March 17, 2005

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 INSPECTION REPORT 05000263/2005006 (DRP)

Dear Mr. Palmisano:

On February 17, 2005, the U.S. Nuclear Regulatory Commission (NRC) completed an Identification and Resolution of Problems inspection at your Monticello Nuclear Generating Plant. The enclosed report documents the inspection finding which was discussed on February 17, 2005, with Mr. J. Conway and other members of your staff.

This inspection focused on the effectiveness of your program to identify and resolve problems. The inspection examined activities conducted under your license as they relate to safety and to compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, one NRC-identified finding of very low safety significance was identified which involved a violation of NRC requirements. However, because this violation was of very low safety significance and because the issue was entered into the licensee's corrective program, the NRC is treating this finding and issue as a Non-Cited Violation in accordance with Section VI.A.1 of the NRC's Enforcement Policy.

On the basis of the sample selected for review, the inspectors concluded that, in general, problems were being properly identified, evaluated, and corrected. In contrast to previous inspections in this area, we note that your program has stabilized and, for the most part, is no longer in transition. However, we note that weaknesses continue to exist, particularly with respect to the evaluation of problems.

If you contest the subject or severity of a Non-Cited Violation, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission - Region III, 2443 Warrenville Road, Suite 210, Lisle, IL 60532-4352; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the Resident Inspector Office at the Monticello Nuclear Generating Plant facility.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made 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

Enclosure: Inspection Report 05000263/2005006(DRP)
w/Attachment: Supplemental Information

cc w/encl: J. Cowan, Executive Vice President
and Chief Nuclear Officer
Manager, Regulatory Affairs
J. Rogoff, 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
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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	50-263
License No:	DPR-22
Report No:	05000263/2005006(DRP)
Licensee:	Nuclear Management Company, LLC
Facility:	Monticello Nuclear Generating Plant
Location:	2807 West Highway 75 Monticello, MN 55362
Dates:	January 31 through February 17, 2005
Inspectors:	R. Langstaff, Project Engineer D. Jones, Reactor Engineer R. Orlikowski, Resident Inspector
Observers:	None
Approved by:	B. Burgess, Chief Branch 2 Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000263/2005006; 01/31/2005-02/17/2005; Monticello Nuclear Generating Plant; Identification and Resolution of Problems.

This report covers an announced baseline inspection on the Identification and Resolution of Problems. The inspection was conducted by a Region III Project Engineer, a Region III Reactor Engineer, and the resident inspector. One Green finding associated with a non-cited violation (NCV) was identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be "Green" or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. Inspector Identified and Self-Revealed Findings

Cornerstone: Occupational Radiation Safety

- Green. A finding of very low safety significance was identified by the inspectors for a violation of Technical Specification administrative procedure adherence requirements. Operations personnel failed to notify radiation protection and chemistry personnel, as required by administrative procedures, prior to a system alignment change of the reactor core isolation cooling (RCIC) system that could affect exposure rates. The primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution in that the licensee failed to take effective corrective actions with respect to previously identified issues concerning transient high radiation areas. Specifically, the licensee had previously experienced a transient high radiation incident involving a system alignment change of the RCIC (Reactor Core Isolation Cooling) system. This prior incident was the subject of a Non-Cited Violation. Despite this prior incident, the licensee failed to make adequate revisions of their operating procedures to prevent recurrence. The licensee has initiated corrective actions which include appropriate procedure revisions.

  The issue was more than minor because the failure to include appropriate guidance in surveillance procedures could become a more safety significant concern in that it could result in unnecessary dose in individuals. The finding was of very low safety significance because the three-year rolling average collective dose for the Monticello Nuclear Generating Plant was less than 240 person-rem per unit. The issue was an NCV of Technical Specification 6.5.A.1 which required that procedures be implemented for control of radioactivity for limiting personnel exposure. (Section 4OA2.3.c)

B. Licensee-Identified Findings

No findings of significance were identified.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Identification and Resolution of Problems (71152)

.1 Effectiveness of Problem Identification

a. Inspection Scope

The inspectors conducted a review of the Monticello Nuclear Generating Plant process for identifying and correcting problems at the plant. Specifically, inspectors reviewed previous licensee and NRC inspector identified issues to determine if problems were appropriately identified, characterized, and entered into the corrective action program. The problem identification program and the effectiveness of the program were evaluated by reviewing issues identified in previous NRC inspections, selected corrective action program documents and records, and discussions of the program with licensee personnel.

The inspectors reviewed documents associated with the corrective action program for a period covering November 2003 through January 2005 to determine if problems were being identified at the appropriate threshold and entered into the corrective action process.

The inspectors also reviewed records of internal audits and self-assessments associated with the Monticello Nuclear Generating Plant corrective action program. Several corrective action program (CAP) documents initiated by licensee personnel on audit and assessment findings were reviewed to verify that adequate corrective actions had been taken or were planned. The inspectors reviewed other selected licensee audits and self-assessments performed since 2003. The inspectors conducted the review to determine whether the audit and self-assessment programs were effectively managed, adequately covered the subject areas, and to determine whether the associated findings were appropriately captured in condition reports.

The inspectors reviewed Department Roll-Up Meeting (DRUM) reports, NRC inspection report findings issued over the last 2 years, Nuclear Oversight (NOS) assessments, and selected plant CAPs to determine if problems were being identified at the proper threshold and entered into the corrective action process. The inspectors also conducted a vertical slice assessment of both Emergency Diesel Generator systems to assess whether equipment problems were being identified and entered into the corrective action system. The documents used during the review are listed in the attachment.

b. Assessment

There were no findings identified in this area during this inspection. The inspectors concluded that the licensee was generally effective in identifying and appropriately characterizing problems. The inspectors concluded that plant personnel effectively identified and entered problems into the corrective action program using corrective

action program forms. The significance threshold for entering issues into the program was appropriate. Specific observations are discussed below.

b.1 Trending Program

The inspectors performed an 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 inspectors had the following observations:

- The inspectors determined that the quarterly DRUM reports were an effective tool to help departments review their quarterly performance and identify potential adverse trends. The site DRUM report provided a tool to identify site wide problems and potential adverse trends.

- The licensee had implemented a new computer trending program to help identify potential trends and issues. While the trending program had only recently been implemented, the inspectors recognized that the program can be an effective tool to help the site identify adverse trends.

- CAP036307 was initiated identifying a declining trend in the site performance indicator for CAP document due date extension. Upon discussions with the Performance Assessment manager, the inspectors learned that the existing number of corrective action due date extensions was acceptable to plant management and that an adverse trend did not exist. The inspectors noted that the causal evaluation was narrowly focused in that it failed to recognize that the site performance indicator goal was set lower than actual management expectations, giving a false indication that the number of corrective action due dates extensions was not acceptable. The inspectors were concerned that this situation could mask a potential problem or lead site personnel to become desensitized to the performance indicator.

.2 Prioritization and Evaluation of Issues

a. Inspection Scope

The inspectors reviewed the licensee's significance classification and evaluation of a selected sample of CAPs. The inspectors' assessment included a review of the following attributes of individual licensee initiated CAPs: significance category assigned to a CAP; the adequacy of operability and reportability determinations, if applicable; the extent of condition evaluations, if applicable; causal investigations, including root cause evaluations, apparent cause evaluations, and condition evaluations; and the appropriateness of the assigned corrective actions. The inspectors also assessed licensee evaluations for previously issued NRC Non-Cited Violations (NCVs). The documents used during the review are listed in the attachment.

b. Assessment

The inspectors concluded that most issues were appropriately prioritized and adequately evaluated. However, the inspectors did identify some examples of where issues would have been more appropriate classified at a higher significance level warranting a more in-depth evaluation. The inspectors also noted that continued weaknesses existed with respect to evaluation of issues. Specific observations are discussed below. In addition, the inspectors identified a number of evaluation weaknesses with respect to one evaluation discussed in Section 4OA2.4.b.1 of this report.

b.1 Weak Evaluation for Noticeable Water Hammer

A noticeable water hammer occurred after starting an residual heat removal (RHR) pump on August 4, 2004 (documented by CAP034313). The water hammer could be heard by operators in the main control room in addition to personnel located in the reactor building. Operators walked down the RHR system and did not identify any visible damage. The CAP was classified as having a "C" significance classification (i.e., a condition resulting in minor impact to the plant and/or organization) and no further evaluation was performed.

The inspectors reviewed the primary corrective action program described by Procedure 4 AWI-10.01.03, "Action Request Process," and Nuclear Management Company (NMC) Procedure FP-PA-ARP-01, "Action Request Process." Based on their review, the inspectors concluded that the CAP would have been more appropriately classified as having a "B" significance classification. The inspectors noted that a "C" significance classification was usually reserved for failures or malfunctions of non-safety related equipment and such CAPs typically did not require Apparent Cause Evaluations (ACEs). Although there was no visible damage as a result of the water hammer, the licensee had not identified the cause of the water hammer. The inspectors considered the presence of a water hammer to be a symptom of a potentially inadequate venting procedure or indicative of another system configuration problem. Since no further evaluation nor follow-up corrective actions were performed by licensee, the condition which led to the August 2004 water hammer was still likely present.

b.2 Weak Supporting Documentation for Evaluation

The inspectors reviewed root cause evaluation RCE000861 which was for human performance issues associated with improper design inputs in ventilation system fan and motor sheaves modification. The inspectors determined that, although the causes determined and corrective actions appeared reasonable, the event description was lacking. Although the improper design inputs stemmed from incorrect readings obtained by engineering personnel using strobe test equipment, the use of the strobe test equipment was not described in the event description. As a consequence, it was difficult for the reader to ascertain the appropriateness of causes determined and corrective actions. Documentation weaknesses were also identified during the previous Identification and Resolution of Problems inspection (documented in Section 4OA2.2.b.3 of Inspection Report 05000263/2003009).

b.3 Continued Issues Associated with Adherence to Administrative Procedures

The inspectors performed a focused review of a trend of site personnel failing to follow administrative procedures. Specifically, the inspectors reviewed CAP documents and a quality assurance finding associated with this issue. The assessment included a review of the significance level assigned to corrective action documents, the extent of condition evaluations, the cause investigations, and the appropriateness of assigned corrective actions. The inspectors determined that the licensee's characterization of the issue and causal evaluations were appropriately performed according to plant procedures and guidelines.

Because only some of the corrective actions had been completed and several other corrective actions were in progress at the time of the inspection, the inspectors were unable to completely assess the effectiveness of the corrective actions associated with the quality assurance finding. The inspectors did note that there continued to be occurrences of site personnel failing to follow administrative procedures evidenced by multiple CAPs initiated during this inspection involving failures to follow administrative procedures. The inspectors did identify one example of weak implementation of a corrective action (discussed in Section 4OA2.3.b.2 of this report) because an administrative procedure was not followed.

.3 Effectiveness of Corrective Actions

a. Inspection Scope

The inspectors reviewed selected CAPs and associated corrective actions to evaluate the effectiveness of the licensee's corrective actions taken for issues. The inspectors reviewed condition evaluations, apparent cause evaluations, root cause evaluations, and operability determinations to verify that corrective actions, commensurate with the significance of an issue, were identified and implemented in a timely manner, including corrective actions to address long-standing or repetitive issues. The inspectors also verified the continued implementation of a sample of completed corrective actions. The samples that were selected for review were based, in part, on the safety and risk significance of the issues.

The inspectors reviewed past inspection results, selected plant corrective action documents and root cause evaluations 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 NCVs documented in NRC inspections within the past 2 years. The documents used during the review are listed in the attachment.

b. Assessment

Most corrective actions were appropriately implemented. However, some examples and one finding were identified where corrective actions were not effectively implemented. The specific observations and finding are discussed below.

b.1 Corrective Action to Address Procedure Problem Implemented Incorrectly

The inspectors reviewed CAP 033707 which was initiated to address the shearing of a hinge anti-rotation roll pin for a feedwater check valve upon disassembly. The corrective action was to revise the drawing and technical manual to standardize the location of the roll pin to one side of the check valve so that the hinge plug could be removed from the opposite side thereby avoiding the shearing of the roll pin. However, the revisions to the valve drawing and applicable technical manual both stated to install and remove the roll pin from the same side of the check valve contrary to the intended corrective action. As a result of these changes, the roll pin would consistently be sheared upon disassembly. The incorrect corrective actions had minimal safety impact as the roll pins were only sheared upon valve disassembly. The licensee initiated CAP036953 to address the errors.

b.2 Corrective Action to Address Procedure Weakness Implemented Poorly

The inspectors reviewed CAP033947 which pertained to an inadvertent start of a diesel driven fire pump during performance of a biocide injection procedure. The inspectors agreed with significance characterization for this issue and the conclusion that a valve was opened too quickly resulting in a pressure drop in the fire protection header causing the fire pump to start. The inspectors also agreed with the conclusion that procedural weaknesses contributed to the valve being opened too quickly. Operations personnel recommended that a note or a caution be added to the procedure and the system engineer prepared a procedure change accordingly. However, the inspectors identified that the procedure change did not meet the requirements of Section 5.9.2 of Procedure 4 AWI-02.03.01, “Writing Guidelines,” in that the change contained direction on how to perform a step (i.e., an instructional statement) in a note rather than within a procedural step. Based on the inspectors observations, the system engineer initiated a Document Change, Hold, and Comment Form (3087 Identification Number 05-0389) to correct the procedure. In discussing the issue with the system engineer, the inspectors determined that although the engineer was aware of Procedure 4 AWI-02.03.01, the engineer was not aware of a recently issued corporate writers’ guide which was more comprehensive. In follow-up discussions with licensee management, the inspectors learned that the licensee planned to establish a procedure writers group to make procedure changes. It was expected that such a change would help ensure that future procedure changes meet writers’ guide requirements.

b.3 Appropriate Adverse Trend Related to Identification of Technical Specification (TS) Limited Conditions for Operation for Work Orders

The inspectors reviewed the corrective action program documents related to a licensee identified adverse trend for failing to identify Limiting Condition for Operation (LCO) entry and exit requirements related to work orders. The inspectors assessed the licensee’s root cause evaluation, corrective actions, and the effectiveness of the corrective actions. As part of the assessment, the inspectors reviewed CAP documents related to LCO entries. The inspectors had the following observations:

- The inspectors determined that corrective actions have been effective and site personnel are identifying work order related LCO entry and exit requirements prior to the work order being initiated.

- The inspectors identified nine CAP documents initiated during the previous 15 months related to LCO exits being delayed due to various circumstances. The LCO delays ranged in time from several minutes up to approximately 6 hours. The inspectors did not identify a common cause among the reasons for LCO exit delays. The inspectors also noted that the times were typically not excessive, with only three of the nine CAPs identified exceeding 1 hour in duration.

c. Findings - Ineffective Corrective Action for Transient High Radiation Condition

Introduction: The inspectors identified a Non-Cited Violation (NCV) of TS having very low safety significance (Green) for failing follow administrative work instructions (AWI). These procedures required that operators notify radiation protection personnel prior to a system alignment change that could affect exposure rates. This finding was as a result of NMC failing to take effective corrective actions with respect to previously identified issues concerning transient high radiation areas. Specifically, the licensee had previously experienced a transient high radiation incident involving a system alignment change of the RCIC system. This incident was the subject of a Non-Cited Violation. Despite this prior incident, the licensee failed to make adequate revisions of their operating procedures to prevent recurrence.

Description: NRC Inspection Report 05000263/2004004 documented a Green non-cited violation of TSs as a result of failing to follow procedures requiring operators to notify radiation protection personnel prior to a system alignment change that could affect exposure rates. Specifically, on August 10, 2004, operators restored the Reactor Core Isolation Cooling (RCIC) system after performing Procedure 0255-08-IA-1, "RCIC Quarterly Pump and Valve Test." During this evolution, a transient high radiation condition was created in the RCIC room when the steam isolation valves were opened. Localized dose rates exceeded 100 millirem per hour (mrem/hr) for a short time, as indicated by a worker's electronic dosimeter reading. The worker did not exceed any exposure limits.

This issue was entered into the licensee's correction action program as CAP034431 in response to NCV 05000263/2004004-02. Apparent cause evaluation, ACE004247, was performed by radiation protection personnel to identify the causes of the unexpected transient high radiation condition. This evaluation identified inadequate operator knowledge and skills as an apparent cause. The corrective actions for this deficiency were to provide training for operators and to revise the pre-job briefs for the RCIC and HPCI quarterly surveillance procedures. Although information sharing has been completed with the plant operators as a compensatory measure, formal training had not been completed as of the time of this inspection. The pre-job briefs for the RCIC and HPCI procedures were revised on August 11, 2004. The evaluation also identified inadequate procedural guidance as an apparent cause and stated that RCIC Procedure 0255-08-1A-1 had been revised to require notification to radiation protection personnel prior to opening the steam line isolation valves. As part of the extent of

condition review for ACE004247, it was stated that Procedure 0255-06-1A-1, "HPCI [High Pressure Core Injection] Quarterly Pump and Valve Test," had also been revised to prevent a similar occurrence when performing HPCI testing. As an enhancement, operations personnel revised Operations Manual B.02.03-05, "Reactor Core Isolation Cooling: System Operation," and Operations Manual B.03.03-05, "High Pressure Coolant Injection System Operation," in November 2004.

On December 16, 2004, operations personnel recognized that the corrective actions to revise the RCIC and HPCI quarterly pump and valve test procedure as stated in ACE004247 had not been completed. However, operations personnel did not enter this issue into the corrective action system until January 19, 2004, when CAP036727 was initiated. A corrective action, CA023472, to revise the procedures as stated in ACE004247 was generated as a result of CAP036727. The inspectors determined that the RCIC and HPCI Quarterly Pump and Valve Test procedures had not been revised as stated in ACE004247 or CA023472. The team also determined that, on February 7, 2005, operations personnel cycled the RCIC steam line isolation valves using Procedure 0255-08-IA-1 without notifying radiation protection personnel of the system alignment change. No personnel were in the RCIC room when the valves were cycled on February 7, 2005. The inspectors determined that cycling the RCIC or HPCI steam line isolation valves could allow the steam line to depressurize, either through cooldown or opening of a steam trap valve while an isolation valve was shut, and then subsequently repressurize the steam line when the isolation valve was reopened, thereby causing exposure rates in the RCIC or HPCI room to change. The potential change in exposure rates could result in unnecessary dose to individuals in the RCIC or HPCI room.

During this inspection, the inspectors also identified that the extent of condition review performed for ACE004247 failed to identify all procedures susceptible to an issue similar to that encountered for the RCIC quarterly pump and valve test procedure due to inadequate guidance. The inspectors noted that Procedure 0255-08-III-1, "RCIC Comprehensive Pump and Valve Test," satisfied the requirements of the RCIC quarterly test Procedure 0255-08-1A-1, and also contained inadequate procedural guidance. Similarly, Procedure 0255-06-III-1, "HPCI Comprehensive Pump and Valve Test," satisfied the requirements of the HPCI quarterly test Procedure 0255-06-III-1 when completed and also contained inadequate procedural guidance. However, no corrective actions were initiated to revise the RCIC or HPCI comprehensive tests procedures.

Analysis: The inspectors determined that failing to take effective corrective actions with respect to previously identified issues concerning transient high radiation areas was a performance deficiency warranting a significance evaluation. Specifically, operations personnel failed to revise both the quarterly pump and valve test procedures and the comprehensive test procedures for both the RCIC and HPCI systems to include guidance to contact radiation protection personnel prior to cycling of isolation valves. The inspectors concluded that the finding was greater than minor in accordance with Inspection Manual Chapter (IMC) 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Disposition Screening," issued on June 20, 2003, because the failure to include appropriate guidance in the surveillance procedures could become a more safety significant concern in that it could result in unnecessary dose to individuals. The finding involved the program and process (exposure control) attribute of the

Occupational Exposure cornerstone of the Radiation Safety strategic performance area. The inspectors completed a significance determination of this issue using IMC 0609, "Significance Determination Process (SDP)," dated April 21, 2003, Appendix C, "Occupational Radiation Safety Significance Determination Process," dated December 16, 2003. Based on this review, the inspectors determined that the finding was related to exposure work controls for maintaining exposure As Low As Reasonable Achievable (ALARA). The inspectors determined that the finding was of very low safety significance, (i.e., Green) because the three-year rolling average collective dose for the Monticello Nuclear Generating Plant was less than 240 person-rem per unit.

Enforcement: Technical Specification 6.5.A.1 requires written procedures be established, implemented and maintained for the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, February 1978. Appendix A of Regulatory Guide 1.33 requires written procedures be implemented for control of radioactivity for limiting personnel exposure. Administrative Procedure 4 AWI-04.01.06, "Conduct of Operations," FP-OP-COO-01, Attachment 7, "Equipment Manipulation and Status Control," Section 3.11, requires that operators notify radiation protection and chemistry personnel prior to a system alignment change that could affect exposure rates. Contrary to the above, on February 7, 2005, the operating crew failed to notify radiation protection personnel prior to cycling the RCIC steam line isolation valves. This violation is being treated as an NCV consistent with Section 4.2.1 of the NRC Enforcement Manual (NCV05000263/2005005-01) because the licensee had entered the previous violation into their corrective action program; the licensee had taken compensatory measures to restore compliance within a reasonable time by revising the surveillance pre-job briefs and the RCIC and HPCI system operations manuals; and because this issue does not meet the repetitive criteria because it is associated with a Green SDP finding. This violation has been entered into the licensee's corrective action program as CAP037092. The licensee has implemented corrective actions to revise the RCIC and HPCI surveillance test procedures to ensure radiation protection personnel are notified prior to system configuration changes.

.4 Assessment of Safety-Conscious Work Environment

a. Inspection Scope

As part of the Identification and Resolution of Problems inspection scope, the inspectors interviewed approximately ten members of the plant staff, primarily from the engineering disciplines, to assess the establishment of a safety conscious work environment (SCWE) at the Monticello Nuclear Generating Plant. In this context, a SCWE refers to an environment in which employees feel free to raise safety concerns, both to their management and to the NRC, without fear of retaliation. The interviews typically included questions similar to those listed in the appendix, "Suggested Questions for Use in Discussions with Licensee Individuals Concerning PI&R [Problem Identification and Resolution] Issues," to NRC Inspection Procedure 71152. During the conduct of interviews, document reviews and observations of activities relevant to the Identification and Resolution of Problems inspection, the inspectors looked for evidence that suggested plant employees may be reluctant to raise safety concerns.

b. Assessment

The inspectors concluded that, overall, a healthy SCWE environment existed at the Monticello Nuclear Generating Plant. All individuals interviewed indicated a willingness to raise safety concerns using the CAP process. Most of the individuals interviewed indicated that they had previously initiated CAPs on issues. In addition, the inspectors noted a number of instances where individuals had initiated CAPs which identified issues beyond their normal course of duties. The inspectors did not identify any evidence of retaliation against anyone who had raised a safety issue. However, the inspectors did identify one evaluation, discussed below, which had the potential to adversely impact the SCWE at the Monticello Nuclear Generating Plant.

b.1 Inappropriate Evaluation Observations

Introduction: The inspectors identified that observations made during an evaluation of an issue were inappropriate and had the potential to adversely impact the SCWE among the Monticello Nuclear Generating Plant engineering staff. However, the inspectors concluded that, based on interviews of the individuals involved and the inspection of safety concerns processed through the corrective action program, the SCWE was not adversely impacted. In addition to its potential impact on the SCWE, a number of other weaknesses were identified with respect to this evaluation.

Description - Development of Issue: Members of the Monticello Nuclear Generating Plant engineering staff had initiated CAP034137 in July 2004. In raising their concern, the individuals noted that a number of technical issues had languished in comparison to compliance issues, which were readily addressed. Although the identified technical issues were beyond the design basis of the Monticello Nuclear Generating Plant, a significant reduction in risk would have been achieved by addressing the identified technical issues.

The inspectors noted that after the issue was brought to senior site management's attention in July 2004, senior site management ensured that the technical concerns raised by the individuals were satisfactorily addressed in a timely manner. The most significant technical concern raised by the individuals involved beyond design basis flooding scenarios in the turbine building which had been first entered into the corrective action program in April 2002. Section 4OA2.4 of Inspection Report 05000263/2004005 discusses how the flooding issues were addressed. The issue of why it took until 2004 for site management to fully recognize and address the technical concerns was the subject of CAP034137.

Description - Potential Impact on SCWE: To provide an independent review of the issue, an engineering management individual from another NMC site was assigned to review the issue. However, the individual assigned was under the understanding that he was providing observations to the Monticello Nuclear Generating Plant management rather than performing an ACE. The individual conducted interviews of a number of people from the Monticello Nuclear Generating Plant management and engineering staff during August 2004. The individual subsequently forwarded his observations to the Monticello Nuclear Generating Plant plant manager who then entered the observations into the corrective action program as ACE004237 in September 2004.

The inspectors noted that some of the documented "observations" for the original version of ACE004237 reflected negatively upon the staff who had initiated CAP034137 without being supported by factual information. For example, one of the observations stated that the individuals who had initiated the CAP did not consider compliance, licensing basis, or deterministic evaluations as safety issues. No evidence was provided which supported this observation. Based on interviews of the individuals, the inspectors concluded that the individuals who had initiated the CAP did understand that compliance, licensing basis, and deterministic evaluations were considered safety issues. The inspectors conclusion was further supported by an interview with the Site Director who had stated the that individuals had identified compliance issues in the past. Another observation stated that the individuals did not keep site and fleet management informed of their concerns. This observation also did not appear to be factually supported. The inspectors noted that the individuals were able to provide documentation of 14 meetings, 12 e-mails, and 4 CAPs in which they had presented their concerns to management prior to July 2004. The inspectors questioned the appropriateness of documenting these negative observations in the ACE given that the NMC Apparent Cause Evaluation Handbook, a guidance document, stated that "the cause determination should be based on the facts as they are understood, using the evaluator's experience and best judgement."

The inspectors noted that by placement of the observations into the corrective action program, the observations became accessible to not only the individuals who raised the concern, but to individuals with access to the licensee's computer network, i.e. most NMC employees. The inspectors were concerned that statements which inappropriately (i.e., without a factual basis) reflected negatively upon individuals who had raised issues could have a negative impact upon other individuals at the Monticello Nuclear Generating Plant Nuclear Generating Plant regarding treatment of safety concerns.

To assess whether the evaluation for ACE004237 resulted in a negative impact upon the SCWE among the engineering staff, the inspectors interviewed the individuals who had initiated CAP034137 and a number of other engineering personnel. Based on the interviews, the inspectors determined that the individuals who had initiated CAP034137 were not reluctant to raise safety issues. The inspectors noted that one of the individuals had initiated at least two CAPs since July 2004. As part of the interviews of other personnel, the inspectors specifically asked the individuals interviewed whether they had heard of anyone experiencing a negative reaction as the result of submitting a CAP. The majority of individuals interviewed indicated that they were not aware of any instances where an individual had experienced a negative reaction to initiating a CAP or raising a safety concern. However, one of the individuals interviewed responded that there had been a negative reaction in response to the initiation of CAP034137. The individual was aware of how CAP034137 had been addressed in the corrective action program and considered the resolution of the issues raised to have not been handled professionally. However, the individual interviewed stated he would not hesitate to initiate a CAP when necessary and had indicated that he had initiated a number of CAPs for various issues. Based on these interviews, the inspectors concluded that the potential for negative impact as a result of how CAP034137 had been addressed was limited and that, overall, the SCWE had been not adversely impacted.

Description - Evaluation Weaknesses: CAP034137 was charactered as having a "B" level of significance thereby requiring an Apparent Cause Evaluation under the licensee's program. The inspectors questioned this significance characterization. The inspectors noted that NMC Procedure FP-PA-ARP-01 defined a level "A" condition as "a significant programmatic breakdown exists, that if left uncorrected would likely result in the compromise of nuclear and/or personnel safety." For the concerns raised by the individuals, programmatic issues existed in that numerous communication efforts failed to result in the desired priority being assigned to several technical issues. Although the identified technical concerns were beyond the design basis for the Monticello Nuclear Generating Plant, the technical concerns did involve nuclear safety in that by addressing the issues a significant reduction in risk could be achieved. As such, the inspectors considered a level "A" significance classification, which would have warranted a formal root cause evaluation, to have been more appropriate to address the issue.

The individuals who had initiated CAP034137 raised some objections with respect to the observations made. In response, a corporate engineering manager performed an additional review of the corrective actions associated with the concerns raised by the individuals. The inspectors noted that this additional review did not appear to be independent of the original assessment effort in that the corporate engineering manager was accompanied with the engineering management individual who had performed the original review and provided the observations for the original ACE. Although this review was described as being a review of all (emphasis added) corrective actions taken related to the concerns raised by the individuals initiating CAP034137, the inspectors noted that the review did not include one of the relevant CAPs (CAP012897) initiated by one of the individuals. The omission was noteworthy in that one of the conclusions drawn from the review was that the individuals had not initiated CAPs for some of the concerns they had raised.

After the observations were entered into the corrective action system for the original ACE, Performance Assessment staff recognized, through the routine grading of ACEs, that the original version of ACE004237 did not meet the requirements for an ACE (documented by CAP035100). The specific deficiencies identified were that there was no problem statement, no event description, no apparent cause, no extent of condition/cause, and no operating experience review documented. The inspectors noted that the Performance Assessment staff neither questioned the appropriateness of the observations nor the lack of supporting evidence for some of the observations as part of the grading process.

To address the documentation requirements for an ACE, the evaluation efforts were rewritten into the form of ACE. The NMC Apparent Cause Evaluation Handbook specified that the event description contain a brief, but full description of the event and associated consequences. The event description section for the revised ACE004237 primarily restated the words of CAP034137 with little additional information. The event description did not link what had happened to consequences and apparent causes. The apparent cause section for the revised ACE004237 primarily restated most of the observations from the original ACE. Although some of the more questionable observations were not carried over to the revised ACE, the observations discussed above which inappropriately reflected negatively upon the individuals who had initiated the CAP had been retained. In addition, the NMC Apparent Cause Evaluation

Handbook suggested that information about organizational interfaces be gathered for the evaluation. However, the organizational interfaces did not appear to be considered as part of the evaluation. The inspectors noted that the engineers involved in the identification of the technical issues reported to an organization off-site for a period of time, which may have contributed to the problems associated with management recognizing and addressing the identified technical issues. Despite these weaknesses, the revised ACE received the highest scores possible for the event description and apparent cause when it was subsequently graded.

Description - Corrective Actions: In response to the issues raised by the inspectors, Performance Assessment staff removed the documents containing inappropriate observations from their corrective action program in order to restrict access to the documents. NMC planned to re-perform the evaluation for ACE004237 with the Monticello Nuclear Generating Plant Nuclear Generating Plant Nuclear Oversight organization taking the lead. In addition, Performance Assessment staff entered the issue into the corrective action program as CAP037414 to address the issue and planned to perform a condition evaluation.

4OA6 Meetings

.1 Exit Meeting

The inspectors presented the inspection results to Mr. J. Conway and other members of licensee management at the conclusion of the inspection on February 17, 2005. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

J. Conway, Site Director of Operations
J. Grubb, Plant Manager
R. Baumer, Compliance Engineer, Regulatory Affairs
K. Booth, Performance Assessment
S. Brown, Manager, Programs Engineering
J. Dabney, Manager, Production Planning
J. Fields, Acting Manager, Regulatory Affairs
N. French, Acting Manager, System Engineering
S. Halbert, Manager, Training
K. Jepson, Manager, Radiation Protection - Chemistry
B. MacKissock, Manager, Operations
R. Olson, General Supervisor, Electrical Maintenance
J. Rieder, CAP Coordinator, Performance Assessment
B. Sawatzke, Manager, Performance Assessment
S. Sharp, Director, Engineering
T. Taylor, Manger, Nuclear Oversight

NRC

B. Burgess, Chief, Projects Branch 2

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Items Opened and Closed

05000263/2005006-01	NCV	Ineffective Corrective Action for Transient High Radiation Condition (Section 4OA2.3.c)

LIST OF DOCUMENTS REVIEWED

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

Apparent Cause Evaluations

ACE004237; Resolution of safety issues is not commensurate with compliance issues; version dated September 16, 2004, and December 1, 2004
ACE004247; Unexpected Transient High Radiation Condition Created in RCIC Room
ACE004261; 11 RHR pump min flow valve indicated open for 9 minutes following pump shutdown; dated October 14, 2004

Corrective Action Program Documents

CAP013564; Converted Issue #:3001620 title: No instrument deviation/setpoint calculation; dated March 13, 2003
CAP033021; Procedure Adherence Errors are Continuing at an Unacceptable Level at Monticello Nuclear Generating Plant, Particularly Administrative Procedures
CAP 033707; Roll pin sheared on FW97-1 hinge pin; dated June 19, 2004
CAP033947; Diesel Fire Pump Start During Biocide injection Procedure #1454; dated July 5, 2004
CAP034390; Worker Receives Dose Rate Alarm in RCIC Room
CAP034431; Unexpected Transient High Radiation Condition Created in RCIC Room
CAP034799; 11 RHR pump min flow valve indicated open for 9 minutes following pump shutdown; dated September 13, 2004
CAP035100; ACE 004237 not performed IAW site expectations and the Fleet ACE Manual; dated October 1, 2004
CAP035173; Quality Assurance Finding (QAF) - There is a Continuing Trend on Failure to Follow Administrative Procedures
CAP036727; ACE004247 States Two Procedures Were Revised That Appear Not to Have Been
CAP036825; Received DFP & Elec FP Auto Start followed by 11 CT #4 Deluge Trip; dated January 26, 2005

Corrective Action Program Documents Generated As a Result of Inspection

CAP036953; Updating of tech manual and drawing for fdwtr check valve done incorrectly; dated February 3, 2005
CAP037092; NRC Question concerning review of RCIC Procedure change - Station Review; dated February 11, 2005
CAP037414; Inadequately developed ACE results in inappropriate information included; dated March 3, 2005

Nuclear Oversight Observation Reports

2004-001-5-006; Emergent Assessment; dated January 16, 2004
2004-001-5-010; Emergent Assessment; dated January 16, 2004
2004-001-5-016; Field observations of plant activities; dated February 6, 2004
2004-001-5-038; Maintenance and Corrective Action; dated March 30, 2004
2004-002-5-011; Maintenance Activities; dated May 14, 2004
2004-004-5-002; Check Valve Program; November 1, 2004
2004-004-5-023; Management and Leadership; dated December 30, 2004
2004-004-5-028; Corrective Action Program; dated January 28, 2005
2004-003-5-031; Effectiveness Review for CRs 01000431 and 02009465 (CRs Addressing Repetitive Events Where Appropriate LCOs were not Recognized or Entered as Required by TSs)

Procedures

4 AWI-02.03.01; Writing Guidelines; Revision 13
4 AWI-10.01.03; Action Request Process (PF-PA-ARP-01); Revision 27
0255-06-IA-1; HPCI Quarterly Pump and Valve Tests; Revision 68
0255-08-IA-1; RCIC Quarterly Pump and Valve Tests; Revision 59
1454; Fire Protection Biocide Injection; Revision 2
B.02.3-05; Reactor Core Isolation Cooling: System Operation; Revision 13
EWI-08.16.01; Check Valve Program; Revision 4
FP-PA-ARP-01; Action Request Process; Revision 3
MMP-011; Check Valve Disassembly/Inspection; Revision 5
Department Roll-up Meeting (DRUM) Manual - Department Performance Trending; Revision 0
NMC Apparent Cause Evaluation Manual; Revision 0

Self Assessments

Site DRUM Results; Fourth Quarter 2004
Site DRUM Results; Third Quarter 2004

Miscellaneous

Calculation CA-03-052; Instrument Setpoint Calculation, Diesel Oil Storage Tank Level; Revision 0
Corrective Action CA021279; Revise Procedures and Surveillances that Involve HPCI/RCIC Steam Line Isolation to include Radiation Protection Notification
Drawing NX-9235-37; Revision G
Monticello Nuclear Generating Plant Station Logs for August 9 and 10, 2004
Monticello Nuclear Generating Plant Station Logs for February 7 through 9, 2005
Operating Experience Document OE019352; Title: OE17706 - Transient High Radiation Area During RCIC Restoration
Operations Pre-Job Briefing Guide for RCIC Quarterly Pump and Valve Test #0255-08-IA-1
Procedure 5659 Log Sheet; Radiation Protection Log for February 6 through 8, 2005

Root Cause Evaluation RCE000861; Human performance issues root cause evaluation for CR 04000881 “Improper design inputs used in alteration 03A073 replacement of EFT fan and motor sheaves;” dated May 5, 2004
Technical Manual NX-16984; Gate, Globe and Check Valves; Revision TRF 2004-128

LIST OF ACRONYMS USED

ACE	Apparent Cause Evaluation
ADAMS	Agencywide Documents Access and Management System
ALARA	As Low As Reasonably Achievable
CAP	Corrective Action Process
CFR	Code of Federal Regulations
DPR	Demonstration Power Reactor
DRP	Division of Reactor Projects
DRUM	Department Roll-Up Meeting
HPCI	High Pressure Coolant Injection
IMC	Inspection Manual Chapter
LCO	Limiting Condition for Operation
LLC	Limited License Company
NCV	Non-Cited Violation
NMC	Nuclear Management Company, LLC
NOS	Nuclear Oversight
NRC	U.S. Nuclear Regulatory Commission
PARS	Publicly Available Records
PI&R	Problem Identification and Resolution
RCIC	Reactor Core Isolation Cooling
RHR	Residual Heat Removal
SCWE	Safety Conscious Work Environment
SDP	Significance Determination Process