January 14, 2004

Mr. T. Palmisano
Site Vice President
Monticello Nuclear Generating Plant
Nuclear Management Company, LLC
2807 West County Road 75
Monticello, MN 55362-9637

SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT
NRC PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION
REPORT 50-263/2003009

Dear Mr. Palmisano:

On December 5, 2003, the U.S. Nuclear Regulatory Commission (NRC) completed a team inspection at the Monticello Nuclear Generating Station. The enclosed report documents the inspection results which were discussed on December 5, 2003, with you and members of your staff.

This inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems, compliance with the Commission's rules and regulations and with the conditions of your operating license. Within these areas, the inspection involved selected examination of procedures and representative records, observations of activities, and interviews with personnel. No findings were identified.

On the basis of the sample selected for review, the team concluded that in general, problems were being properly identified, evaluated, and corrected. While no findings were identified during the inspection, the team had several observations regarding the effectiveness of corrective action program implementation as detailed in the enclosed report. The observations are not limited to one or two organizations, indicating to us that your staff may not fully understand or appreciate the importance of the corrective action process.

In addition to the observations, the team is concerned that the corrective action program at Monticello continues to be in transition. This inspection is the third PI&R inspection in the last thirty months. During the first inspection site personnel indicated the program was in transition. We followed up the initial inspection only to find the program still in transition. At the beginning of the current inspection we were again informed that the program is in transition. While we identified a number of enhancements your staff had made to the program prior to our inspection, and a number of enhancements your staff plans to implement, we remain concerned of the protracted amount of time the program has been in a state of change. At the exit, we requested that you provide a schedule for when the corrective action program enhancements planned for implementation will be fully implemented.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

***/ RA /***

Bruce L. Burgess, Chief
Branch 2
Division of Reactor Projects

Docket No. 50-263
License No. DPR-22

Enclosures: Inspection Report No. 50-263/2003009
w/Attachment: Supplemental Information

cc w/encl: J. Cowan, Executive Vice President
and Chief Nuclear Officer
Manager, Regulatory Affairs
J. Rogoff, Esquire, Vice President, Counsel and Secretary
Nuclear Asset Manager, Xcel Energy, Inc.
Commissioner, Minnesota Department of Health
R. Nelson, President
Minnesota Environmental Control Citizens
Association (MECCA)
Commissioner, Minnesota Pollution Control Agency
D. Gruber, Auditor/Treasurer,
Wright County Government Center
Commissioner, Minnesota Department of Commerce
Manager - Environmental Protection Division
Minnesota Attorney General's Office

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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

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|---|---|
| Docket No: | 50-263 |
| License No: | DPR-22 |
| Report No: | 05000263/2003009 |
| Licensee: | Nuclear Management Company, LLC |
| Facility: | Monticello Nuclear Generating Plant |
| Location: | 2807 West Highway 75<br>Monticello, MN 55362 |
| Dates: | November 3, 2003, through December 5, 2003 |
| Inspectors: | G. Wright, Project Engineer - Team Lead<br>Robert Orlikowski, Resident Inspector<br>Michael Jordan, Consultant |
| Approved by: | Bruce L. Burgess, Chief<br>Branch 2<br>Division of Reactor Projects |

Enclosure

## SUMMARY OF FINDINGS

IR 05000263/2003009; 11/3/2003 -12/05/2003; Nuclear Management Company, LLC; Monticello Nuclear Generating Plant; Identification and Resolution of Problems.

The inspection was conducted by one region-based inspector, one resident inspector and one consultant. No findings of significance were identified.

### Identification and Resolution of Problems

In general, the plant identified issues and entered them into the corrective action process at an appropriate level. Nuclear Oversight (NOS) assessment reports identified issues for the plant to resolve, including issues with corrective action follow through and effectiveness. The majority of issues reviewed were properly categorized and evaluated although some evaluations were narrowly focused, particularly for cause evaluations. In general corrective actions reviewed were appropriately implemented and appeared to have been effective. While no findings were identified during the inspection, the team developed a number of observations including:

1. Weaknesses in trending issues,

2. Level of detail and information provided in assessments was not always sufficient to allow the reader to reach the same conclusion as the author(s).

3. Actions to correct conditions (ACCs) were not always handled in a manner to ensure that corrective actions were acceptable to the original reviewer of the condition report.

4. A number of assessments were overly narrow in their focus resulting in missed opportunities to identify broader or secondary causes.

5. The quarterly performance assessment program has made a positive impact on the corrective action program. The team, during discussions with the licensee, identified program guidance and implementation enhancements which would improve the program's effectiveness.

## REPORT DETAILS

## 4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution

.1 Effectiveness of Problem Identification

a. Inspection Scope

The inspectors reviewed NRC inspection report findings issued over the last 2 years, selected plant corrective action documents, Nuclear Oversight (NOS) assessments, operating experience reports and trend assessments to determine if problems were being identified at the proper threshold and entered into the corrective action process. The inspectors also conducted a focused plant walkdown of the High Pressure Coolant Injection System (HPCI) to ensure that equipment problems were entered into the corrective action system. The documents used during the review are listed in Attachment 1.

b. Observations

In general, the plant identified issues and entered them into the corrective action process at an appropriate level. NOS assessment reports identified issues for the plant to resolve and entered the deficiencies into the corrective action program (CAP). The licensee appropriately used the CAP to document instances where previous corrective actions were ineffective or inappropriate. The team's review also noted the following items:

b.1 Identification Threshold

The licensee had defined an adequate threshold for the identification of issues to be entered into the corrective action program. The corrective action documents are called condition reports (CR). The generation rate for CRs was appropriate with approximately 5500 general CRs written at the time of the inspection. Both the number and significancy level distribution of CRs appeared to be appropriate for the facility.

b.2 Operating Experience

The inspectors reviewed a sampling of industry operating experience (OPEX) reports and concluded that the licensee was appropriately including the issues in the CAP. Refer to Section .2.b.3 for additional information on operating experience.

b.3 Nuclear Oversight

The inspectors reviewed a sample of NOS assessment reports from the past 2 years and determined that the NOS staff, in general, was effectively identifying plant performance issues including issues with implementation of the CAP.

.2 Prioritization and Evaluation of Issues

a. Inspection Scope

The team reviewed previous NRC inspection reports and associated corrective action documents to verify that identified issues were appropriately characterized and entered into the CAP.

Inspection team members attended management meetings to observe the assignment of CR categories for current issues and the review of root, apparent, and common cause analyses, and corrective actions for existing CRs.

The team conducted an independent assessment of the prioritization and evaluation of selected CRs. The assessment included a review of the category assigned, the operability and reportability determinations, the extent of condition evaluations, the cause investigations, and the appropriateness of assigned corrective actions. Other attributes reviewed by the team included the quality of the licensee's trending of conditions and the corresponding corrective actions. The team also assessed licensee corrective actions stemming from Non-Cited Violations (NCVs) and Licensee Event Reports (LERs). This review included the controlling procedures, selected records of activities, and observation of various licensee meetings. In addition, the team conducted several interviews with cognizant licensee personnel.

The team likewise reviewed the licensee's efforts to capture industry operating experience (OPEX) issues in the CAP. Documents reviewed included the licensee's assessment of industry operating event reports, NRC, and vendor generic notices.

Information reviewed by the team dated back to the previous problem identification and resolution inspection conducted in 2001.

b. Observations

The team verified that in general the issues reviewed through the CR process were properly categorized and evaluated. However, the team had several observations regarding the licensee's trending program and the quality of its documentation. Details of the team's observations are described in the following subsections.

b.1 Overview of Prioritization and Evaluation Process

The corrective action process included a review of newly initiated CRs by the Management Review Committee (MRC) composed of senior plant management. The MRC reviewed the investigation class assigned to each CR. Within the licensee's program, an "1" was assigned to a Significant Condition Adverse to Quality (SCAQ) requiring a root cause evaluation, a "2" was assigned to a Condition Adverse to Quality (CAQ) requiring an apparent cause evaluation, and "3" was a CAQ requiring a condition evaluation to determine the proper corrective actions. A significance level "4" was also available for conditions that were not adverse to quality.

The team noted a number of assessments that were overly narrow in their focus resulting in missed opportunities to identify broader or secondary causes. For example:

-CR 02010480; Prim Cont Isolation function of TIP(Transverse Incore Probe) ball valves not considered during maintenance activity; dated 11/07/02 - This CR was written when maintenance on a TIP was conducted and a licensed operating crew recognized the LCO entry and took proper actions: however, during previously conducted maintenance on a TIP, a separate licensed operating crew did not recognize the entry into the LCO. The actions to prevent recurrence included changing a procedure to identify entering an LCO when performing this surveillance; however, neither the assessment nor the corrective actions addressed why a fully licensed crew did not recognize the LCO entry when the TIP was manually operated.

-XOE 03003868; OE15909 Uncontrolled locked high radiation area discovered in drywell resulted in tech spec violation; dated 4/11/03 - The condition report addressed the concern with the drywell not being posted as a high radiation area which was one of the issues in the OE. However, no actions were taken to address the cause for the high radiation area, which was flushing of a hydraulic line.

-CR 03008607; Corrective action for QAF 02000867 was not effective in resolution of FME concerns and deficiencies; dated 8/20/03 - Quality Assurance conducted an audit of FME concerns and determined the action to be not effective, and identified a potential cause to be "... that the supervisors are not enforcing or promoting higher standards." This potential cause was not addressed in the actions to close this CR.

The team also identified one CR where all available options did not appear to have been evaluated prior to formulating a corrective action.

-CR 03002298 Unexpected HPCI Turbine Inlet Hi Drain Pot Level Alarm C3-B-10 - The CR was written to evaluate actions regarding a recurring HPCI high level drain alarm. The recommended corrective action was to perform a vibration analysis on the system and then add additional bracing to the system to stop the vibration. It did not appear that alternatives were considered in addressing the sporadic alarm including alarm circuitry or consideration of age degradation on the alarm. A subsequent CR 03010262 provided additional solutions to the issue.

b.2 Trending Program

The team performed an in-depth examination of the licensee's trending activities as a follow-on to an observation made in the previous problem identification and resolution inspection.

With respect to the quality of the trending program, the team had the following observations:

- In the CAP coding area, the team noted that the licensee's trend analysis relied primarily on individuals. While the licensee used the computer system to generate lists of potentially related issues, it did not use the computer to identify potential trends. The lack of such computer enhanced trending tools limits the trending program's effectiveness.

- On a number of occasions, the team identified where an item was not included in a trend analysis because it was classified as "legacy." The team agreed with the logic; however, the team noted that the licensee had not provided any explanation as to why the item couldn't be a problem today. For example:

  > In Design Engineering's 2nd Quarter 2003 Effectiveness Report is a statement: "of the remaining eight CR's, two are old design documentation issues, one was determined to be a non-issue and one was due to issues not part of design engineering." No description was offered as to why the old design documentation issues couldn't be a current problem.

- The quarterly performance assessment program oversight panels (Process, Human Performance, and Equipment Performance), were appropriately reviewing their respective areas for trends and when appropriate, requesting further evaluations from individual site organizations.

b.3 Documentation

In general, the team found the licensee's documentation practices associated with the CAP to be weak. In several instances, the team was only able to successfully understand the licensee's actions because key individuals recalled details of what had occurred and, more importantly, why it had occurred. The team noted that this documentation weakness leaves the licensee vulnerable to the loss of key information. For example:

- OPEX items,

  -XOE 03007050; IN 200-08 Potential flooding through unsealed concrete floor cracks; dated 7/03/03 - The documentation that closed this CR did not clearly document that the Monticello procedure included the inspections of the floors for cracks and spalling which were identified in the original IN.

  -XOE 02000709; OE13172 Diesel Generator foundation hold down bolt found broken; dated 1/28/02 - The action addressed in the OE was to periodically check the torque on the hold down bolts for the diesel generator. The action implemented by Monticello was a walkdown inspection of the foundation bolts. This action did not included a check of the bolts torque and no explanation as to why the torque was not checked.

- Cause analysis,

  -CR 03002719; Unplanned LCO entered when both Rx Bldg air locks doors were opened at the same time; dated 3/13/03 - The CR did not document which doors were found open, thus it was difficult to determine if the corrective action taken to prevent recurrence from a previous CR was ineffective or if this was a problem with another set of doors.

  -CR 02000867; Deficiencies in ME (Foreign Material Exclusion) practices have resulted in control rod not functioning and have potential to damage Rx system; dated 2/01/02 - The CR did not provide sufficient information to substantiate that an "evaluation" to identify actions to prevent recurrence and actions to correct cause were properly conducted as required by station procedures for a Level 1 CR.

  -CR 02000889; Human performance error assessment, dated 02/01/2002 - Two documentation issues were identified with this CR. The first being the connection between causes and corrective actions was unclear. There were numerous corrective actions which appeared to provide positive actions; however, there was little direct correlation to the identified causes. Second, the actual level of assessment was not documented in the CR. This lack of documentation made it very difficult to understand whether an analysis had been performed or only a computer search on cause codes. Discussions with the licensee on both points identified appropriate actions and assessments had taken place.

.3 Effectiveness of Corrective Action

a. Inspection Scope

The inspectors reviewed past inspection results, selected CRs, root cause reports and common cause evaluations to verify that corrective actions, commensurate with the safety significance of the issues, were specified and implemented in a timely manner. The inspectors evaluated the effectiveness of corrective actions. The inspectors also reviewed the licensee's corrective actions for Non-Cited Violations (NCVs) documented in NRC inspections in the past 2 years. The inspectors conducted a walkdown of the High Pressure Coolant Injection (HPCI) system to assess the material condition of the system and verify that the licensee appropriately identified degraded conditions within the corrective action program.

b. Observations

In general, the licensee's corrective action for the sample reviewed were appropriate and appeared to have been effective. The team noted that the licensee appropriately used the CAP to document instances where previous corrective actions were ineffective or inappropriate.

b.1 Effectiveness of Corrective Actions

The team noted that actions in Condition Reports which requested only a review/assessment or evaluation did not have a formal feedback loop to the original CR review panel before closeout. Sometimes the review/assessment or evaluation resulted in actions which were different than what had been recommended. This may be appropriate, however, the original CR reviewer was not appraised of the changes or evaluation results. For example:

-TCC 03002388; Evaluate the following plant operating conditions for incorporation into plant procedures; dated 3/04/03 - This TCC listed four operating conditions which the review panel felt needed to be changed in the plant procedures. The direction was to "evaluate," and the evaluation determined two of the four actions were needed and the others were not. The TCC was then closed with no indication as to whether the Panel agreed with the action.

-Monticello Nuclear Generating Plant Human Performance Panel Trend Analysis Report for 1st Quarter 2003 generated CR 03004592 to evaluate the use of error reduction tools and documents in the System Engineering organization. In the 2nd quarter evaluation the Human Performance Panel generated another CR on the same subject with the following comment: "This is the second consecutive quarter that a CR was written on indications of written document quality. The previous CR was closed with no action required." Discussions with the licensee indicated that the Panel had not seen System Engineering's response to the first CR. A similar situation occurred with the Maintenance department.

.4 Work Orders and the Corrective Action Program

a. Inspection Scope

The inspection team reviewed condition reports which had been closed to work requests or other condition reports to assess whether the original issue was appropriately addressed in the follow-on document. The team also assessed the licensee review of work orders for additional issues which might be adverse to quality.

b. Observations

b.1. Practice of Closing CRs to Work Requests or other CRs

The team verified that the issues addressed in the initial CR were appropriately addressed in subsequent work requests or CRs.

b.2 Post Activity Work Order Reviews

The team identified that the post activity work order reviews were being conducted to ensure that administrative requirements were being followed. The team was concerned that information provided on the work order was not being

reviewed with an eye towards identifying additional issues which might warrant condition reports by themselves. Further, the team could not identify any guidance regarding review of narrative information on CRs provided by the individual who performed the work.

.5 Corrective Action Program Enhancements

Discussions with the licensee identified the following enhancements being implemented at Monticello:

a. Designation of department CAP coordinators;
b. Enhanced membership and meeting frequency of the Corrective Action Review Board;
c. Enhancements to the condition report screening team; and
d. Designating CAP attribute ownership to site organizations.

.6 Quarterly Performance Assessment Reviews:

a. Inspection Scope

The team reviewed the quarterly performance assessment program at Monticello, concentrating on the past years reports.

b. Observations

The site has had in place for approximately the past two years a quarterly performance assessment program. The program has each department assess their performance and provide the results to senior management. In addition, the program defines three Panels which look across organizations in the areas of human performance, process, and equipment performance. The team believed that the program has been beneficial and has the potential to be a very valuable part of the corrective action process.

In reviewing the output from the quarterly reviews the team had the following observations:

1. There is no site wide guidance on format or content;
2. Often the organizational assessments provide numbers and statistics, and may identify issues; however, they don't always address corrective actions - ongoing, in-development, or planned; and
3. Actions by organizations in response to a Panel generated condition report is not reviewed by the Panel.

The team concluded that the above items limited the effectiveness of the quarterly review process.

.6 Assessment of Safety-Conscious Work Environment

a. Inspection Scope

The inspectors conducted interviews with plant staff to assess whether there were impediments to the establishment of a safety conscious work environment. During these interviews, the inspectors used Appendix 1 to Inspection Procedure 71152, "Suggested Questions for Use in Discussions with Licensee Individuals Concerning PI&R Issues," as a guide to gather information and develop insights. The inspectors also discussed the implementation of the Employee Concerns Program (ECN) and selected concerns with the plant's ECN Coordinator. Additional discussions with the ECN Coordinator centered on integration of the ECN and CAP programs.

b. Observations

Plant staff interviewed did not express any concerns regarding the safety conscious work environment. The staff was aware of and generally familiar with the corrective action program and other plant processes including the Employee Concerns Program through which concerns could be raised. Further, a review of the types of issues in the ECN indicated that site personnel were appropriately using the corrective action and employee concerns programs to address their concerns. The inspectors discussed the results of a survey conducted by the ECN earlier in 2003 and actions taken by the licensee based on the survey results. Based on interviews, the ECN Coordinator was appropriately focused on ensuring all site individuals were aware of the program, reviewing individual concerns, and integrating where appropriate the ECN and CAP programs to resolve concerns.

4OA6 Management Meetings

.1 Exit Meeting Summary

The inspectors presented the inspection results to Mr. T. Palmisano and other members of licensee management in an exit meeting on December 5, 2003. The licensee acknowledged the observations presented and indicated that no proprietary information was provided to the inspectors.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## SUPPLEMENTAL INFORMATION

## KEY POINTS OF CONTACT

Licensee

| | |
|---|---|
| P. Albares | Programs Engineering Manager |
| M. Antony | Design Engineering Supervisor |
| R. Balmer | Regulatory Affairs, Compliance Engineer |
| K. Booth | Performance Assessment, CAP Coordinator |
| G. Bregg | Nuclear Oversight, Manager |
| T. Crippes | Equipment Panel Lead |
| D. Crofoot | Training Manager |
| R. Von Dell | Business Support Manager |
| R. Goransan | Human Performance Coordinator |
| J. Grubb | Business Manager |
| S. Halbert | Performance Improvement Manager |
| M. Holmes | Chemistry Supervisor |
| D. Horgen | Corrective Action Program Coordinator |
| K. Jepson | Radiation Protection/Chemistry Manager |
| B. MacKissock | Operations Manager |
| G. Mathiasen | Health Physicist |
| J. Mestad | Employee Concerns Program Coordinator |
| D. Neve | Regulatory Affairs Manager |
| R. Olson | Maintenance Manager |
| T. J. Palmisano | Site Vice President |
| M. Petitclair | Design Engineering (Equipment Process Control Chairman) |
| S. Porter | Electrical Engineering Supervisor |
| J. Purkis | Plant Manager |
| B. Sawatzke | Performance Assessment Manager |
| S. Sharp | System Engineering Manager |
| Mike Winters | Mechanical Maintenance Supervisor |

## ITEMS OPENED, CLOSED, AND DISCUSSED

Items Opened: None

Items Closed: None

## LIST OF ACRONYMS

| | |
|---|---|
| ACC | Action to Correct Cause |
| AFI | Area for Improvement |
| AO | Air Operated |
| App | Appendix |
| APRM | Average Power Range Monitor |
| AWI | Administrative Work Instruction |
| Bldg | Building |
| CARB | Corrective Action Review Board |
| CAQ | Condition Adverse to Quality |
| CHAMPS | Computerized History and Maintenance Planning System |
| CGCS | Combustible Gas Control System |
| CR | Condition Report |
| CRS | Control Room Supervisor |
| CRD | Control Rod Drive |
| CRV | Control Room Ventilation |
| DRP | Division of Reactor Projects |
| ECP | Employee Concern Program |
| EDG | Emergency Diesel Generator |
| FME | Foreign Material Exclusion |
| GEMAC | General Electric Manual/Automatic Controller |
| INPO | Institute of Nuclear Power Operation |
| LCO | Limiting Condition for Operation |
| LPRM | Linear Power Range Monitor |
| LS | Limit Switch |
| Lvl | Level |
| MAPP | Management Assessment and Plant Performance |
| MDI | Maintenance Department Instruction |
| MNGP | Monticello Nuclear Generating Plant |
| MRC | Management Review Committee |
| MSIV | Main Steam Isolation Valve |
| NMC | Nuclear Management Company |
| NRC | Nuclear Regulatory Commission |
| OA | Other Activity |
| OCD | Operations Control Document |
| ODBC | Open Data-Base Connect |
| OQAP | Operational Quality Assurance Plan |
| PHC | Plant Health Committee |
| QA | Quality Assurance |
| QAF | Quality Assurance Finding |
| RFO | Refueling Operations |
| RBM | Rod Block Monitor |
| RBV | Reactor Building Ventilation |
| RPV | Reactor Pressure Vessel |
| RHR | Residual Heat Removal |
| RX | Reactor |
| SBGT | StandBy Gas Treatment |

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|---|---|
| SCAQ | Significant Condition Adverse to Quality |
| SCT | Secondary Containment |
| SCTMT | Secondary Containment |
| SJAE | Steam Jet Air Ejector |
| SPOTMOS | Suppression Pool Temperature Monitoring Operating System |
| Surv | Surveillance |
| TIP | Transverse Incore Probe |
| WEC | Work Execution Center |
| WO | Work Order |
| WRGM | Wide Range Gas Monitor |
| XOE | External Operating Event |

## LIST OF DOCUMENTS REVIEWED

The following is a list of licensee documents reviewed during the inspection. Inclusion of a document on this list does not imply that NRC inspectors reviewed the entire documents, but, rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. In addition, inclusion of a document on this list does not imply NRC acceptance of the document, unless specifically stated in the body of the inspection report.

4OA2 Identification and Resolution of Problems

Condition Reports

| CR Number | Description |
|---|---|
| 00000818 | Inaccurate data submitted for 4th Quarter 1999 NRC Performance Indicator for Emergency AC power system |
| 01005129 | Fire Doors 142, 124 and 125 were found to have inadequate latch throw during test 0275-03 |
| 01005928 | Failure of Door-142 to latch renders EFT boundary INOP requiring unplanned 24 hour LCO entry and fire impairment |
| 01006034 | Condition report 20014113 approved as a level 3 should have been a level 2 (control room door strike failure). |
| 01006451 | Reactor vessel venting check per OPS Daily Log 0000-B does not have proper guidance on applicable venting conditions |
| 01006493 | Post-scram operating crew performance issues require further investigation and assessment to support disposition |
| 01006794 | Safety inspection revealed continued use of unsafe tools and equipment, blocked exits, obstructed travel pathways |
| 01006855 | One Steam Separator hold-down bolt does not stop after 90 degrees rotation. it spins freely |
| 01007038 | Action Closed Inappropriately for the Review of surveillance s not properly implementing Tech Spec surveillances |
| 01007261 | Corrective Action Process Weaknesses Identified during the NRC PI&R – see attachment for details |
| 01007334 | Adverse trend - large number of cases of foreign material (FME) found in plant equipment |
| 01007387 | Self Assessment critique of Modification 00Q105 |
| 01008153 | Impact of FRV lockup on operator actions during scram recovery not fully assessed in previous condition reports |
| 01008167 | Recurring RWM conditions indicate a significant adverse trend. See DocHandler for related conditions / issues |
| 01008236 | Procedure inadequacies result in inability to verify proper RCIC system response during performance of Test 1070 |
| 20021989 | DELETED CR: Efforts to reduce backlogs to support Performance Indicators may be misguided. |
| 02000182 | OE13140 Unit 1 shutdown due to a potential failed jet pump at Quad cities |
| 02000529 | Unanticipated Tech Spec LCO entries – NRC PI&R issue |
| 02000709 | OE13172 - Diesel Generator Foundation Hold Down Bolt Found Broken. |

| | |
|---|---|
| 02000867 | Deficiencies in FME practices have resulted in control rod not functioning & have potential to damage Rx systems |
| 02000889 | The station is experiencing many human performance errors. Some of those are resulting in plant transients |
| 02001029 | OE13206 - Potential to Drain RPV Inventory During CRD Exchange Activities |
| 02001084 | OE13226 - Individual Enters Locked High Radiation Area Without Self-Reading Dosimeter |
| 02001239 | Critique of nuclear engineering activities 2/9/2 CRP adjustment |
| 02001240 | Adverse trend in not identifying operability issues and LCO entries for adverse system interactions. |
| 02001414 | Investigate failure of SBGT flow controller, FIC-2943. Requires design change per 00R000-14 and cancel WO 0001842. |
| 02001947 | WO 0001842 was canceled and equipment malfunction transferred to (2DO) CR 20021414 contrary to 4AWI-10.01.01. |
| 02002070 | OE13369 - Insufficient Quantity of Lube Oil Maintained Onsite to Support EDG Operation |
| 02002198 | H2 tank found with relief valve stuck open |
| 02002314 | Loose materials in the Reactor Building and Turbine Building could adversely impact internal flooding protection |
| 02002533 | WORK CONTROL: Two Individuals entered the overhead area of TB 951' without contacting the RPC as required by RWP #1 |
| 02002716 | OE13436 - Failure To Declare A Supported System Inoperable With A Support System Outside of Tech Specs Not Functional |
| 02002979 | Door 47 will not latch closed without assistance |
| 02006719 | Air line for CV-3503 (HPCI test return) held in place with seal wire, rubbing on other equip in area |
| 02003714 | Corrective actions are being closed without completing the intended action or properly assessing fundamental causes |
| 02003827 | OE13577 - BWR Jet Pump Bracket Wedge Wear and Setscrew Gaps |
| 02007611 | Air line failed on HPCI test return valve CV-3503 resulting n aborted test and extended HPCI LCO time. WO initiated. |
| 02004609 | Received alarm 3-B-10 HPCI TURBINE INLET DRAIN POT LEVEL |
| 02006256 | PANS Sirens - Expected response not received when initially polling new Federal 2001 sirens during 7/3/02 monthly test |
| 02006350 | System Engineer for RCIC not represented @ T-1 Mtg for RCIC System OOS Window Week |
| 02006965 | Ineffective monitoring of activities assigned to interns results in fire protection plan challenges (ADVERSE TREND) |
| 02007765 | Received unexpected alarm C03-B-10 HPCI TURBINE INLET HI DRAIN POT LEVEL - alarm came in and immediately cleared |
| 02008743 | EM&P/ECT actions taken to prevent recurrence for condition report 20004793 were assessed as ineffective |
| 02009465 | Adverse trend with respect to identifying proper TS LCO to enter for work activities |
| 02010480 | Prim Cont Isol function of TIP Ball Valves not considered during maintenance activity (missed LCO entry/Oper Eval) |
| 02010676 | ACC: On-Line Work Management Process Guide used as implementing procedure without procedure controls as required by OQAP |

| | |
|---|---|
| 02010741 | Develop an AWI for a Voluntary LCO (VLCO) process |
| 02010752 | Perform self-assessment to determine if the TS license amendment implementation has ID'd all procedure changes |
| 02010884 | HWC pump relief found stuck open |
| 02012489 | Electric Motor Driven Fuel Oil Pump on 12 EDG failed during monthly test 0187-2 |
| 02011334 | 4Q02 EMERGENCY Diesel Generator Self-Assessment Final Report |
| 02011403 | ESI 10CFR21 report 0082 rev 2 was not assessed by MNGP in a timely manner - copy was received from another plant |
| 02011660 | Revise procedures 7203 and 0255-18-IA-2 to address fire analysis concerns + APR 02011542, ACC 02011943, 2DO 02009678 |
| 02011767 | Effects of vibration on 4KV protective relays not adequately evaluated |
| 02011897 | Corrective Action process not effective at resolving issues with 8136 process control of SCTMT penetrations |
| 02010224 | On-Line Work Management Process Guide used as implementing procedure without procedure controls as required by the OQAP |
| 02012433 | CR evaluation of 12 EDG gov speed control dropping is inadequate |
| 03000203 | Unplanned LCO entry when both Rx Bldg air lock doors were open at the same time |
| 03000471 | Individual entered posted High Radiation Area without observing the High Radiation Area posting |
| 03000536 | Adverse Trend: The recirc flow converter instrument loop has experienced numerous and increasing number of adverse conds |
| 03000633 | Unplanned LCO entry required when both Rx Bldg airlock doors were open at the same time |
| 03000748 | ADVERSE TREND - 3 Unplanned LCO Entries due to simultaneous opening of both Rx Bldg Airlock doors since 12/9/02 |
| 03001024 | Both reactor building access doors were open simultaneously for a brief period of time. Doors were immediately closed |
| 03001187 | MULTIPLE Isolations of 11 SJAE Suction Valve AO-1085A Result ed in Significant Operational Transients |
| 03001521 | During calibration of LS-23-91A and LS-23-91B per procedure 7130, primary containment was breached for about 3 minutes. |
| 03001523 | 13 RHR pump failed to start for Torus Cooling. No breaker flags were found. WO 0307244 |
| 03001568 | V-EAC-14A tripped on low oil pressure. Entered 30 day LCO per TS 3.17A. |
| 03001593 | HPCI controller erratic when controller placed in "balance" during HPCI shutdown sequence. |
| 03001663 | CR reportability documentation inadequate to answer follow up questions related to torus area App R issue |
| 03001690 | High Range Detector for Stack WRGM Channel A failed high source calibration during WRGM refurbishment modification. |
| 03001875 | OE15490 - Inaccurate Estimated Personnel Exposure |
| 03001925 | Effectiveness reviews of 01000344 and 01000504 revealed in- adequate implementation of the Corrective Action Program |
| 03002079 | RBV WRGM Channel A declared inoperable due to suspected incorrect database items. Unplanned LCO. LCO Retracted 3/4/3 |

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| 03002446 | Unplanned LCO entry when both Rx Bldg airlock doors were opened at the same time |
| 03002455 | Unplanned LCO entry when both Rx Bldg air lock doors were opened at the same time |
| 03002500 | A CRV declared inoperable, Compressor V-EAC-14A tripped on low oil pressure. |
| 03002508 | DW CAM loss of flow alarm failed during shutdown evolution extending LCO. Unplanned LCO declared. LCO retracted 3/13/03 |
| 03002689 | OE15645 - Air Operated Valve Actuator Effective Spring Rate Significantly Affected by Stiffness of Actuator Diaphragm |
| 03002710 | RBM-7 declared inop due to suspected intermittent LPRM sel relay operation. Unplanned LCO declared. LCO retracted. |
| 03002719 | Unplanned LCO entered when both Rx Bldg air lock doors were opened at the same time |
| 03002895 | OE15712 -Control Rod Drive Pump Erosion(Followup to OE15379) |
| 03003119 | ADVERSE TREND. Recent FME issues suggest a lack of FME AWI understanding (4 AWI-04.05.09) |
| 03003351 | Unplanned LCO entry for both reactor building airlock doors being momentarily simultaneously open & immediately closed |
| 03003456 | OE15834 - Rod Worth Minimizer Found Bypassed During Start-Up |
| 03003670 | Unplanned LCO entry when both Rx. Bldg air lock doors were open at the same time |
| 03003748 | Unable to perform B CGCS test 0255-21-III-2 due to no power available to panel C-286B in EFT bldg. |
| 03003832 | Entered Unplanned LCO for # 11 EDG |
| 03003837 | Entered Unplanned LCO for "A" CGCS due to 11 EDG becoming inoperable while "B" CGCS was inoperable for PM. |
| 03003855 | Found four of the six fuses (FU-1 through FU-6) in Panel C-285B for "B" CGCS loose. |
| 03003857 | Loose screw on Stack B WRGM Power terminal strip found during modification to add cable markers |
| 03003868 | OE15909 - Uncontrolled Locked High Radiation Area Discovered in Drywell, Resulting in Tech Spec Violation |
| 03004000 | Unplanned LCO entry with both reactor building airlock doors being momentarily opened simultaneously for 1.5 seconds |
| 03004031 | During Surv 0141 DPIS-2572 was found within as found, out of as left, would not calibrate to within as left. |
| 03004542 | Indication of written document quality issue in documents produced by system engineering. From 1Q03 HU Panel report |
| 03004545 | Indication of written document quality issues in documents produced by Maintenance. From 1Q03 HU Panel Report |
| 03004590 | Indication of written document quality issue in documents produced by system engineering. From 1Q03 HU Panel Report |
| 03004592 | Indication of work practices issues in the System Engrg department. From 1Q03 HU Panel Report |
| 03004960 | Outboard MSIV AO-2-86C Bonnet Stud Hole Threads Found Damaged |
| 03006099 | Evaluation of torus cooling line downstream from MO-2008 for pipe thinning did not include system mission time |
| 03005383 | Post modification critique of modification 02Q225 Core reload for cycle 22 |

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| 03005933 | Individual left door 340 open and unattended after access |
| 03005973 | Snapshot self-assessment of the CAP found the assessment of CR 02008199 to be a breakdown in implementation of the CAP |
| 03006151 | Condensate Backwash Transfer Pump (P-79) leaking oil which may ingress to TBEDS (S-44) |
| 03006203 | Erroneous UT data provided by program owner for use in the evaluation of Div I torus cooling line |
| 03006262 | AFI MA.5-2 Shortfalls with establishing FME barriers and preventing foreign material from entering plant equipment |
| 03006407 | FME concern was noted during Plant Status Inspection in Off-gas Storage Building |
| 03006409 | ACC: Prepare alteration to replace bearings using oil bath for lubrication with sealed bearings for pump P-79 |
| 03006481 | TSTF-404, Scram Discharge Volume Vent & Drain Valve Actions for Boiling Water Reactors (approved CLIIP item) |
| 03007048 | Unsecured roll-up garage/delivery door at MTC |
| 03007050 | IN 2003-08: Potential Flooding Through Unsealed Concrete Floor Cracks |
| 03007097 | Received 3-B-10, HPCI Turbine Inlet Hi Drain Pot Level. The alarm momentarily alarmed, No Operability Issue |
| 03007138 | OUTAGE ADVERSE TREND - Rapid Trend Team results indicate an error rate of 24 percent in the area of Foreign Material Exclusion |
| 03007231 | Individual left door 47 open after access |
| 03007233 | Individual left door 327 open after access |
| 03007698 | Indications of work practice issues in the Maintenance dept. From 2 Q03 HU Panel report review of level ½/3 CRs |
| 03007713 | Monticello Maintenance Department Not Effective in Implementing Self-Assessment Process |
| 03008587 | Airlock doors 47 and 49 momentarily opened at the same time, unplanned LCO for secondary containment integrity |
| 03008258 | Received spurious alarm 3-B-10 HPCI TURBINE INLET DRAIN POT LEVEL spike |
| 03008504 | Received alarm C-03-B-10 (HPCI turbine inlet Hi drain pot level) |
| 03008607 | Corrective action for QAF 02000867 was not effective in the resolution of FME concerns and deficiencies |
| 03008672 | Unplanned LCO entry due to failure of A Stack WRGM. |
| 03008910 | HPCI Exhaust Check Valve HPCI-9 found without insulated bonnet. HPCI room heatup calc assumes bonnet is insulated. |
| 03008930 | Unplanned LCO entry due to failure of VD-9111B to open upon start of V-ERF-12 |
| 03009050 | Individual left door 204 open and unattended after access |
| 03009217 | ADVERSE TREND: B Core Spray Pump has a history of low flow th rough the motor cooling coils. |
| 03009247 | IN 2003-15: Importance of Followup Activities in Resolving Maintenance Issues |
| 03009392 | Individual left door 204 open and unattended after access |
| 03009663 | Potential adverse trend associated with the adequacy of Post Maintenance Testing. |
| 03009813 | Received CFW508 DFCS/FWCV DEMAND DEVIATION of –3.6 percent |
| 03009816 | AM29 malfunction may be causing DFCS indication abnormalcies |

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| 03009985 | Inadequate level 1 investigation documentation determined by the CARB |
| 03010208 | Unplanned Secondary Containment LCO entered when both doors to Radwaste were opened at the same time (for < 2 sec) |
| 03010262 | Received annunciator C03-B-10 (HPCI Turbine Inlet Hi Drain Pot Level) |
| 03011333 | Capscrews on the HPCI stop valve pilot inlet were found to not be fully threaded through the connecting flange |
| 03011385 | CA Program – Scope of assessment for OE15909 (CR 3003868) was too narrowly focused |
| 03011527 | Close out of XOE 02000709 action does not meet expectations |
| 03010680 | Unplanned LCO for Div II SPOTMOS inoperable when operator turned recorder off to replace ribbon cartridge. |
| 03011035 | Unplanned 36 hour LCO entry for reactor building airlock doors #47 & 49 being opened at same time & immediately closed |
| 03011133 | CV-3267 (Torus N2 Makeup Isolation Valve) failed to open when cycled from control room. Unplanned LCO entry. |
| 03011338 | Unable to establish required flow with MO-2009 during the Div.2 RHR Pump and Valve Tests 0255-04-IA-1-2 |
| 03011675 | Drywell Cam indication failed downscale - Unplanned LCO |
| 03011719 | Many of the cause code changes made by the cause code review team are being questioned by engineering |

Work Orders

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| 0001080 | CANCELED – SBGT FIC 2943 not reading correct |
| 0001842 | Cancel *SBGT A Train FIC-2943 not reading correct |
| 0201598 | Cancel A SBGT FIC-2943 flow indication failed high |
| 0203728 | Restraints for air line on CV-3503 need work/fix |
| 0204052 | Repair CV 3503 air line |
| 0204438 | Solenoid valve, pump supply line, sticks open |
| 0205790 | Inspect/repair Praxair H2 pump priming SV |
| 0205812 | 12 EDG DC motor driven fuel pump problem |
| 0307861 | Terminal Block Screw on Stack WRGM Power is loose |
| 0310809 | AM 29 red temp. indicating light periodically on |

Procedures

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| FP-EC-ECP-01 | Employee Concerns, Rev 1 |
| FP-NO-IA-07 | Assessment Scheduling, Rev 0 |
| FP-OP-OL-01 | Operability Determination, Rev 0 |
| FP-PA-OE-01 | External Operating Experience, Rev 0 |
| FP-PA-SA-03 | Snapshot Self-Assessment Process, Rev 0 |
| 1385 | Periodic Structural Inspection, Rev 3 |
| 7203 | TIP Replacement |
| 0255-18-IA-2 | TIP Ball Valve Open Position Indication |
| 4 AWI-04.05.02 | Requesting Work and Work Order Preparation, Rev 19 |
| 4 AWI-04.05.05 | Work Order Closeout and Disposition, Rev 14 |
| 4 AWI-08.14.01 | Employee Concerns, Rev 3 |
| 4 AWI-09.02.02 | Nuclear Oversight Department Assessments and Audits, Rev 0 |

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| 4 AWI-10.01.01 | Corrective Action Program, Rev 15 |
| 4 AWI-10.01.02 | Employee Observation Reporting, Rev 4 |
| 4 AWI-10.01.03 | Condition Report Process, Rev 24 |
| 4 AWI-10.01.04 | Operability Determination (FP-OP-PL-01), Rev 5 |
| 4 AWI-10.01.05 | Investigation of Level 1 Condition Reports, Rev 8 |
| 4 AWI-10.01.06 | External Operating Experience, Rev 9 |
| 4 AWI-10.01.07 | Cause Coding, Rev 3 |
| 4 AWI-10.01.08 | External Operating Experience (FP-PA-OE-01), Rev 0 |
| 4 AWI-10.02.01 | Actions to Correct Conditions or Prevent Recurrence, Rev 7 |
| 4 AWI-10.04.01 | Trending and Analysis, Rev 3 |
| 4 AWI-10.05.01 | Management Assessment of Plant Performance, Rev 3 |
| 4 AWI-10.05.02 | Self Assessment Program, Rev 9 |
| 4 AWI-10.05.03 | Focused Self-Assessment Planning Conduct and Reporting (FP-PA-SA-03), Rev 0 |
| 4 AWI-10.05.04 | Assessment Scheduling (FP-NO-IA-07), Rev 4 |
| 4 AWI-10.05.05 | Snapshot Self-Assessment Process (FP-PA-SA-03), Rev 0 |
| 4 AWI-10.05.06 | Bench Marking Process, Rev 0 |

Self-Assessments

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| 2003-001-5-025 | Corrective Action Program (CAP) evaluations and trending – 2/3/03–2/28/03) |
| 2003-001-5-032 | Corrective Action Program Review – 2/10/03–2/14/03 |
| 2002-003-013 | Completed Action Review Associated with ACC 20024520 – 8/5/02–8/12/02 |
| 2002-002-5-024 | Field Observation of PM work to replace “A” Vent WRGM High Flow Pump – 5/7/02–5/8/02 |
| 2002-001-5-006 | Corrective Action Status of previously identified INPO Areas For Improvement (AFIs) in the engineering area – 1/21/02–2/1/02 |
| 2002-004-5-032 | Corrective Action (CA)/Operating Experience (OE) Program Self Assessment – 11/29/02–12/17/02 |

Quality Assurance Audits

Monticello Nuclear Oversight Internal Assessment Schedule – 2001, 2002 & 2003, Rev 0
Nuclear Oversight 4th Quarter 2001 Assessment of Monticello
Nuclear Oversight 1st Quarter 2002 Assessment Report for Monticello
Nuclear Oversight 2nd Quarter 2002 Assessment Report for Monticello
2003-001-5 - Nuclear Oversight 1st Quarter 2003 Assessment Report for Monticello
2003-002-5 - Nuclear Oversight 2nd Quarter 2003 Assessment Report for Monticello
2003-003-5 - Nuclear Oversight 3rd Quarter 2003 Assessment Report for Monticello

Performance Indicator Reports used to track CAP Effectiveness
06/16/2003 - Corrective Action Review Board Meeting Minutes – April 7, 2003
07/15/2003 - Corrective Action Review Board Meeting Minutes – June 9 and June 30, 2003
09/22/2003 - Corrective Action Review Board Meeting Minutes – July 14 and August 20, 2003
September 2003 Root Cause Evaluation Quality Organizational Performance Indicator
September 2003 Monticello Corrective Action Program Performance Indicators

Chemistry & Radiation Protection Effectiveness Report 1st Quarter 2003
Design Engineering Quarterly Effectiveness Report 1st Quarter 2003
Engineering Department Quarterly Effectiveness Report 1st Quarter 2003
Engineering Projects/Support Department Quarterly Effectiveness Report 1st Quarter 2003
Equipment Performance Panel Trending and Analysis Report 1st Quarter 2003
Human Performance Panel Trending and Analysis Report 1st Quarter 2003
Maintenance Department Quarterly Effectiveness Report 1st Quarter 2003
Operations Department Quarterly Effectiveness Report 1st Quarter 2003
Process Performance Panel Trending and Analysis Report 1st Quarter 2003
Program Engineering Quarterly Effectiveness Report 1st Quarter 2003
System Engineering Quarterly Effectiveness Report 1st Quarter 2003
Training Effectiveness Report 1st Quarter 2003
Chemistry & Radiation Protection Effectiveness Report 2nd Quarter 2003
Design Engineering Quarterly Effectiveness Report 2nd Quarter 2003
Engineering Department Quarterly Effectiveness Report 2nd Quarter 2003
Engineering Projects/Support Department Quarterly Effectiveness Report 2nd Quarter 2003
Equipment Performance Panel Trending and Analysis Report 2nd Quarter 2003
Human Performance Panel Trending and Analysis Report 2nd Quarter 2003
Maintenance Department Quarterly Effectiveness Report 2nd Quarter 2003
Operations Department Quarterly Effectiveness Report 2nd Quarter 2003
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System Engineering Quarterly Effectiveness Report 2nd Quarter 2003
Training Effectiveness Report 2nd Quarter 2003
Chemistry & Radiation Protection Effectiveness Report 3rd Quarter 2003
Design Engineering Quarterly Effectiveness Report 3rd Quarter 2003
Engineering Department Quarterly Effectiveness Report 3rd Quarter 2003
Equipment Performance Panel Trending and Analysis Report 3rd Quarter 2003
Human Performance Panel Trending and Analysis Report 3rd Quarter 2003
Maintenance Department Quarterly Effectiveness Report 3rd Quarter 2003
Operations Department Quarterly Effectiveness Report 3rd Quarter 2003
Process Performance Panel Trending and Analysis Report 3rd Quarter 2003
Program Engineering Quarterly Effectiveness Report 3rd Quarter 2003
System Engineering Quarterly Effectiveness Report 3rd Quarter 2003
Training Effectiveness Report 3rd Quarter 2003

Miscellaneous

OQAP Manual - Operational Quality Assurance Plan, Revision 25
WO 0310769 - Insulate bonnet on HPCI-9
B.8.7 - Monticello Maintenance Rule Program – System Basis Document, Revision 2