhancement review committee (PERC), and other trend and performance indicators. These programs are described in the following administrative procedures:

AP 03.02	Deviation and Event Reporting
AP 03.07	Internal Appraisal
AP 03.08	Action and Commitment Tracking System
AP 03.09	Results Improvement Program

The programs established by these procedures are well structured. However, in spite of good administrative control procedures, well defined corrective action programs and processes, and a high level of senior station management involvement and oversight, the licensee has not been totally effective in program implementation.

Based on interviews with station management and staff, and reviews of DERs and Quarterly trend reports, the team concluded that performance problems such as procedural adherence, inattention to detail, lack of self-checking, and poor radiological work practices appeared to have increased at a rate greater than the overall work activities. The team noted that station management efforts to re-emphasize and heighten worker awareness of management expectations in these areas has increased.

The licensee's self assessment initiatives, including the management observation program and monthly evaluations by the site senior assessment engineer, have been effective and have made positive contributions to overall station performance. Also, the Quality Assurance department has maintained effective day-to-day oversight and performed effective audits of various station programs. Recent initiatives to reorganize and improve the overall effectiveness of the nuclear engineering staff appear to have been well researched and formulated. However, these engineering initiatives are in the initial stages. Short-term improvements in communications and coordination of engineering activities, including engineering tasks backlog reduction, have demonstrated positive results. Long term improvement was not assessed.

### 3.1 Licensee Management Observation Program

Licensee managers are assigned to routinely observe various activities, including training, maintenance, calibrations, operator rounds, testing and housekeeping, to ensure that these activities are being adequately performed. These observations assess and evaluate training effectiveness, work practices, safety rule compliance, adherence to procedures, procedure quality, material condition, placement of scaffolding, and migratory equipment. If a deviation or event is discovered, a deviation/event report (DER) is initiated. Further, a report of the manager's observations are provided to the General Manager-Operations, with a listing of recommended corrective actions.

One backshift management observation of a calibration was observed by the team. The manager was knowledgeable in the activities to be performed, was attentive to procedural adherence and quality, evaluated plant material condition and ensured that workers cleaned up the general area afterwards. The manager further ensured that safety rules and ALARA practices were followed. Discussions with the manager showed that he was conversant with the requirements of AP 03.07, and that he had performed several such inspections.

The management observation practice appears to be a good initiative, adding value by ensuring management presence during backshifts and in verifying that the various activities are being adequately performed.

### 3.2 Quality Assurance Program

The inspectors reviewed several quality assurance (QA) audits that spanned an 18-month period. Further, the inspectors interviewed several QA inspectors and observed one shop QA verification.

The QA on-site organization has improved the depth and quality of their audits in the past six months. It appears that the licensee is making a concerted effort to more thoroughly review and critique plant activities. However, while the program appears to have a sufficiently low threshold for identifying problems, there does not always appear to be an adequate resolution to these problems. This was exemplified by the problems the licensee experienced with foreign material exclusion (FME) during the 1995 Refueling Outage. Approximately 68 instances of inadequate FME control occurred during the outage, despite several Deviation/Event Reports which documented earlier instances of loss of FME control.

### 3.3 Independent Assessment

The inspectors reviewed the past six months of evaluations performed by the site senior assessment engineer. The evaluations covered a wide variety of activities and were typically concise as to recommended actions. However, it was not always clear from the reports how the conclusions were supported by the stated observations. For instance, while the reports generally repeated an overall inattention to detail trend, the conclusions typically repeated that overall performance remained good.

### 3.4 Performance Enhancement Review Committee

The Performance Enhancement Program established the Performance Enhancement Review Committee (PERC). PERC meetings are typically held on a weekly basis to discuss actions taken to address problems or events that occurred recently. The PERC meeting attendees are typically chaired by the Resident Manager with attendance typically including the General Managers. The purpose of the meetings is to provide for a timely review of events by management and an assessment of the accuracy and adequacy of root cause evaluations and critiques or responses for significant personnel errors, including corrective actions.

The PERC was implemented in October 1994. PERC membership and responsibilities are described in AP-03.03, "Deviation and Event Analysis." The committee meets weekly and reviews all significant human error events and human performance issues. PERC also reviews evaluations of human performance events when they are completed. The main focuses of PERC are the identification and correction of human performance event causes, ensuring clear and concise expectations for procedure use and adherence and the use of self-checking to perform tasks.

The inspectors attended a PERC meeting on May 5, 1995. Four DERs concerning personnel performance were discussed in detail. All four were determined to be caused by inattention to detail. The DERs reviewed concerned some radiation worker practices, a battery acid spill, and an improper procedure change. The inspectors noted good discussions that resulted in several recommendations to improve performance. Several questions related to determining the causes of events were raised, and management provided direction for additional investigation. Lessons learned were developed to be presented at the weekly "tailgate" meetings.

The inspectors reviewed other PERC meeting agendas and minutes and determined that the threshold for event significance was appropriate and that the events selected for discussion provided a good focus on personnel errors. The inspectors concluded that the PERC process was an effective means for senior station management to communicate expectations for personnel performance.

### 3.5 Results Improvement Program

The Results Improvement Program (RIP) is a plan of continuous improvement for the life of the plant. The process is described in AP-03.09, "Results Improvement Program," which formalizes the management methods used to remedy issues and improve performance.

A general review of the program was conducted during this inspection. Based on this review, it appears that senior management has continued to emphasize the RIP and the inspectors considered the program to be a good initiative.

#### 3.5.1 Design Engineering Reorganization

Several recommendations for engineering department performance improvements were generated as a result of working group review assigned from the RIP. A recommendation with significant impact was to reorganize the engineering department. This reorganization is currently in progress.

The goals of the reorganization are to increase engineering responsiveness to plant needs, improve work management with engineering, and develop design engineering into a "high performance team" that is capable of internally performing all engineering functions. Based on a review of design engineering performance indicators, including overdue items, modifications, and other engineering work items, the licensee has made significant progress in engineering department improvements.

Another recent initiative was that an engineering assurance (EA) program was established to formalize self-assessment in the engineering area. The purpose of the EA program was to provide a performance and trending method to track and measure the effectiveness of the engineering process and to institute improvements. Although the EA program is very recent, based on a review of the purpose, objectives and functions of the EA program charter, the inspectors considered that the establishment of EA was a good self-assessment initiative.

The inspectors reviewed a response to DER-94-0184, for which an action plan was developed. The main propose of the action plan, dated March 23, 1995, was to improve the following areas in engineering response to DERs: timeliness; quality and adequacy of responses; completeness of the proposed action plans; and the ability to carry out action plans on schedule. The action plan included items such as training engineering personnel on the DER process and establishment of trending processes. The action plan was considered to be well thought out.

## 4.0 MANAGEMENT PROCESSES, SAFETY COMMITTEES

The licensee has established several processes to communicate management expectations. These processes include routine management meetings, formal review programs and other formal presentations. An example of formal communication to staff is the weekly tailgate meeting that is conducted for each department. Typical topics that are discussed at the tailgate meetings include safety, lessons learned from plant events and a review of the plant trend report. Several reports are developed and periodically reviewed by senior site management. These reports include the corrective action monitoring program report that documents and trends the number of issued, closed, open and overdue items. The report also highlights items for management action. An extensive monthly report describing plant performance indicators is generated. At the routine meetings, department manager action items are reviewed and discussed. The inspectors also noted that a pre-outage brief was conducted to reinforce management expectations in the area of procedure adherence and work practices.

#### **4.1 Operations Review Group (ORG)**

##### **4.1.1 ORG Trend Reports and Performance Indicators**

The ORG is the licensee organization responsible for management of the DER program. In addition to DER processing, the ORG identifies lessons learned through review of DERs. The ORG analyzes the DER data to identify adverse trends in accordance with AP-03.03, "Deviation and Event Analysis." Trend reports are developed and adverse trends are identified and recommendations developed for corrective action. Based on observations and review of ORG activities, the inspectors determined that the ORG contributed positively to plant performance.

#### **4.2 Routine Meetings**

##### **4.2.1 Daily Supervisor Meeting**

The daily supervisor meeting is chaired by the Operations Department and discusses plant status, emergent work, changes in the daily work plan, and reviews plant priorities and action items. The inspectors attended several of these meetings and found the meetings to be effective.

##### **4.2.2 Plant Leadership Team**

The plant leadership team (PLT) consists of the Resident Manager and other senior site managers. The mission and charter as described in STD-1.800, "Plant Leadership Team," is to establish standards and goals, provide priorities and long term vision for operating, and to provide effective oversight. The PLT was established as a result of previously identified deficiencies in management methods, in part, to establish expectations and standards, priorities and communication. The Resident Manager uses the meeting to establish expectations of staff and priorities for the resolution of plant issues. The meeting involves a review of plant status based on daily operations logs, DERs, and input from meeting attendees. The focus is on nuclear and industrial safety and management expectations for professionalism

and performance. There are RIP improvement areas established that are periodically reviewed by the PLT.

The inspectors attended several PLT meetings and based on the discussions, concluded that the PLT was an effective method and good forum for senior management to focus on day-to-day as well as long term issues.

#### 4.2.3 Daily Department Manager's Meeting

During the two weeks onsite, the inspectors attended the daily department manager's meeting. The daily topics for the meetings included plant status, locked-in control room alarms, priorities of the day, department manager action items, health physics and chemistry performance, industrial safety performance, and industry information. Additional topics are scheduled on a rotating basis including human performance events, DERs, and self assessment reports. The inspectors concluded that the meetings were well controlled and conducive to providing focused attention to issues.

#### 4.3 System Engineering Presentation

System Engineering presentations are conducted weekly by the responsible system engineer. Described in procedure TSSO-24, "System Presentation," the purpose is to give a detailed overview of a system's current status, including maintenance requirements, system performance, outstanding action items/commitments, and planned or proposed modifications. Other departments have the opportunity to discuss items.

The inspector observed a presentation for the high pressure coolant injection system given by the system engineer. Items discussed included major system issues, system status, open problem identifications and work requests, and an overall assessment of the system. The system status included current open temporary modifications, control room deficiencies, challenges to operability, industry comparison based on nuclear plant reliability data system (NPRDS) component failure analysis reports, DERs, and regulatory issues.

The inspectors considered the system engineering presentation to be a useful initiative. The program helps to establish the system engineer as the focal point for system performance and issues. The inspectors noted that the presentations are used by management to understand issues and to establish priorities. It was noted that followup items are identified and tracked.

#### 4.4 Onsite Review Committee

The inspectors observed Plant Operations Review Committee (PORC) meetings on May 3 and May 10, 1995. Based upon these limited observation opportunities, the team found the PORC to have been effective in their review and oversight function. Agenda topics were consistent with committee oversight responsibilities and appropriately presented for committee review. Observed discussions by the members were viewed as consistent with the relative significance of the issue. Areas warranting further review or additional detail were appropriately tabled for follow-up discussion during a future committee meeting.

#### 4.5 Employee Concerns Program

The employee concerns program is termed the nuclear safety SPEAKOUT program. The program has been in effect since March 1994. It is an additional method for employees and contractors to express concerns in a manner that protects the worker and assures that the concerns are addressed. In addition to nuclear safety, harassment and discrimination issues can be referred to the SPEAKOUT program. Personnel are made aware of the program through general employee training, tailgate meetings and other publications. Procedure NSS-1, "Nuclear Safety SPEAKOUT Program," clearly describes the program, personnel responsibilities and the process. The program provides for an initial review of concerns to assess nuclear safety, the conduct of exit interviews for personnel departing the station and the impression of program independence by the SPEAKOUT evaluation committee makeup and reporting requirements. Tracking and trending of issues is also performed. Based on interviews with plant personnel, the inspectors concluded that personnel are familiar with the program. The inspectors concluded that the SPEAKOUT program appeared to have the attributes of a solid program.

#### 4.6 Nuclear Generation Department Business Plan

The inspectors reviewed the October 1994 Nuclear Generation Department Business Plan. The plan is an approach to identify key objectives and strategies for the licensee. The inspectors noted that the plan identified nuclear generation performance problems and defined the organization's focus and priorities for improving overall performance. The inspectors concluded that the Nuclear Generation Department Business Plan, by defining the licensee's mission and goals, was an effective tool to provide an overall direction for the licensee to improve station performance.

#### 5.0 INTERVIEW

The inspectors discussed the issues in this report with the cognizant licensee management throughout the inspection period and summarized the findings at an exit meeting with the Plant Manager, Mr. H. Salmon, on May 12, 1995.



Attachment 1

**Exit Meeting Attendees**

<u>Name</u>	<u>Title</u>
D. Lindsey	General Manager, Maintenance
F. Edler	Technical Services Manager
H. Salmon	Resident Manager
M. Colomb	General Manager, Support Services
L. Doerflein	NRC
C. Carpenter	NRC
D. Weaver	NRC
E. Knutson	NRC
J. Foley	ORG Manager
W. Comstock	Quality Specialist II
R. Converse	Senior Assessment Engineer
J. Romanowski	Operations Training Supervisor
G. Hunegs	NRC
A. Zaremba	Licensing Manager
D. Kieper	Instrumentation & Control Manager
A. Halliday	Maintenance Manager
R. Wiese, Jr.	Outage Coordinator
D. Wallace	Manager, Engineering Support
R. Locy	Operations Manager
D. Ruddy	Director, Design Engineering
Mr. Tresler	Consultant to VP Engineering
T. Dougherty	VP Nuclear Engineering
D. VanDermark	QA Manager
R. Steigerwald	ORG Specialist
W. Berzin	Manager of Communications