July 21, 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 INTEGRATED INSPECTION REPORT 05000263/2004003

Dear Mr. Palmisano:

On June 30, 2004, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Monticello Nuclear Generating Plant. The enclosed integrated inspection report documents the inspection findings which were discussed on June 29, 2004, with you and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and 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, there were three NRC-identified and one self-revealed finding of very low safety significance, of which three involved a violation of NRC requirements. However, because these violations were of very low safety significance and because the issues were entered into the licensee's corrective action program, the NRC is treating these findings as Non-Cited Violations in accordance with Section VI.A.1 of the NRC's Enforcement Policy. Additionally, a licensee-identified violation is listed in Section 4OA7 of this report.

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.

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

Enclosure: Inspection Report 05000263/2004003
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
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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	50-263
License No:	DPR-22
Report No:	05000263/2004003
Licensee:	Nuclear Management Company, LLC
Facility:	Monticello Nuclear Generating Plant
Location:	2807 West Highway 75 Monticello, MN 55362
Dates:	April 1 through June 30, 2004
Inspectors:	S. Burton, Senior Resident Inspector R. Orlikowski, Resident Inspector J. Adams, Senior Resident Inspector, Prairie Island R. Jickling, Emergency Preparedness Analyst M. Mitchell, Radiation Specialist S. Ray, Senior Resident Inspector, Braidwood
Observers:	None
Approved by:	B. Burgess, Chief Branch 2 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000263/2004003; 04/01/2004 - 06/30/2004; Monticello Nuclear Generating Plant. Adverse Weather, Operability Evaluation, Post Maintenance Testing, Access Control to Radiologically Significant Areas.

This report covers a 3-month period of baseline resident inspection and announced baseline inspections of emergency preparedness and radiation protection. The inspections were conducted by a regional emergency preparedness inspector, a regional radiation specialist inspector, and the resident inspectors. 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: Initiating Events

- Green. A finding of very low safety significance was identified by the inspectors associated with the failure to control or remove materials in the switchyard and adjacent to the 1AR transformer. These materials could become missile hazards during adverse weather conditions, such as tornados or severe thunderstorms, increasing the likelihood of an initiating event. The primary cause of this finding was related to the cross-cutting area of Human Performance. The licensee has included this finding in their corrective action program as CAP 033894. Proposed corrective actions included a review of related condition reports and a review of industry good practices related to housekeeping. The intent of the reviews would be to ensure that appropriate precautions are established that would minimize the risk of equipment damage or transients as a result of inclement weather.

  This finding was more than minor since the finding could be reasonably viewed as a precursor to a significant event, such as a loss of Technical Specification-required power supplies or a loss of off-site power caused by missile damage to auxiliary power system or switchyard components. The finding was of very low safety significance because the finding did not contribute to the likelihood of a primary or secondary system loss of coolant accident initiator; the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available; and the finding did not increase the likelihood of a fire or internal or external flooding. No violation of NRC requirements occurred. (Section 1R01)

Cornerstone: Mitigating Systems

- Green. A finding of very low safety significance was identified by the inspectors for a violation of 10 CFR 50, Appendix B, Criterion XVI, Corrective Action. This issue involved the failure to take prompt and adequate corrective actions in response to operability concerns with the 11 and 12 emergency diesel generator (EDG) room

ventilation. Subsequent testing and analysis has demonstrated 11 and 12 EDG room ventilation as being adequate for an outside air temperature of 105 degrees Fahrenheit (degrees) under normal operation and 107 degrees with operations personnel taking compensatory actions.

This issue was more than minor because it directly impacts the equipment performance attribute for the mitigating systems cornerstone. This finding was of very low safety significance because there was no design deficiency; no actual loss of safety function of the 11 and 12 EDG room ventilation system; no single train loss of safety function for greater than the Technical Specification (TS) allowed outage time; and no risk due to external events. A Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action" was identified for failure of the licensee to take prompt actions to correct a condition adverse to quality. (Section 1R15)

- Green. A finding of very low safety significance was identified by the inspectors for a violation of Technical Specifications (TS) for failing to follow Operations Manual procedures, which require that a functional test be performed to verify operability prior to returning an average power range monitor (APRM) to service. After performing maintenance and returning APRM 1 to service, the shift manager subsequently recognized that APRM 1 had not completed its post maintenance test (PMT) and ordered APRM 1 to be removed from service. The primary cause of this finding was related to the cross-cutting area of Human Performance. The licensee has instituted corrective actions including a formal root cause evaluation to assess this issue.

  The issue was more than minor because it directly impacts the configuration control attribute for the mitigating systems cornerstone. This finding was of very low safety significance because there was no design deficiency; no actual loss of safety function of the RPS; no single train loss of safety function for greater than the TS allowed outage time; and no risk due to external events. The issue was a Non-Cited Violation of TS 6.5.A, which requires that written procedures be implemented for operation of nuclear instruments. (Section 1R19)

Cornerstone: Public Radiation Safety

- Green. A finding of very low safety significance was self-revealed when a radiation protection technician (RPT) transferred radioactive material, with a dose rate of approximately 300 millirem/hour at one foot, from the transversing incore probe (TIP) cubicle to the refuel floor and did not assure the material was placed in the posted high radiation area. The primary cause of this finding was related to the cross-cutting area of Human Performance. The RPT did not perform adequate self-checking to ensure that radioactive material was properly posted and barricaded.

  The finding is more than minor because it could reasonably be viewed as a precursor to a more significant event and is associated with one of the cornerstone attributes, specifically occupational radiation safety. The occurrence involves an individual worker's potentially unplanned dose resulting from conditions contrary to the Technical Specifications, which could have been significantly greater as a result of a single minor reasonable alteration of the circumstances. The finding was of very low safety

significance because the potential exposure time was short and the matter did not result in unintended personal dose. (Section 2OS1)

B. Licensee-Identified Violations

A violation of very low safety significance, which was identified by the licensee, has been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. The violation and corrective action tracking number is listed in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

Monticello operated at full power for the entire assessment period except for brief down-power maneuvers to accomplish rod pattern adjustments and to conduct planned surveillance testing activities with the following exceptions:

- On May 21, 2004, reactor power was reduced to approximately 30 percent to replace a motor bearing on the Number 12 condensate pump. Reactor full power was achieved on May 23, 2004.

- On June 5, 2004, reactor power was reduced to approximately 30 percent to replace motor brushes on the Number 12 recirculation pump motor generator set. Reactor full power was achieved on June 5, 2004.

- On June 17, 2004, the reactor was shutdown for a maintenance outage to replace the Number 12 recirculation pump seals. The reactor was restarted on June 21, 2004, and the turbine connected to the grid on June 22, 2004. Reactor full power was achieved on June 23, 2004.

1. REACTOR SAFETY

Cornerstone: Initiating Events, Mitigating Systems, Barrier Integrity, and Emergency Preparedness

1R01 Adverse Weather (71111.01)

.1 Tornado and High Wind Preparation

a. Inspection Scope

The inspectors performed a detailed review of the licensee's procedures and a walkdown of two systems to observe the licensee's preparations for adverse weather conditions that could result from nearby tornados or severe thunderstorms. The inspectors verified that required surveillance testing (where applicable) and preventive maintenance was scheduled and performed at the specified frequency. During system walkdowns, the inspectors examined the material condition of major system components for evidence of system degradation. As part of this inspection, the documents in Attachment 1 were utilized to evaluate the potential for an inspection finding.

The inspectors evaluated readiness for seasonal susceptibilities for the following systems for a total of one sample:

- Monticello transmission system, including the 345 kilo-Volt (kV), 230 kV, 115 kV, and 13.8 kV sections of the switchyard, and the exterior portions of the plant auxiliary power system during the week ending May 1, 2004.

b. Findings

Introduction

The inspectors identified a Green finding for a failure to control materials in the switchyard and adjacent to the 1AR transformer. The finding was not considered a violation of regulatory requirements. The finding increased the probability of an initiating event because high velocity winds which accompany severe thunderstorms and tornados could cause unsecured material to become missile hazards. These hazards increase the probability of damage to risk significant equipment which, upon failure, would cause an initiating event.

Description

On April 27 and 28, 2004, the inspectors conducted a walkdown of the risk significant portions of the external power system and the switchyard to assess the licensee's preparations to preclude or minimize potential damage from high velocity winds associated with severe thunderstorms and tornados. During the walkdown of the auxiliary power system, the inspectors noted the storage of a significant quantity of disassembled metal scaffolding, gang boxes, an unsecured sump hose, and other material adjacent to the 1AR transformer. The 1AR is relied upon to meet minimum power requirements for the safety-related 4.16 kV busses as specified in Technical Specification (TS) 3.9.A. The inspectors concluded that high velocity winds combined with the close proximity of the 1AR transformer to the large quantity of stored materials increased the potential to damage the transformer or related electrical equipment. This issue was entered into the licensee's corrective action program as Condition Report (CR) 04004152.

The inspectors accompanied a non-licensed operator on a routine visit to the switchyard. The Monticello switchyard contains the 345 kV, 230 kV, 115 kV, and 13.8 kV system equipment. In particular, the 345 kV, 115 kV, and 13.8 kV sections have been determined to be risk significant with respect to the maintenance rule and provide power to the auxiliary power system transformers included in TS 3.9.A. The inspectors identified many unsecured items stored in the switchyard during the walkdown and concluded that these items increased the potential for an initiating event because the material could become missiles when subjected to high velocity winds, thereby increasing the probability of damage to installed risk significant equipment. Included in the list of observed items were four fiberglass ladders, metal 3-step ladders, numerous instructional signs mounted on metal stanchions, compressed gas bottles with caps removed, and miscellaneous tools. The licensee included this finding in their corrective action program on June 30, 2004, as CAP 033894. Proposed corrective actions included a review of related condition reports and a review of industry good practices related to housekeeping. The intent of the reviews would be to ensure that appropriate precautions are established that would minimize the risk of equipment damage or transients as a result of inclement weather.

The inspectors reviewed several licensee procedures that addressed tornado and high wind conditions. The inspectors found no specified actions or pro-active elements that

required the licensee to minimize the number of missile hazards prior to seasonable susceptibilities. Additionally, the inspectors observed a lack of sensitivity on the part of plant personnel towards the minimization of tornado or severe thunderstorm generated missiles. This issue was entered into the licensee's corrective action program as CR 04004156.

Analysis

Licensee Procedure 4AWI-04.02.01, "Housekeeping," was applicable to work in areas required for plant operation, and specified that site personnel shall ensure that equipment areas where maintenance occurs are protected from equipment degradation or damage due to inclement weather. Additionally, the licensee Operational Quality Assurance Plan commits the licensee to ANSI N45.2.3-1973, "Housekeeping During the Construction Phase of Nuclear Power Plants," during the plant operational phase, and this standard requires scheduled inspections of work areas and construction practices to ensure protection of installed equipment from weather-related movement of stored items. The licensee indicated that operator rounds were the tool for performing periodic inspections. The inspectors also found that related procedures did not stipulate standards for cleanliness/housekeeping and that these standards were considered skill-of-the-craft.

The inspectors determined that the failure of operations personnel to apply standards to outside areas containing risk significant equipment similar to those applied to internal plant buildings was a performance deficiency, which was related to the cross-cutting areas of human performance. The inspectors reviewed this finding using the guidance contained in Appendix B, "Issue Disposition Screening," of Inspection Manual Chapter (IMC) 0612, "Power Reactor Inspection Reports." The inspectors determined that the finding was more than minor because it affected the protection against external factors attribute of the initiating events cornerstone designed to limit the likelihood of events that upset plant stability. Specifically, the increased number of potential missiles in the vicinity of risk significant power systems raised the probability that severe weather could cause a loss of TS-required power supplies or a loss of off-site power, and thereby initiate a plant transient.

The inspectors evaluated the finding using IMC 0609, Appendix A, Attachment 1, "Significance Determination of Reactor Inspection Findings for At-Power Situations." Using the Phase 1 Significance Determination Process (SDP) worksheet for the initiating event cornerstone, transient initiator contributor, the inspectors determined that the finding did not contribute to the likelihood of a primary or secondary system loss of coolant accident initiator; the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available; and the finding did not increase the likelihood of a fire or internal or external flooding. Therefore, the finding was determined to be of very low safety significance (Green).

Enforcement

The inspectors determined that procedures were inadequate relative to applying a housekeeping standard to risk significant equipment installed outside. However, a violation of NRC requirements did not occur because no 10 CFR 50, Appendix B, components were impacted by the Finding (FIN 05000263/2004003-01). The licensee has included this finding in their corrective action program as CAP 033894.

.2 Hot Weather Preparations

a. Inspection Scope

The inspectors performed a detailed review of the licensee's procedures and a walkdown of one system to observe the licensee's preparations for adverse weather, including conditions that could result from high temperatures. The inspectors focused on plant specific design features for the system and implementation of the procedures for responding to or mitigating the effects of adverse weather. Inspection activities included, but were not limited to, a review of the licensee's adverse weather procedures, preparations for the summer season, and a review of analysis and requirements identified in the Updated Safety Analysis Report (USAR). The inspectors also verified that operator actions specified by plant specific procedures were appropriate. As part of this inspection, the documents in Attachment 1 were utilized to evaluate the potential for an inspection finding.

The inspectors evaluated readiness for seasonal susceptibilities for the following system for a total of one sample:

- 4.16 kV switchgear room ventilation, during the week ending June 12, 2004

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

The inspectors performed partial walkdowns of accessible portions of trains of risk-significant mitigating systems equipment. The inspectors reviewed equipment alignment to identify any discrepancies that could impact the function of the system and potentially increase risk. Identified equipment alignment problems were verified by the inspectors to be properly resolved. The inspectors selected redundant or backup systems for inspection during times when equipment was of increased importance, due to unavailability of the redundant train or other related equipment. Inspection activities included, but were not limited to, a review of the licensee's procedures, verification of equipment alignment, and an observation of material condition, including operating parameters of equipment in-service. As part of this inspection, the documents in Attachment 1 were utilized to evaluate the potential for an inspection finding.

The inspectors selected the following equipment trains to verify operability and proper equipment line-up for a total of two samples:

- 12 emergency diesel generator (EDG) with 11 EDG out-of-service for maintenance, during the week ending April 17, 2004; and
- high pressure coolant injection (HPCI) system with reactor core isolation cooling (RCIC) system out-of-service for maintenance, during the week ending May 15, 2004.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

a. Inspection Scope

The inspectors walked down risk significant fire areas to assess fire protection requirements. The inspectors reviewed areas to assess if the licensee had implemented a fire protection program that adequately controlled combustibles and ignition sources within the plant, effectively maintained fire detection and suppression capability, maintained passive fire protection features in good material condition, and had implemented adequate compensatory measures for out-of-service, degraded or inoperable fire protection equipment, systems, or features. The inspectors selected fire areas based on their overall contribution to internal fire risk as documented in the plant's Individual Plant Examination of External Events (IPEEE), the potential to impact equipment which could initiate or mitigate a plant transient, or the impact on the plant's ability to respond to a security event. The inspection activities included, but were not limited to, the control of transient combustibles and ignition sources, fire detection equipment, manual suppression capabilities, passive suppression capabilities, automatic suppression capabilities, compensatory measures, and barriers to fire propagation. As part of this inspection, the documents in Attachment 1 were utilized to evaluate the potential for an inspection finding.

The inspectors selected the following areas for review for a total of four samples:

- Fire Zone 8, cable spreading room, during the week ending April 3, 2004;
- Fire Zone 2-B, reactor building east hydraulic control unit (HCU) area, during the week ending April 24, 2004;
- Fire Zone 2-C, reactor building west HCU area, during the week ending April 24, 2004; and
- Fire Zone 3-C, reactor building vessel instrument rack area, during the week ending April 24, 2004.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

a. Inspection Scope

The inspectors performed an annual review of flood protection barriers and procedures for coping with internal and external flooding. The inspection focused on verifying that flood mitigation plans and equipment were consistent with design requirements and risk analysis assumptions. The inspection activities included, but were not limited to, a review and/or walkdown to assess design measures, seals, drain systems, contingency equipment condition and availability of temporary equipment and barriers, performance and surveillance tests, procedural adequacy, and compensatory measures. The inspectors utilized the documents listed in Attachment 1 to accomplish the objectives of the inspection procedure.

The inspectors selected the following equipment for a total of two samples:

- external flood protection measures, for the week ending April 10, 2004; and
- HPCI and RCIC rooms, for the weeks ending April 17 and April 24, 2004.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11)

a. Inspection Scope

The inspectors performed a quarterly review of licensed operator requalification training. The inspection assessed the licensee's effectiveness in evaluating the requalification program, ensuring that licensed individuals operate the facility safely and within the conditions of their license, and evaluated licensed operator mastery of high-risk operator actions. The inspection activities included, but were not limited to, a review of high risk activities, emergency plan performance, incorporation of lessons learned, clarity and formality of communications, task prioritization, timeliness of actions, alarm response actions, control board operations, procedural adequacy and implementation, supervisory oversight, group dynamics, interpretations of technical specifications, simulator fidelity, and licensee critique of performance. As part of this inspection, the documents in Attachment 1 were utilized to evaluate the potential for an inspection finding.

The inspectors observed the following requalification activity for a total of one sample:

- a training crew during an evaluated simulator scenario that included an earthquake with a loss of service water, loss of normal offsite power, and loss of the RCIC system, which resulted in entry into the emergency operating procedures, a manual reactor scram and a leak in the drywell, during the week ending June 19, 2004.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope

The inspectors reviewed systems to assess maintenance effectiveness, including maintenance rule activities, work practices, and common cause issues. Inspection activities included, but were not limited to, the licensee's categorization of specific issues, including evaluation of performance criteria, appropriate work practices, identification of common cause errors, extent of condition, and trending of key parameters. Additionally, the inspectors reviewed implementation of the Maintenance Rule (10 CFR 50.65) requirements, including a review of scoping, goal-setting, performance monitoring, short-term and long-term corrective actions, functional failure determinations associated with reviewed condition reports, and current equipment performance status. As part of this inspection, the documents in Attachment 1 were utilized to evaluate the potential for an inspection finding.

The inspectors performed the following maintenance effectiveness reviews for a total of two samples:

- a function-oriented review of the 115 kV and 345 kV systems because it was designated as risk significant under the Maintenance Rule, during the weeks ending June 19 through July 3, 2004; and
- an issue-oriented review of the 4160 volt system because it was designated as risk significant under the Maintenance Rule, during the week ending May 1, 2004.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13)

a. Inspection Scope

The inspectors reviewed maintenance activities to review risk assessments (RAs) and emergent work control. The inspectors verified the performance and adequacy of RAs, management of resultant risk, entry into the appropriate licensee-established risk bands, and the effective planning and control of emergent work activities. The inspection activities included, but were not limited to, a verification that licensee RA procedures were followed and performed appropriately for routine and emergent maintenance, that the RAs for the scope of work performed were accurate and complete, that necessary actions were taken to minimize the probability of initiating events, and that activities to ensure that the functionality of mitigating systems and barriers were performed. Reviews also assessed the licensee's evaluation of plant risk, risk management, scheduling, configuration control, and coordination with other scheduled risk significant work for these activities. Additionally, the assessment included an evaluation of external factors, the licensee's control of work activities, and appropriate consideration of baseline and cumulative risk. As part of this inspection, the documents in Attachment 1 were utilized to evaluate the potential for an inspection finding.

The inspectors observed maintenance or planning for the following activities or risk significant systems undergoing scheduled or emergent maintenance for a total of seven samples:

- leak on service water pipe for 12 EDG, during the weeks ending April 10 through April 24, 2004;
- concurrent electrical outages, Division I 480 VAC and Division II EDG, during the week ending May 29, 2004;
- 12 condensate pump bearing increased vibration, during the weeks ending April 3 through May 29, 2004;
- RCIC pump bearing replacement during the weeks ending May 15 through May 22, 2004;
- 12 recirculation motor generator set brush replacement, during the week ending June 5, 2004;
- 12 recirculation pump seal replacement, during the week ending June 19, 2004; and
- repair of FW-97-1, feedwater containment isolation check valve, during the week ending June 19, 2004.

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-Routine Plant Evolutions and Events (71111.14)

a. Inspection Scope

The inspectors reviewed personnel performance during planned non-routine evolutions to review operator performance and the potential for operator contribution to the evolution. The inspectors observed or reviewed records of operator performance during the evolution. Reviews included, but were not limited to, operator logs, pre-job briefings, instrument recorder data, and procedures. As part of this inspection, the documents in Attachment 1 were utilized to evaluate the potential for an inspection finding.

The inspectors observed the following evolutions for a total of three samples:

- planned repair to correct main condenser air in-leakage, during the weeks ending May 22 and May 29, 2004;
- planned repair to replace the 12 condensate pump motor bearing, during the weeks ending May 22 and May 29, 2004; and
- planned maintenance to replace the recirculation pump motor generator set brushes, during the week ending June 5, 2004.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors performed operability evaluations of degraded or non-conforming systems that potentially impacted mitigating systems or barrier integrity. The inspectors reviewed operability evaluations affecting mitigating systems or barrier integrity to ensure that operability was properly justified and that the component or system remained available. The inspection activities included, but were not limited to, a review of the technical adequacy of the operability evaluations to determine the impact on TS, the significance of the evaluations to ensure that adequate justifications were documented, and that risk was appropriately assessed. As part of this inspection, the documents in Attachment 1 were utilized to evaluate the potential for an inspection finding.

The inspectors reviewed the following operability evaluations for a total of four samples:

- intermittent ground on the Division II 125 VDC system, during the weeks ending April 17 through April 24, 2004;
- disagreement between design basis documentation of Division I residual heat removal pump recirculation lines code class, during the week ending May 1, 2004;
- low pressure coolant injection (LPCI) loop selection logic, during the week ending June 5, 2004; and
- 11 and 12 EDG room ventilation, during the weeks ending May 15 through June 26, 2004.

b. Findings

Introduction

The inspectors identified a Non-Cited Violation (NCV) having very low safety significance (Green) for failing to take prompt and adequate corrective actions to adequately analyze the EDG 11 and 12 room ventilation to demonstrate EDG operability. This issue was more than minor because it directly impacts the equipment performance attribute for the mitigating systems cornerstone.

Description

The 11 and 12 EDG room ventilation removes heat produced by equipment, piping, and motors during EDG operation. In September of 2003, the engineering group measured the air flow for the 11 and 12 EDG rooms and determined that the actual air flow was less than the design air flow used in the room analysis. Subsequent calculations determined that the EDG room ventilation was only adequate for an outside air temperature of 91 degrees Fahrenheit (degrees) before the design room temperature limit was reached.

The engineering group initiated Action 03010341 to resolve the operable but degraded condition associated with EDG room ventilation. This action had a due date of February 12, 2004. On February 12, 2004, the due date for Action 03010341 was extended to May 1, 2004, while awaiting completion of testing and additional studies. The USAR lists the extreme maximum temperature for the month of April as 91 degrees and for the month of May as 105 degrees.

On April 28, 2004, the outside air temperature reached 92.8 degrees, exceeding the 91 degree limit. The operating crew initiated CR 04004179 and an operability analysis was performed to verify EDG room ventilation operability. Additional testing conducted on April 28, 2004, determined that the 11 and 12 EDG room ventilation was adequate to an outside air temperature of 94 degrees with the EDG room outside doors open as a compensatory measure.

Analysis

The inspectors determined that the engineering department personnel failed to recognize that, by extending the due date of Action 03010341, they entered a period where the predicted temperatures could equal or exceed the analyzed value, thereby removing all design margin. The failure to correct this condition adverse to quality had the potential to render both EDG's inoperable and was considered a performance deficiency warranting further evaluation. The inspectors reviewed this finding using the guidance contained in Appendix B, "Issue Disposition Screening," of IMC 0612, "Power Reactor Inspection Reports." Since elevated outside air temperatures can directly impact the operability of the 11 and 12 EDG, the issue was determined to be more than minor because it directly impacts the equipment performance attribute for the mitigating systems cornerstone objective.

The inspectors reviewed this finding in accordance with IMC 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." Using the Phase 1 SDP worksheet for the mitigation systems cornerstone, the inspectors determined that the finding was not a design or qualification deficiency; the finding did not represent an actual loss of safety function of a system; there was no loss of safety function of a single train of TS equipment for greater than the allowed outage time; there was no loss of safety function of non-TS equipment; and the finding did not screen as potentially risk significant due to external events. Therefore, the finding was considered to be of very low safety significance (Green).

Enforcement

The licensee's Operational Quality Assurance Plan contains commitments to quality assurance criteria for nuclear power plants (10 CFR 50; Appendix B requirements) with respect to the 11 and 12 EDGs. Criterion XVI, "Corrective Action," of 10 CFR Appendix B requires that measures be established to promptly identify and correct deficiencies and other conditions adverse to quality. Contrary to the above, the licensee failed to take actions to correct a known limitation in the analysis for the 11 and 12 EDG room ventilation system, a condition adverse to quality, prior to a period when the outdoor air temperatures could exceed the current analysis. Outdoor air temperatures in excess of the current analysis could result in the inoperability of the 11 and 12 EDGs. Because this violation was of very low safety significance and it was entered into the licensee's Corrective Action program, this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy (NCV 05000263/2004003-02). The licensee has entered this into their Corrective Action program as ACC 04004245. Further testing, maintenance, and analysis has demonstrated 11 and 12 EDG room ventilation was adequate for an outside air temperature of 105 degrees under normal operation and 107 degrees with operations personnel taking compensatory actions. This ensures EDG operability up to the extreme maximum temperature of 107 degrees listed in the USAR.

1R16 Operator Workarounds (71111.16)

.1 Semiannual Review

a. Inspection Scope

The inspectors performed a semiannual review of the cumulative effects of operator workarounds (OWAs) that constituted one sample. The inspectors reviewed OWAs to identify any potential effect on the functionality of mitigating systems. The inspection activities included, but were not limited to, a review of the cumulative effects of the OWAs on the availability and the potential for improper operation of the system, for potential impacts on multiple systems and on the ability of operators to respond to plant transients or accidents. Additionally, reviews were conducted to determine if the workarounds could increase the possibility of an initiating event, if the workaround was contrary to training, required a change from long standing operational practices, created the potential for inappropriate compensatory actions, impaired access to equipment, or required equipment uses for which the equipment was not designed. As part of this inspection, the documents in Attachment 1 were utilized to evaluate the potential for an inspection finding.

The inspectors focused on the licensee's list of documented workarounds during the week ending April 24, 2004. The inspection included interviews with operations, engineering, and probabilistic risk assessment personnel. For the problem identification and resolution portion of the inspection, the inspectors reviewed the condition reports documenting the workarounds and verified that compensatory actions referred to in the condition reports were actually in place.

b. Findings

No findings of significance were identified.

.2 Selected Operator Workarounds

a. Inspection Scope

The inspectors reviewed an OWA and focused on verification of the selected workaround's impact on the functionality of a mitigating system. The inspection activities included, but were not limited to, a review of the selected workaround to determine if the functional capability of the system or human reliability in responding to an initiating event was affected, including a review of the impact of the workaround on the operator's ability to execute emergency operating procedures. As part of this inspection, the documents in Attachment 1 were utilized to evaluate the potential for an inspection finding.

The inspectors reviewed the following OWA for a total of one sample:

- EDG ventilation evaluated to 94 degrees outside air temperature, during the week ending May 1, 2004.

1R17 Permanent Plant Modifications (71111.17)

a. Inspection Scope

The inspectors' review of permanent plant modifications focused on verification that the design bases, licensing basis, and performance capability of related structures, systems or components were not degraded by the installation of the modification. The inspectors also verified that the modifications did not place the plant in an unsafe configuration. The inspection activities included, but were not limited to, a review of the design adequacy of the modification by performing a review or partial review, of the modification's impact on plant electrical requirements, material requirements and replacement components, response time, control signals, equipment protection, operation, failure modes, and other related process requirements. As part of this inspection, the documents in Attachment 1 were utilized to evaluate the potential for an inspection finding.

The inspectors selected the following permanent plant modifications for review for a total of one sample:

- LPCI loop select setpoint change, during the weeks ending June 26 and July 3, 2004.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors verified that the post-maintenance test procedures and activities were adequate to ensure system operability and functional capability. Activities were selected based upon the structure, system, or component's ability to impact risk. The inspection activities included, but were not limited to, witnessing or reviewing the integration of testing activities, applicability of acceptance criteria, test equipment calibration and control, procedural use and compliance, control of temporary modifications or jumpers required for test performance, documentation of test data, system restoration, and evaluation of test data. Also, the inspectors verified that maintenance and post-maintenance testing activities adequately ensured that the equipment met the licensing basis, TS, and USAR design requirements. As part of this inspection, the documents in Attachment 1 were utilized to evaluate the potential for an inspection finding.

The inspectors selected the following post-maintenance activities for review for a total of six samples:

- RCIC bearing replacement, during the week ending May 15, 2004;
- average power range monitor (APRM) 1 Switch S-3 maintenance, during the weeks ending June 5 through June 19, 2004;
- “B” reactor recirculation pump seal maintenance, during the weeks ending June 19 through June 30, 2004;
- repair of FW-97-1, feedwater containment isolation check valve, during the weeks ending June 19 through June 30, 2004;
- repair of No. 12 recirculation pump seal leak-off block valve, during the weeks ending June 19 through June 30, 2004; and
- repair of XR-8-1, recirculation pump gasket leak test valve and cap, during the weeks ending June 19 through June 30, 2004.

b. Findings

Introduction

The inspectors identified a Non-Cited Violation of TS having very low safety significance (Green) for failing to follow operations manual procedures. These operations manual procedures require that a functional test be performed to verify operability prior to returning an APRM to service. This issue was more than minor because it directly impacts the equipment performance attribute for the mitigating systems cornerstone.

Description

On June 2, 2004, APRM 1 was placed in a bypassed condition and isolated for maintenance. After completion of the maintenance, the control room supervisor (CRS) granted permission to an operator to return APRM 1 to service prior to completion of the post maintenance test (PMT) to verify operability. Approximately 10 minutes later the shift manager recognized that APRM 1 was in-service and had not yet completed a PMT to prove its operability. APRM 1 was returned to a bypassed condition and removed from service. APRM 1 subsequently failed its PMT and was declared inoperable. Operations Manual B.05.01.02–05, Power Range Neutron Monitoring (PRM) System operation requires that a functional test be performed to verify operability prior to returning an APRM to service.

Analysis

The inspectors determined that the failure to perform the required functional test on APRM 1 prior to returning it to service was a performance deficiency warranting further evaluation. The inspectors reviewed this finding using the guidance contained in Appendix B, “Issue Disposition Screening,” of IMC 0612, “Power Reactor Inspection Reports.” Since APRM 1 was returned to service and later found to be inoperable, the issue was determined to be more than minor because it directly impacts the configuration control attribute for the mitigating systems cornerstone. The finding also affected the cross cutting area of Human Performance because an operator and CRS failed to recognize that APRM 1 had not completed a functional test prior to returning the instrument to service.

The inspectors reviewed this finding in accordance with IMC 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." Using the Phase 1 SDP worksheet for the mitigation systems cornerstone, the inspectors determined that the finding was not a design or qualification deficiency; the finding did not represent an actual loss of safety function of a system; there was no loss of safety function of a single train of TS equipment for greater than the allowed outage time; there was no loss of safety function of non-TS equipment; and the finding does not screen as potentially risk significant due to external events. Therefore, the finding was considered to be of very low safety significance (Green).

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 for operation of the power range nuclear instrument system. Operations Manual B.05.01.02–05, PRM System operation requires that a functional test be performed to verify operability prior to returning an APRM to service. Contrary to the above, on June 2, 2004, the operating crew failed to follow APRM system operating procedures when they did not perform a functional test prior to returning APRM 1 to service. Because this violation was of very low safety significance and it was entered into the licensee's Corrective Action program, this violation is being treated as a NCV consistent with Section VI.A of the NRC Enforcement Policy (NCV 05000263/2004003-03). The licensee has entered this into their corrective action program as CAP 033467. The licensee also initiated root cause evaluation (RCE) 000857, which required a formal root cause investigation for the inappropriate bypass of an APRM resulting in only one operable APRM on the "A" channel of RPS.

1R20 Outage Activities (71111.20)

a. Inspection Scope

The inspectors evaluated a maintenance outage that began on June 18 and ended on June 21, 2004. As part of this inspection, the documents in Attachment 1 were utilized to evaluate the potential for an inspection finding. The inspectors reviewed activities to ensure that the licensee considered risk in developing, planning, and implementing the outage schedule, developed mitigation strategies for loss of key safety functions, and adhered to operating license and TS requirements to ensure defense-in-depth. The inspection activities included, but were not limited to, a review of the outage plan, monitoring of shutdown and startup activities, maintenance activities, and control of outage risk.

In addition to activities inspected utilizing specific procedures, the following represents a partial list of the major outage activities the inspectors reviewed/observed, all or in part:

- review of the outage plans and the ready-backlog;
- control room turnover meetings and selected pre-job briefings;
- reactor shutdown and cooldown;
- control room demeanor, communications, self/peer checking, and equipment panel control;
- outage planning and scheduling meetings;
- drywell entry and control of containment activities;
- control rod drive piping inspections;
- recirculation pump seal replacement;
- feedwater isolation check valve repair;
- building, equipment and work-in-progress walkdowns and monitoring;
- outage equipment configuration and risk management;
- electrical line-ups;
- selected clearances;

- control and monitoring of decay heat removal;
- drywell closure;
- startup and heatup activities, including criticality, feed pump startup, main turbine generator startup and synchronization, and elements of power escalation to full power; and
- identification and resolution of problems associated with the outage.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors reviewed surveillance testing activities to assess operational readiness and ensure that risk-significant structures, systems, and components were capable of performing their intended safety function. Activities were selected based upon risk significance and the potential risk impact from an unidentified deficiency or performance degradation that a system, structure, or component could impose on the unit if the condition were left unresolved. The inspection activities included, but were not limited to, a review for preconditioning, integration of testing activities, applicability of acceptance criteria, test equipment calibration and control, procedural use, control of temporary modifications or jumpers required for test performance, documentation of test data, TS applicability, impact of testing relative to performance indicator reporting, and evaluation of test data. As part of this inspection, the documents in Attachment 1 were utilized to evaluate the potential for an inspection finding.

The inspectors selected the following surveillance testing activities for review for a total of five samples:

- reactor water cleanup (RWCU) high flow and high room temperature trip unit instrument test and calibration, during the week ending April 24, 2004;
- 11 EDG monthly test, during the weeks ending May 8 and May 15, 2004;
- rod block monitor (RBM) functional test, during the week ending April 24, 2004;
- core spray loop B quarterly pump and valve tests, during the week ending May 22, 2004;
- fire hose hydrostatic testing, during the week ending June 19, 2004; and
- drywell prestart inspection/closure, during the week ending June 26, 2004.

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed temporary modification to assess the impact of the modification on the safety function of the associated system. The inspection activities included, but were not limited to, a review of design documents, safety screening documents, USAR, and applicable TS to determine that the temporary modification was consistent with modification documents, drawings and procedures. The inspectors also reviewed the post-installation test results to confirm that tests were satisfactory and the actual impact of the temporary modification on the permanent system and interfacing systems were adequately verified. As part of this inspection, the documents in Attachment 1 were utilized to evaluate the potential for an inspection finding.

The inspectors selected the following temporary modification for review for a total of one sample:

- pipe patch on the service water pipe to 11 and 12 EDGs, during the week ending April 24, 2004.

b. Findings

No findings of significance were identified.

1EP2 Alert and Notification System Testing (71114.02)

a. Inspection Scope

The inspectors discussed with Monticello emergency preparedness (EP) staff the operation, maintenance, and periodic testing of the alert and notification system (ANS) in the Monticello Plant's Emergency Planning Zone (EPZ) to determine whether the ANS equipment was adequately maintained and tested in accordance with Emergency Plan commitments and procedures. The inspectors reviewed records of test maintenance activities for the period from January 2003 through February 2004.

b. Findings

No findings of significance were identified.

1EP3 Emergency Response Organization Augmentation Testing (71114.03)

a. Inspection Scope

The inspectors reviewed the licensee's emergency response organization (ERO) augmentation testing to verify that the licensee maintained and tested its ability to staff the ERO during an emergency in a timely manner and to determine the adequacy of the tests and associated corrective actions. Specifically, the inspectors reviewed quarterly, off-hours staff augmentation test procedures, related November 4, 2002, through April 29, 2004, test records, primary and backup provisions for off-hours notification of

the Monticello facility emergency responders, and the current ERO rosters. The inspectors reviewed and discussed the facility EP staff's provisions for maintaining ERO call out lists.

b. Findings

No findings of significance were identified.

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies (71114.05)

a. Inspection Scope

The inspectors reviewed Nuclear Oversight staff's 2002, 2003, and 2004 audits of the Monticello plant's EP program to verify that these independent assessments met the requirements of 10 CFR 50.54(t) and that the licensee adequately identified and corrected deficiencies. The inspector also reviewed Nuclear Management Company's (NMC) 2003 and 2004 EP program evaluations and critiques to evaluate the EP staff's efforts to identify and correct weaknesses and deficiencies. Additionally, the inspectors reviewed a sample of EP items, condition reports, and corrective actions related to the facility's EP program to determine whether corrective actions were acceptably completed.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

The inspectors selected EP exercises that the licensee had scheduled as providing input to the Drill/Exercise Performance Indicator (PI). The inspection activities included, but were not limited to, the classification of events, notifications to off-site agencies, protective action recommendation development, and drill critiques. Inspector observations were compared with the licensee's observations and corrective action program (CAP) entries. The inspectors verified that there were no discrepancies between observed performance and performance indicator reported statistics. As part of this inspection, the documents in Attachment 1 were utilized to evaluate the potential for an inspection finding.

The inspectors selected the following emergency preparedness activity for review for a total of one sample:

- the inspectors observed an unannounced off-hours emergency response drill that was performed on June 2, 2004. Drill notifications were made with state, county, and local agencies for an alert classification.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety and Public Radiation Safety

2OS1 Access Control to Radiologically Significant Areas (71121.01)

.1 Plant Walkdowns and Radiation Work Permit Reviews

a. Inspection Scope

The inspectors reviewed the radiation work permits (RWPs) used to access the condenser room associated with planned valve maintenance. The inspectors reviewed this area and other high radiation work areas to identify the work control instructions and control barriers that had been specified. Electronic dosimeter alarm set points for both integrated dose and dose rate were evaluated for conformity with survey indications and plant policy. The inspectors attended the pre-job brief where workers were instructed to verify that they were aware of the actions required when their electronic dosimeters noticeably malfunctioned or alarmed.

The inspectors walked down and surveyed (using an NRC survey meter) several plant areas associated with the radwaste processes to verify that the prescribed RWP, procedure, and engineering controls were in place and that licensee surveys and postings were complete and accurate. This review represented two samples.

b. Findings

No findings of significance were identified.

.2 Problem Identification and Resolution

a. Inspection Scope

The inspectors reviewed the licensee's self-assessments, audits, licensee event reports, and special reports related to the access control program to verify that identified problems were entered into the CAP for resolution.

The inspectors reviewed seven corrective action reports related to access controls and two high radiation area (HRA) radiological incidents (non-PIs identified by the licensee in HRAs <1R/hr). Staff members were interviewed and corrective action documents were reviewed to verify that follow-up activities were being conducted in an effective and timely manner commensurate with their importance to safety and risk based on the following:

- Initial problem identification, characterization, and tracking;
- Disposition of operability/reportability issues;
- Evaluation of safety significance/risk and priority for resolution;
- Identification of repetitive problems;
- Identification of contributing causes;
- Identification and implementation of effective corrective actions;
- Resolution of NCVs tracked in the corrective action system; and
- Implementation/consideration of risk significant operational experience feedback.

This review represented two samples.

b. Findings

No findings of significance were identified.

.3 Radiation Protection Technician Proficiency

a. Inspection Scope

The inspectors reviewed seven radiological problem reports, which found that the cause of the event was radiation protection technician (RPT) error, to determine if there was an observable pattern traceable to a similar cause and to determine if this perspective matched the corrective action approach taken by the licensee to resolve the reported problems. This review represented one sample.

b. Findings

Introduction

A Green finding was self-revealed when a RPT transferred radioactive material, with a dose rate of approximately 300 millirem/hour at one foot, from the transversing incore probe (TIP) cubicle to the refuel floor and did not assure the material was placed in the posted HRA. The finding was a violation of the licensee's TS that requires each entryway to a HRA be barricaded and conspicuously posted as a HRA.

Description

On November 19, 2003, a RPT transferred radioactive material, with a dose rate of approximately 300 millirem/hour at one foot, from the TIP cubicle to the refuel floor. When the material was delivered to the refuel floor, the RPT did not assure the material was placed in the posted HRA but transferred the material to a responsible individual who misunderstood the dose rates of the material and placed the material in the

contaminated area, but not the HRA. The RPT returned to the Access Control Desk and met the refuel floor RPT at the desk. In the ensuing discussion between the RPTs, the possibility of a failure to properly place the material in the HRA or post the material directly became obvious. The refuel floor RPT immediately left for the refuel floor and found the material outside the posted HRA in the contaminated area on the refuel floor. The RPT immediately moved the material to the posted HRA and assessed the possibility of unintended exposures. No unintended exposures were identified. This violation of the TS was not licensee-identified because it was not identified through a program or process specifically intended to identify the problem (i.e., a radiological survey). It was identified as result of a chance meeting of the RPTs at the Access Control Desk. Through this chance meeting, the staff took immediate corrective action to correct the existing condition and the event was placed in the licensee's CAP.

Analysis

The inspectors determined that the failure to assure that HRA materials were properly posted was a RPT performance deficiency warranting a significance evaluation in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Disposition Screening," issued on April 29, 2002. Additionally, the primary cause of this finding was related to the cross-cutting area of Human Performance. The inspectors determined the finding was more than minor because it could reasonably be viewed as a precursor to a significant event and is associated with one of the cornerstone attributes, specifically occupational radiation safety.

The inspectors determined that the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," because the occurrence involves an individual worker's potentially unplanned dose resulting from conditions contrary to the TS, which could have been significantly greater as a result of a single minor reasonable alteration of the circumstances.

Enforcement

Technical Specification 6.9 A.1 required, in part, that HRAs, with dose rates not exceeding 1.0 Rem/hour at 30 centimeters, shall be barricaded and conspicuously posted as a HRA at each entryway to such an area. Contrary to this requirement, on November 19, 2003, the licensee failed to properly post and barricade a HRA on the refuel floor. The unposted and unbarricaded area remained for less than one hour. Once identified, the licensee moved the materials to a properly posted area and initiated a survey of the area to assure full compliance with the HRA requirements. Because this violation was of very low safety significance and was placed into the licensee's corrective action program, this violation is being treated as a NCV, consistent with Section VI.A of the NRC Enforcement Policy. (NCV 05000263/2004003-04)

2PS1 Radioactive Gaseous And Liquid Effluent Treatment And Monitoring Systems (71122.01)

.1 Inspection Planning

a. Inspection Scope

The inspectors reviewed the most current Radiological Effluent Release Report to verify that the program was implemented as described in Radiological Effluent Technical Specification/Off-Site Dose Calculation Manual (RETS/ODCM) and to determine if ODCM changes were made in accordance with Regulatory Guide 1.109 and NUREG-0133. The inspectors determined if the modifications made to radioactive waste system design and operation changed the dose consequence to the public. The inspectors verified that technical and/or 10 CFR 50.59 reviews were performed when required and determined whether radioactive liquid and gaseous effluent radiation monitor setpoint calculation methodology changed since completion of the modifications. The inspectors determined if anomalous results reported in the current Radiological Effluent Release Report were adequately resolved.

The inspectors reviewed RETS/ODCM to identify the effluent radiation monitoring systems and its flow measurement devices, effluent radiological occurrence performance indicator incidents in preparation for onsite follow-up, and the USAR description of all radioactive waste systems. This review represented one sample.

b. Findings

No findings of significance were identified.

.2 Onsite Inspection

a. Inspection Scope

The inspectors walked down the major components of the gaseous and liquid release systems (e.g., radiation and flow monitors, demineralizers and filters, tanks, and vessels) to observe current system configuration with respect to the description in the USAR, ongoing activities, and equipment material condition. This review represented one sample.

The inspectors observed the routine processing (including sample collection and analysis) and release of radioactive gaseous effluent to verify that appropriate treatment equipment was used and that the radioactive gaseous effluent was processed and released in accordance with RETS/ODCM requirements. The inspectors verified that the licensee makes no routine liquid effluent discharges. This review represented one sample.

The inspectors reviewed the records of abnormal releases or releases made with inoperable effluent radiation monitors and reviewed the licensee's actions for these releases to ensure an adequate defense-in-depth was maintained against an

unmonitored, unanticipated release of radioactive material to the environment. This review represented one sample.

The inspectors reviewed the licensee's technical justification for changes made by the licensee to the ODCM as well as to the liquid or gaseous radioactive waste system design, procedures, or operation since the last inspection to determine whether the changes affect the licensee's ability to maintain effluents ALARA and whether changes made to monitoring instrumentation resulted in a non-representative monitoring of effluents. This review represented one sample.

The inspectors reviewed a selection of monthly, quarterly, and annual dose calculations to ensure that the licensee properly calculated the offsite dose from radiological effluent releases and to determine if any annual TS/ODCM (i.e., Appendix I to 10 CFR Part 50 values) were exceeded. This review represented one sample.

The inspectors reviewed air cleaning system surveillance test results to ensure that the system was operating within the licensee's acceptance criteria. The inspectors reviewed the methodology the licensee used to determine the stack and vent flow rates. The inspectors verified that the flow rates were consistent with RETS/ODCM or USAR values. This review represented one sample.

The inspectors reviewed records of instrument calibrations performed since the last inspection for each point of discharge effluent radiation monitor and flow measurement device and reviewed any completed system modifications and the current effluent radiation monitor alarm setpoint value for agreement with RETS/ODCM requirements. The inspectors also reviewed calibration records of radiation measurement (i.e., counting room) instrumentation associated with effluent monitoring and release activities and the quality control records for the radiation measurement instruments. This review represented one sample.

The inspectors reviewed the results of the interlaboratory comparison program to verify the quality of radioactive effluent sample analyses performed by the licensee. The inspectors reviewed the licensee's quality control evaluation of the interlaboratory comparison test and associated corrective actions for any deficiencies identified. The inspectors reviewed the licensee's assessment of any identified bias in the sample analysis results and the overall effect on calculated projected doses to members of the public. In addition, the inspectors reviewed the results from the licensee's quality assurance audits to determine whether the licensee met the requirements of the RETS/ODCM. This review represented one sample.

.3 Identification and Resolution of Problems

a. Inspection Scope

The inspectors reviewed the licensee's self-assessments, audits, licensee event reports, and special reports related to the radioactive effluent treatment and monitoring program since the last inspection to determine if identified problems were entered into the CAP for resolution. The inspectors also verified that the licensee's self-assessment program

was capable of identifying repetitive deficiencies or significant individual deficiencies in problem identification and resolution.

The inspectors also reviewed corrective action reports from the radioactive effluent treatment and monitoring program since the previous inspection, interviewed staff and reviewed documents to determine if the following activities were being conducted in an effective and timely manner commensurate with their importance to safety and risk:

- Initial problem identification, characterization, and tracking;
- Disposition of operability/reportability issues;
- Evaluation of safety significance/risk and priority for resolution;
- Identification of repetitive problems;
- Identification of contributing causes;
- Identification and implementation of effective corrective actions;
- Resolution of NCVs tracked in the corrective action system; and,
- Implementation/consideration of risk significant operational experience feedback.

This review represented one sample.

b. Findings

No findings of significance were identified.

2PS2 Radioactive Material Processing and Transportation (71122.02)

.1 Radioactive Waste System

a. Inspection Scope

The inspectors reviewed the liquid and solid radioactive waste system description in the USAR for information on the types and amounts of radioactive waste (radwaste) generated and disposed. The inspectors reviewed the scope of the licensee's audit program with regard to radioactive material processing and transportation programs to verify that it met the requirements of 10 CFR 20.1101(c). This review represented one sample.

b. Findings

No findings of significance were identified.

.2 Radioactive Waste System Walk-downs

a. Inspection Scope

The inspectors performed walkdowns of the liquid and solid radwaste processing systems to verify that the systems agreed with the descriptions in the USAR and the process control program, and to assess the material condition and operability of the systems. The inspectors reviewed the status of radioactive waste process equipment that was not operational and/or was abandoned in place. The inspectors reviewed the licensee's administrative and physical controls to ensure that the equipment would not contribute to an unmonitored release path or be a source of unnecessary personnel exposure.

The inspectors reviewed changes to the waste processing system to verify the changes were reviewed and documented in accordance with 10 CFR 50.59 and to assess the impact of the changes on radiation dose to members of the public. The inspectors reviewed the current processes for transferring waste resin into shipping containers to determine if appropriate waste stream mixing and/or sampling procedures were utilized. The inspectors also reviewed the methodologies for waste concentration averaging to determine if representative samples of the waste product were provided for the purposes of waste classification in 10 CFR 61.55. This review represented one sample.

b. Findings

No findings of significance were identified.

.3 Waste Characterization and Classification

a. Inspection Scope

The inspectors reviewed the licensee's radiochemical sample analysis results for each of the licensee's waste streams, including dry active waste (DAW), spent resins and filters. The inspectors also reviewed the licensee's use of scaling factors to quantify difficult-to-measure radionuclides (e.g., pure alpha or beta emitting radionuclides). The reviews were conducted to verify that the licensee's program assured compliance with 10 CFR 61.55 and 10 CFR 61.56, as required by Appendix G of 10 CFR Part 20. The inspectors also reviewed the licensee's waste characterization and classification program to ensure that the waste stream composition data accounted for changing operational parameters and thus remained valid between the annual sample analysis updates. This review represented one sample.

b. Findings

No findings of significance were identified.

.4 Shipment Preparation

a. Inspection Scope

The inspectors reviewed shipment packaging, surveying, labeling, marking, placarding, vehicle checks, emergency instructions, disposal manifest, shipping papers provided to the driver, and licensee verification of shipment readiness for five selected non-exempt shipments. Because no shipments were scheduled during the inspection, these reviews were conducted using the shipping records. The inspectors verified that the requirements of any applicable transport cask Certificate of Compliance were met and verified that the receiving licensee was authorized to receive the shipment packages. The inspectors verified that the licensee's procedures for cask loading and closure procedures were consistent with the vendor's approved procedures. The inspectors observed radiation worker practices to verify that the workers had adequate skills to accomplish each task and to determine if the shippers were knowledgeable of the shipping regulations and whether shipping personnel demonstrate adequate skills to accomplish the package preparation requirements for public transport with respect to NRC Bulletin 79-19 and 49 CFR Part 172 Subpart H. The inspectors reviewed the training records provided to personnel responsible for the conduct of radioactive waste processing and radioactive shipment preparation activities. The review was conducted to verify that the licensee's training program provided training consistent with NRC and Department of Transportation (DOT) requirements. This review represented one sample.

b. Findings

No findings of significance were identified.

.5 Shipping Records

a. Inspection Scope

The inspectors reviewed five non-excepted package shipment manifests/documents completed in 2002/2003 to verify compliance with NRC and DOT requirements (i.e., 10 CFR Parts 20 and 71 and 49 CFR Parts 172 and 173). This review represented one sample.

b. Findings

No findings of significance were identified.

.6 Identification and Resolution of Problems

a. Inspection Scope

The inspectors reviewed condition reports, audits and self-assessments that addressed radioactive waste and radioactive materials shipping program deficiencies since the last inspection, to verify that the licensee had effectively implemented the CAP and that problems were identified, characterized, prioritized and corrected. The inspectors also

verified that the licensee's self-assessment program was capable of identifying repetitive deficiencies or significant individual deficiencies in problem identification and resolution.

The inspectors also reviewed corrective action reports from the radioactive material and shipping programs since the previous inspection, interviewed staff and reviewed documents to determine if the following activities were being conducted in an effective and timely manner commensurate with their importance to safety and risk:

- Initial problem identification, characterization, and tracking;
- Disposition of operability/reportability issues;
- Evaluation of safety significance/risk and priority for resolution;
- Identification of repetitive problems;
- Identification of contributing causes;
- Identification and implementation of effective corrective actions;
- Resolution of NCVs tracked in corrective action system(s); and
- Implementation/consideration of risk significant operational experience feedback.

This review represented one sample.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

Cornerstones: Mitigating Systems, Emergency Preparedness, and Public Radiation Safety

.1 Reactor Safety Strategic Area

a. Inspection Scope

The inspectors' review of performance indicators (PI) used PI guidance and definitions contained in Nuclear Energy Institute (NEI) Document 99-02, Revision 2, "Regulatory Assessment Performance Indicator Guideline," to verify the accuracy of the PI data. The inspectors' review included, but was not limited to, conditions and data from logs, licensee event reports, condition reports, and calculations for each PI specified. For the three EP PI's, the inspectors reviewed records including procedural guidance on assessing opportunities for the three PIs, assessments of PI opportunities during pre-designated control room simulator training sessions, the 2003 biennial exercise and drills, revisions of the roster for personnel assigned to key ERO positions, and the results of periodic ANS operability tests. As part of the inspection, the documents listed in Appendix 1 were utilized to evaluate the accuracy of PI data.

The following PIs were reviewed for a total of 6 samples:

- Safety System Unavailability for Emergency AC Power Systems, for the period of April 2003 through March 2004;
- Safety System Unavailability for Residual Heat Removal System, for the period of April 2003 through March 2004;
- Safety System Functional Failures, for the period of April 2003 through March 2004;
- Drill Exercise/Performance, for the period of October 2003 through March 2004;
- Emergency Response Organization Drill Participation, for the period of October 2003 through March 2004; and
- Alert and Notification System Reliability, for the period of October 2003 through March 2004.

b. Findings

No findings of significance were identified.

.2 Radiation Safety Strategic Area

a. Inspection Scope

The inspectors review of the licensee submittals for performance indicators (PIs) used PI guidance and definitions contained in Nuclear Energy Institute (NEI) Document 99-02, Revision 2, "Regulatory Assessment Performance Indicator Guideline," to verify the accuracy of the PI data. The inspectors' review included, but was not limited to, conditions and data from logs, licensee event reports, condition reports, and calculations for each PI specified. Since no reportable elements were identified by the licensee for the last four quarters, the inspectors compared the licensee's data in quarterly reviews and the annual effluent report with CRs to verify that there were no occurrences concerning the public radiation safety cornerstone. As part of the inspection, the documents listed in Appendix 1 were utilized to evaluate the accuracy of PI data.

The following PIs were reviewed for a total of one sample:

- RETS/ODCM Radiological Effluent Occurrence, for the period of July 2003 through June 2003.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, and Emergency Preparedness

.1 Routine Review of Identification and Resolution of Problems

a. Inspection Scope

As part of the routine inspections documented above, the inspectors verified that the licensee entered the problems identified during the inspection into their CAP. Additionally, the inspectors verified that the licensee was identifying issues at an appropriate threshold and entering them in the CAP, and verified that problems included in the licensee's CAP were properly addressed for resolution. Attributes reviewed included: complete and accurate identification of the problem; that timeliness was commensurate with the safety significance; that evaluation and disposition of performance issues, generic implications, common causes, contributing factors, root causes, extent of condition reviews, and previous occurrence reviews were proper and adequate; and that the classification, prioritization, focus, and timeliness of corrective actions were commensurate with safety and sufficient to prevent recurrence of the issue.

b. Findings

No findings of significance were identified.

.2 Daily Corrective Action Program Reviews

a. Inspection Scope

In order to assist with the identification of repetitive equipment failures and specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's CAP. This review was accomplished by reviewing daily CAP summary reports and attending corrective action review board (CARB) meetings.

b. Findings

No findings of significance were identified.

.3 Semi-Annual Trend Review

a. Inspection Scope

The inspectors performed a review of the licensee's CAP and associated documents to identify trends that could indicate the existence of a more significant safety issue. The inspectors' review was focused on unplanned limited condition of operation (LCO) entries, but also considered the results of daily inspector CAP item screening discussed in Section 4OA2.2 above, licensee trending efforts, and licensee human performance

results. The inspectors' review nominally considered the 6 month period of January 2004 through June 2004, although some examples expanded beyond those dates when the scope of the trend warranted.

Inspectors reviewed adverse trend CAP items associated with various events that occurred during the period. The review also included issues documented outside the normal CAP in major equipment problem lists, repetitive and/or rework maintenance lists, departmental problem/challenges lists, system health reports, quality assurance audit/surveillance reports, self assessment reports, and maintenance rule assessments. The specific items reviewed are listed in the Documents Reviewed section attached to this report. The inspectors compared and contrasted their results with the results contained in the licensee's CAP trending documents. Corrective actions associated with a sample of the issues identified in the licensee's trend report were reviewed for adequacy.

The inspectors also evaluated the report against the requirements of the licensee's CAP as specified in 4 AWI-10.01.01, Corrective Action Program, and 10 CFR 50, Appendix B. Additional documents reviewed are listed in Attachment 1 to this report.

The inspectors evaluated the licensee trending methodology and observed that the licensee had performed a detailed review. The licensee routinely reviewed cause codes, involved organizations, key words, and system links to identify potential trends in their CAP data. The inspectors compared the licensee process results with the results of the inspectors' daily screening and did not identify any discrepancies.

b. Findings

There were no findings of significance identified. The licensee's CAP identified one issue of potential significance. This issue was a gradual increase in the unidentified leakage rate. The inspectors reviewed the licensee's corrective actions associated with this issue using the guidance contained in Inspection Procedure (IP) 71152 as well as other baseline inspection procedures.

With regard to the increasing unidentified leakage, this issue could be indicative of a more significant problem associated with barrier integrity. The inspectors determined that the licensee's trend CAP item had effectively aggregated the examples and caused them to comprehensively address the degrading condition. The resultant licensee actions included increased monitoring and trending, weekly management updates, and setting an operational limit for leakage as part of their corrective action plan for the overall trend problem. During a maintenance shutdown to repair the 12 recirculation pump seal, the licensee identified a feedwater check valve that had a small mechanical joint leak. The licensee repaired the valve during the maintenance outage. Initial indications are that the unidentified leak rate has gone down since the repair. The licensee continues to monitor the unidentified leakage.

.4 Selected Issue Follow-up Inspection: Review of Site Human Performance Clock Resets Due to Unplanned Limited Conditions of Operation

Introduction

Monticello Nuclear Generating Station maintains an event-free clock that tracks the period between human performance-related events. The inspectors recognized that there have been four human performance event clock resets since December of 2003 that were attributed to unplanned LCO entries. This issue raised a concern that there may be an adverse trend in unplanned LCO entries due to human performance events.

a. Inspection Scope

The inspectors reviewed four human performance event clock resets that were attributed to unplanned entry in an LCO. The inspection included a review of the licensee's corrective actions associated with each human performance event clock reset. The four events inspected were:

- unnecessary LCO entry for 11 residual heat removal service water (RHRSW) flush, on December 9, 2003;
- improper design inputs used in Alteration 03A073 for replacement of emergency filtration train (EFT) fan and motor sheaves, on February 4, 2004;
- "A" wide range gas monitor (WRGM) unplanned LCO due to a loss of sample flow while placing placard on Panel C-257 next to the WRGM keypad, on February 4, 2004; and
- inappropriate bypass of an APRM channel resulting in TS non-compliance, on June 2, 2004.

b. Issues

During their review of the human performance clock reset events, the inspectors evaluated the causal factors for each of the four events. The inspectors also reviewed the root cause evaluations that were performed for two of the events. The inspectors concluded that the causal factors for each of the four events were not related.

The inspectors also discussed the four events with the performance assessment manager to determine if the four events constitute an adverse trend in the licensee's corrective action program. Because the four events did not have common causal factors nor were they committed by one group, the inspectors concluded that an adverse trend did not exist.

4OA4 Cross-Cutting Aspects of Findings

.1 A finding described in Section 1R01 of this report had, as its primary cause, a human performance deficiency when an operator failed to apply standards to outside areas containing risk significant equipment similar to those applied to internal plant buildings.

.2 A finding described in Section 1R19 of this report had, as its primary cause, a human performance deficiency when an operator and control room supervisor failed to utilize human performance tools to recognize that APRM 1 had not been tested prior to returning the instrument to service.

.3 A finding described in Section 2SO1.3 of this report had, as its primary cause, a human performance deficiency when a RPT failed to utilize human performance tools when he did not assure that radioactive material was placed in an appropriately posted area.

4OA5 Other Activities

.1 Offsite Power System Operational Readiness (TI 2515/156)

Cornerstone: Initiating Events and Mitigating Systems

a. Scope

The inspectors reviewed licensee maintenance records, event reports, corrective action documents and procedures, and interviewed the station engineering, maintenance, and operations staff to collect data necessary to complete the Temporary Instruction (TI) 2515/156. This review was conducted to confirm the operational readiness of the offsite power systems in accordance with NRC requirements such as Appendix A to 10 CFR Part 50, General Design Criterion (GDC) 17; Criterion XVI of Appendix B to10 CFR Part 50, Plant TS for offsite power systems; 10 CFR 50.63; 10 CFR 50.65 (a)(4), and licensee procedures. Specifically, the inspectors reviewed the licensee's procedures and processes for ensuring that the grid reliability conditions are appropriately assessed during periods of maintenance in accordance with the Maintenance Rule, 10 CFR 50.65 (a)(4). The inspectors also assessed the reliability and grid performance through a review of historical and current data to verify compliance with the station blackout rule 10 CFR 50.63, TS, and GDC 17. Lastly, the inspectors assessed the licensee's implementation of operating experience that was applicable to the site as well as corrective action documents to ensure issues were being identified at an appropriate threshold, assessed for significance, and appropriately dispositioned. The inspectors used the documents listed in Attachment 1 to accomplish the objectives of the TI.

b. Findings

There were no findings identified during this inspection. The inspectors have summarized below the licensee's responses to the significant issues reviewed during the temporary instruction.

(1) Monticello Nuclear Generating Plant (MNGP) has a communications protocol agreement with the Transmission System Operator (TSO) in the form of an operating guide that is enforced by a contract. The Nuclear Power Plant Operating Services Agreement (NPPOSA) is the formal legal agreement between the plant and the grid operator.

(2) MNGP has transmitted its post-trip minimum voltage and maximum load demand requirements to the TSO to ensure that the TSO maintains the proper voltages in accordance with the NPPOSA.

(3) The Energy Marketing Hourly Trader and Network Reliability Leader has the responsibility for declaring when a specific system grid condition exists, communicating the condition to MNGP, Energy Marketing, and the Control Center, and also promptly informing the same organizations when the condition is cleared. In addition, contingency voltages are continuously monitored, and the MNGP control room is notified if contingency voltages are predicted to be inadequate.

(4) MNGP informs the TSO when connecting loaded EDG to the grid and the length of time they will be on the grid, such as in performance of surveillance tests. The EDG surveillance test procedures include specific requirements, precautions, and restrictions concerning weather conditions to reduce the probability of a simultaneous loss of both on-site and off-site power sources.

Risk management of on-line maintenance procedures are followed for performance of risk assessments for planned maintenance activities and unplanned equipment unavailabilities. Generally the assessment will be performed utilizing Equipment Out Of Service (EOOS) software. As an alternative, the probabilistic risk assessment (PRA) organization can perform a quantitative or qualitative analysis using models and/or insights from the PRA.

Subyard switching is considered in all risk analysis. Additionally, operating procedures include general precautions such as a discussion of the subyard switching during EDG operation.

(5) The current grid condition is posted in the MNGP Work Execution Center (WEC) and the control room. This information is taken into account prior to performing maintenance on related risk significant equipment.

(6) MNGP experienced loss of offsite power (LOOP) events on April 27, 1981, and June 4, 1984. Offsite power was unavailable for 15 minutes for the April 27, 1981, event and for 23 minutes for the June 4, 1984, event. The MNGP USAR has a design coping time of 4 hours for a LOOP.

(7) Monticello Nuclear Generating Plant has entered and evaluated the August 14, 2003, grid event into their CAP as an industry operating experience evaluation. The evaluation was entered as CR 03009189 and CR 03009923 on September 9, 2004. Several assigned actions resulting from CR 03009189 and CR 03009923 were still open at the time of the inspection.

4OA6 Meetings

.1 Exit Meeting

The inspectors presented the inspection results to Mr. Palmisano and other members of licensee management on June 29, 2004. The licensee acknowledged the findings presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

.2 Interim Exit Meetings

Interim exits were conducted for:

- Emergency Preparedness Program and Performance Indicators Inspection with Mr. T. Palmisano on May 7, 2004, and a phone call exit on May 13, 2004, with D. Pedersen and R. Baumer;
- Occupational Radiation Safety Radiological Access Control and Public Radiation Safety Radioactive Material Processing and Transportation Inspection with Mr. J. Purkis on April 9, 2004; and
- Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems with Mr. J. Purkis on June 10, 2004.

4OA7 Licensee-Identified Violations

The following violation of very low significance was identified by the licensee and was a violation of an NRC requirement which meets the criteria of Section VI of the NRC Enforcement Manual, NUREG-1600, for being dispositioned as a NCV.

Cornerstone: Occupational Radiation Safety

Technical Specifications 6.9 A.1. required, in part, that high radiation areas (HRA), with dose rates not exceeding 1.0 Rem/hour at 30 centimeters, shall be barricaded and conspicuously posted as a high radiation area at each entryway to such an area. Contrary to this requirement, on September 20, 2003, the licensee failed to properly post and barricade a HRA on the refuel floor. Once identified through a routine area survey, the licensee properly posted area in full compliance with the HRA requirements.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee
T. Palmisano, Site Vice President
J. Conway, Site Director
J. Purkis, Plant Manager
R. Baumer, Licensing
G. Bregg, Manager, Quality Services
K. Jepsen, Radiation Protection Manager
D. Neve, Regulatory Affairs Manager
E. Sopkin, Director of Engineering
D. Pedersen, Emergency Planning Manager
C. Dixon, Sr. Emergency Planning Coordinator
J. Grubb, Business Support Manager
G. Holthaus, Sr. Emergency Planning Coordinator
L. Hoskins, Sr. Emergency Planning Coordinator

Nuclear Regulatory Commission
B. Burgess, Chief, Reactor Projects Branch 2

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

05000263/2004003-01	FIN	Failure to Control Materials in the Subyard Which Could become Potential Missiles (Section 1R01)
05000263/2004003-02	NCV	Failure to Take Prompt and Adequate Corrective Actions to Adequately Analyze the 11 and 12 EDG Room Ventilation to Demonstrate EDG Operability (Section 1R15)
05000263/2004003-03	NCV	Failure to Perform a Functional Test to Verify Operability Prior to Returning an APRM to Service (Section 1R19)
05000263/2004003-04	NCV	Failure to Post and Barricade a High Radiation Area (Section 2OS1)

Closed

05000263/2004003-01	FIN	Failure to Control Materials in the Subyard Which Could become Potential Missiles (Section 1R01)
05000263/2004003-02	NCV	Failure to Take Prompt and Adequate Corrective Actions to Adequately Analyze the 11 and 12 EDG Room Ventilation to Demonstrate EDG Operability (Section 1R15)

05000263/2004003-03	NCV	Failure to Perform a Functional Test to Verify Operability Prior to Returning an APRM to Service (Section 1R19)
05000263/2004003-04	NCV	Failure to Post and Barricade a High Radiation Area (Section 2OS1)

Discussed

None

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 reports.

1R01 Adverse Weather

Documents and Procedures:
Operations Manual B.08.07-01; Heating and Ventilation: Function and General Description of System; Revision 5
Post Severe Weather Checklist 1444; Revision 4
Monticello Station Log for Monday, June 8, 2004, and Tuesday, June 9, 2004
1150; Summer Checklist; Revision 34

Technical Specifications:
Section 3.9; Auxiliary Electrical System; Amendment 51

Updated Safety Analysis Report:
Section 8.2; Transmission System; Revision 20
Section 8.3; Auxiliary Power System; Revision 20
Section 2.3; Meteorology; Revision 19
Section 10.3.2; Plant Heating and Ventilation Air Condition Systems; Revision 20

Operations Manual:
B.08.07-05; Heating and Ventilation: System Operation; Revision 4
A.6; Acts of Nature; Revision 18
A.6-001; Review of Emergency Preparedness During or After Natural Disaster Events; Revision 1

1R04 Equipment Alignment

Documents and Procedures:
B.03.02-05; HPCI System: System Operation; Revision 22

Drawings and Prints:
NH-36250; HPCI System (Water Side); Revision AD
NH-36249; HPCI System (Steam Side); Revision AM

Updated Safety Analysis Report:
Volume II Section 6.2.4; HPCI System; Revision 20

Operations Manual:
B.03.02-01; HPCI System: Functional and General Description of System; Revision 5
B.03.02-02; HPCI System: Description of Equipment; Revision 3

1R05 Fire Protection

Pre-Fire Fighting Procedures and Strategies:
Strategy A.3-08; Cable Spreading Room; Revision 8
Strategy A.3-02-B; Reactor Building East HCU Area; Revision 5
Strategy A.3-02-C; Reactor Building West HCU Area; Revision 5
Strategy A.3-03-C; Vessel Instrument Rack Area; Revision 4

Documents and Procedures:
4 AWI-08.01.00; Fire Protection Program Plan; Revision 3
4 AWI-08.01.01; Fire Prevention Practices; Revision 20
4 AWI-04.03.01; Plant Surveillance and License Amendment Implementation Program; Revision 10

Condition Reports:
04003159; CSR Fire Detector Unable to Be Cleaned and Tested Due to Obstructions

1R06 Flood Protection Measures

Documents and Procedures:
Design Basis Document: T-5 External Flooding; Revision 3
Design Basis Document: T-8 Internal Flooding; Revision 2

Drawings and Prints:
NH-178639; Flood Barriers for A.6 Acts of Nature Procedure
NF-74413-2; Underground Services Electrical, Communications, and Security; Revision M
NF-74413-5; Underground Services Cooling Tower Area; Revision L
NF-74413-8; Underground Services 12.5 kV & Construction Tower Area; Revision D
ND-95209; Monticello Main Plant Structures; Revision S
NF-74413-4; Underground Services Electrical Power; Revision M
NF-97431; Yard Drainage Line - Yard Grading; Revision A
NF-36700; Grade Drain and Utilities; Revision L

Updated Safety Analysis Report:
Section Appendix G; Probable Maximum Flood
Section 2.4.2.2; Ground Water; Revision 19
Section 12.2; Plant Principal Structures and Foundations; Revision 20

Section 10.3.6; Plant Equipment and Floor Drainage Systems; Revision 20

Operations Manual:
A.6; Acts of Nature; Revision 18

Condition Reports:
04000390; USAR 2.4.2.2 Says Groundwater Table Is at 922 Feet, but That Is the Level 4000+ Feet From the Plants. Level Near Plant Is 908 Feet
03002987; There Is No Analysis That Show the Diesel Oil Storage Tank Will Withstand Hydrostatic Force Due to a Flood
03004115; Consider Procedural Enhancements to A.6 (Tanker Truck) or Formal Evaluation of Diesel Oil Storage Tank
03012767; Track AES [Applied Engineering Services] T-44 [Diesel Oil Storage Tank] Calculation and Formally Accept as MNGP Calculation
03011108; License Renewal of HPCI Roof Noted Cracks in Slab. Water Is Leaking into HPCI Room. Cracks Need to Be Sealed

1R11 Licensed Operator Requalification Program

Documents and Procedures:
RQ-SS-46E; Earthquake with a Loss of Service Water; Revision 0
C.4-A; Reactor Scram; Revision 22
C.4-F; Rapid Power Reduction; Revision 15
C.5.1-1300; Secondary Containment Control; Revision 7
C.5.1-1200; Primary Containment Control; Revision 10
C.5.1-1100; RPV [Reactor Pressure Vessel] Control; Revision 6

Condition Reports:
033609; Untimely Completion of Critical Steps Results in Crew Cyclic Simulator Evaluation Failure

1R12 Maintenance Effectiveness

Documents and Procedures:
Operations Manual B.09.08-05; EDGs, System Operation; Revision 17
Maintenance Rule Database Entries for 4.16 kV System and Subsystems for January 1, 2002 through March 23, 2004
B.9.6; Monticello Maintenance Rule Program System Basis Document; 4.16 kV System; Revision 5
4858-59-PM; 1R Transformer and Associated Bus Maintenance Procedure; Revision 8
4858-03-OCD; 1R Reserve Transformer Maintenance Isolation; Revision 2
NUMARC 93-01; Nuclear Energy Institute Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants; Revision 2
Monticello Generating Station Transmission Operation Guide; dated 5/3/2004
4 AWI-08.15.01; Risk Management for Outage and On-line Activities; Revision 0
SWI-14.01; Risk Management of On-Line Maintenance; Revision 2
NUMARC 93-01; Nuclear Energy Institute Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants; Revision 3

B.9.5; Maintenance Rule Program System Basis Document; 115 kV Substation; Revision 1
B.9.4; Maintenance Rule Program System Basis Document; 230 kV Substation; Revision 1
B.9.3; Maintenance Rule Program System Basis Document; 345 kV Substation; Revision 2
License Event Report 84-021; Loss of Offsite Power
License Event Report 81-009; Racking Out of Energized 4.16 kV Breaker and Subsequent Events
MWI-3-M-2.01; AC Electrical Load Study; Revision 6
M-SOE-91-02; Monticello Nuclear Generating Plant Significant Operating Event Investigation Report: Plant Equipment Vulnerability to Substation Transients
NRC Information Notice 91-22; Four Plant Outage Events Involving Loss of AC Power or Coolant Spills

Drawings and Prints:
NH-36051; Diesel Oil System; Sheet 1 of 2; Revision AF
NH-36051-1; Diesel Oil System; Sheet 2 of 2; Revision H
NF-36298-1; Monticello Nuclear Generating Plant Electrical Load Flow One Line Diagram; Revision Q

Technical Specifications:
3.9/4.9 and Bases; Auxiliary Electrical Systems

Operations Manual:
B.08.01.02; EDG Emergency Service Water; Description of Equipment; Revision 1
B.09.08-01; EDG, Function and General Description; Revision 3
B.09.03-05; 345 kV Substation System Operation; Revision 18
B.09.05-05; 115 kV Substation System Operation; Revision 5
C.4-B.09.02.B; Abnormal Procedures; Loss of Normal Offsite Power; Revision 9

Condition Reports:
03003843; Foreign Material Discovered in Breaker Cubicle 152-201 During 4.16 kV Bus Maintenance
03004753; Phenolic Guide Blocks on the 4.16 kV Breakers Secondary Disconnects Found Broken During Minor Breaker Preventative Maintenance
03005591; Difficulty Racking in 4.16 kV Breaker 43 into Cubicle 152-508
03007956; Two Cover Screws with Star Washers Were Found Missing During Performance of 4858pm on 4.16 kV Breaker 5 Magne-Blast Circuit Breakers
04002287; Unable to Rack 4.16 kV Breaker 38 into Spare Cubicle 152-403 Due to Uncoupled Position Stop Released Pin
02005361; Breaker 152-401 Failed to Close While Switching from 1R to 2R Transformer
03000789; Received Annunciator C08-C-5 (Number 1R Reserve Transformer Trouble)
04000754; Received Unexpected Annunciator C-08-C-56 (Number 1R Reserve Transformer Trouble)
04000956; Received 1R Transformer Trouble Alarm C-08-C-5
04001209; Unexpected Alarm on 1R Transformer
02002183; Maintenance Rule Program Did Not Capture 9.2 Hours of Unavailability from the 1R Transformer on 12/21/01

02002183; 1AR Transformer Has Exceeded its Maintenance Rule Performance Criteria for Unavailability Causing 4.16 kV System to Enter Red Status
02004663; Phenolic Guide Blocks on the 4.16 kV Breakers Secondary Disconnects Found Broken During Performance of Minor Breaker Preventative Maintenance
02008856; Bolts Missing/Loose on Back of 4.16 kV Cubicles. No Operability Concerns
02008178; Minor Damage to Plastisol Flexible Cover on C Phase Arc Chute for Breaker 4.16 kV B-10
02009216; Secondary Contact Damage on 4.16 kV Breaker B-10 While Racking into Cubicle 152-102

1R13 Maintenance Risk Assessments and Emergent Work Control

Documents and Procedures:
MNGP Plant Status Report; May 25, 2004
Monticello Maintenance Rule Program System Basis Document; B.6.5; Condensate and Feedwater System; Revision 1
Vibration Summary Report; P-1B 12 Condensate Pump; May 17, 2004
Vibration Summary Report; P-1B 12 Condensate Pump; May 19, 2004
Vibration Summary Report; P-1B 12 Condensate Pump; March 29, 2004
Vibration Summary Report; P-1B 12 Condensate Pump; April 6, 2004
0255-08-IA-1; RCIC Pump and Valve Test; Revision 56
4 AWI-08.15.01; Risk Management for Outage and On-Line Activities; Revision 0
Monticello Maintenance Rule Program System Basis Document; Recirculation System; Revision 0
4290; Recirculation Pump Seal Overhaul; Revision 9
3630; Alteration Package 04A045 - Recirculation Pump Alignment Pin
4290-02-OCD; “B” Recirculation Pump Mechanical Maintenance; Revision 8
Post-Maintenance Testing Activities Control Cover Sheet for WO 0402354; Revision 11
Magnetic Particle Examination Report Nos. 0402354-MT-1 & -2, for WO 0402354
3728; ANII Contact Log for WO 0402345; Revision 3
3063-05; ASME Section XI Repair/Replacement Plan for WO 0402354; Revision 8
3063-06; ASME Section XI Repair/Replacement Reconciliation Report for WO 0402354; Revision 0

Drawings and Prints:
NH-366665; Service Water System and Make-up Intake Structure; Revision CF
NF-36298; Monticello Electrical Load Flow One Line Diagram; Revision Q

Updated Safety Analysis Report:
Section 10.2.5; Reactor Core Isolation Cooling System (RCIC); Revision 20

Operations Manual:
B.09.08-05; Emergency Diesel Generator System Operation; Revision 17
B.8.1.2-01; Emergency Diesel Generator Emergency Service Water; Revision 6
B.8.4.1; Instrument and Service Air

Condition Reports:
04003557; Water Leak from Insulation Upstream of SW-239-2, SW Supply to 12 Emergency Diesel Generator

CAP000018; P-1B Motor Vibration Indicates Need for Replacement Prior to Summer
01006015; Improper Greasing Method Listed in 4916-02-PM for Condensate Pump Motor Guide Bearings. Could Cause Motor or Bearing Damage
03013024; During Performance of RCIC Quarterly Pump and Valve Test 0255-08-IA-1 Vibration Reading for P4V was in Alarm
033154; RCIC Stock Replacement Bearing Not Identical to Bearing in RCIC
033440; Abnormal Brush Wear on Number 12 Recirculation Motor Generator Set Inboard Collector Ring
0334548; 12 Motor Generator Tachometer Coupling Spacing Shorter than 11 Motor Generator Set Tachometer Coupling

Work Orders:
0400005; Replace RCIC Pump Outboard Bearing
0402098; Contingency WO to Replace 12 Recirculation Pump Seal
0402354; Repair Weld Check Valve [FW-97-1]
0402342; FW-97-1 has Leak at Hinge Plug
0402223; 12 Recirculation Pump Block Valve Apparently Did Not Close as Required

1R14 Personnel Performance During Non-Routine Plant Evolutions and Events

Documents and Procedures:
MNGP Radiochemistry Digi-Chem System TOC & Off Gas Flow Report for May 22, 2004; May 25, 2004
MNGP Radiochemistry Digi-Chem System Reactor Cleanup Influent Report for May 22 & 23, 2004; May 25, 2004
Information Notice 82-32; Contamination of Reactor Coolant System By Organic Cleaning Solvents; August 19, 1982
Information Notice 83-49; Sampling and Prevention of Intrusion of Organic Chemicals into Reactor Coolant Systems; July 25, 1983
MNGP Down Power to 30% and 12 Condensate Pump Bearing Replacement Work Schedule; May 21, 2004
Information Notice 96-69; Operator Actions Affecting Reactivity; December 20, 1996
MNGP Schedule for Work Week 4213; May 30 through June 5, 2004
3427-B; OC Subcommittee B Review Distribution List; Revision 11; Document Title: Recirculation MG Brush Replacement; dated June 2, 2004

Technical Specifications:
3.0/4.0 and Bases; Recirculation System
3.6/4.6 and Bases; Primary System Boundary

Updated Safety Analysis Report:
Section 4.3; Recirculation System; Revision 20

Operations Manual:
C.2-05; Power Operations: System Operation; Revision 19
B.01.04-05; Reactor Recirculation System: System Operation; Revision 16
B.01.04-01; Reactor Recirculation System: Function and General Description of Equipment; Revision 3

Condition Reports:
033440; Abnormal Brush Wear on Number 12 Recirculation Motor Generator Set Inboard Collector Ring
0334548; 12 Motor Generator Tachometer Coupling Spacing Shorter than 11 Motor Generator Set Tachometer Coupling

1R15 Operability Evaluations

Documents and Procedures:
Design Basis Document B.9.10; 125 VDC System; Revision 3
Instrument Calibration and Maintenance Record for Instrument DPIS 2-129A; Recirculation Loop Differential Pressure Low Pressure Coolant Injection (LPCI) Loop Select; March 1987 through December 1992
Instrument Calibration and Maintenance Record for Instrument DPIS-2-129B; Jet Pump Water Supply Differential Pressure RHR Permissive Interlock; January 1998 through December 1992
Instrument Calibration and Maintenance Record for Instrument DPIS-2-129C; Jet Pump Water Supply Differential Pressure RHR Permissive Interlock; March 1989 through December 1992
Instrument Calibration and Maintenance Record for Instrument DPIS-2-129D; Jet Pump Water Supply Differential Pressure RHR Permissive Interlock; January 1998 through December 1992
Work Request Authorization; Number 92-5594; RHR LPCI Loop Select Differential Pressure Switch
3186-G-01-3; Quality Control Inspection Record; dated March 16, 1992
7110; RHR System Instrument Maintenance Procedure; Revision 8
3505; Nonconforming Item Report; Report Number 91-087 and attachment; dated February 8, 1991
ESM-03.02; Design Requirements, Practices & Topics (Instrumentation and Controls); Revision 5
Form 3313; Corrections and/or Supplemental Information: Nonconformance Item Report (NCI) 91-087; dated March 26, 1992
GENE-637-0089-0393; General Electric Sensitivity Analysis; Monticello LPCI Loop Select Logic Setpoint; dated May 1993
3087; Document Change, Hold, and Comment Form; Identification Number 04-1820; dated June 14, 2004
3087; Document Change, Hold, and Comment Form; Identification Number 04-1782; dated June 11, 2004
Design Basis Document; Section 5.3; Diesel Generator Building Supply Fans V-SF-9, V-SF-10; Revision C
Calculation Number MN03-P024612-101; Emergency Diesel Generator Room Heat-Up Air Cooler Fan Flow Analysis; Revision 0
Letter Number SLMON-2004-104; Sargent and Lundy; Emergency Diesel Generator Ventilation System Modification Study; dated April 29, 2004

Drawings and Prints:
Monticello Drawing NH36246; Residual Heat Removal System; Revision BL
Monticello Drawing NH36247; Residual Heat Removal System; Revision BP

Technical Specifications:
3.9/4.9; Station Battery System
3.5/4.5 and Bases; Core and Containment Spray/Cooling Systems

Updated Safety Analysis Report:
Section 8.5.2; 125 VDC System; Revision 20
Section 6.2.3; Residual Heat Removal System; Revision 20
Section 14.7; Loss-of-Coolant Accident; Revision 20
Section 8.4; Plant Standby Diesel Generator Systems; Revision 20
Section 2.3; Meteorology; Table 2.3-1 Monthly Air Temperature; Revision 19

Condition Reports:
04003778; Intermittent Resistive Ground (Approximately 20 Volts) That Changes Polarity is Present on the Division II 125 VDC System
04004061; Disagreement as to the Boundary Between Class HE and GE for Division I Residual Heat Removal Pump Minimum Flow Lines
03011289; Resident Inspector Question Regarding Operability of 12 Residual Heat Removal Service Water with Leakage past Valve RHRSW-2-4 and with the Bonnet Loose on Valve RHRSW-1-4
033391; LPCI Loop Selection Logic May Not Meet USAR Break Size Detection Requirement
04004179; Outside Air Temperature 91.9 F. A.6 Manual Directs to Evaluate Emergency Diesel Generators for Operability
03010341; Measured Air Flow for 11/12 EDG Room Is less Than That Used in Calculation CA-03-133
03009388; Measured Air Flow for 11/12 EDG Room Is less Than That Used in Calculation CA-03-133
03002963; Existing Analysis Supporting EDG Room Ventilation Capacity Is Inadequate
04001554; Due Date for Level 3 Action Did Not Consider the Actual Time Required to Complete the Action
04004245; Outside Air Temperature 91.9 F. A.6 Manual Directs to Evaluate Emergency Diesel Generators for Operability
04004189; EDG Room Ventilation Flow Rate Data Challenged Proactive Operability Determined Prepared for 91 Degree F Day
03001908; Existing Analysis Supporting EDG Room Ventilation Capacity Is Inadequate
02012385; Determine EDG Room Upper Temperature Limits
03002964; Existing Analysis Supporting EDG Room Ventilation Capacity Is Inadequate
03005455; Existing Analysis Supporting EDG Room Ventilation Capacity Is Inadequate

1R16 Operator Workarounds

Documents and Procedures:
Monticello Operational Challenges List; April 21, 2004
OWI-01.07; Operations Department Self Assessment; Revision 22
0255-06-IA-1; HPCI Quarterly Pump and Valve Tests; Revision 66
2053; Operator Challenge Request Form; Revision 1
2220; Operational Challenge Resolution - Operator Workarounds; Revision 3
Microsoft Excel Spreadsheet File; Division I RHR Pump Run Hours for Cycle 22 Through April 15, 2004

Operations Memo 03-23; Apparent Thinning of Torus Cooling Line Downstream of Valve MO-2008; August 14, 2003
Electronic Memo T. Wellumson to B. MacKissock; PRA Review of Operator Workarounds; February 17, 2004
Electronic Memo T. Wellumson to B. MacKissock; PRA Review of Operator Workarounds; March 18, 2004
Operator Aid C-17 on Panel C-25
Temporary Information Tag 04-29 on MO-2067 Control Switch
A.6; Acts of Nature; Revision 18
Operations Manual C.4-B.08.07.A; Ventilation System Failure; Revision 17

Condition Reports:
03005018; Nondestructive Examination Thickness Reading Low on Torus Cooling Line TW34-10"-HE Downstream From MO-2008
03006099; Evaluation of Torus Cooling Line Downstream From MO-2008 for Pipe Thinning Did Not Include System Mission Time
03008787; Pipe Thinning Downstream of MO-2008 Added to Ops Challenge List as an Operator Workaround
04002636; Received “HPCI PUMP HI SUCTION PRESS” Alarm While Opening MO-2067 Per WO-0306864 Instructions
03010341; Pursue Modification or Justify Existing EDG Ventilation to Resolve Operable but Degraded Condition
03002963; Existing Analysis Supporting EDG Room Ventilation Capacity Is Inadequate
03001908; Existing analysis Supporting EDG Room Ventilation Capacity Is Inadequate
03005455; Evaluate EDG Components for Expected Service Life under Expected High Temperature Conditions
03009388; Measured Air Flow for 11/12 EDG Room Is less than That Used in Calculation CA-03-133
04001544; Due Date for Level 3 Action Did Not Consider the Actual Time Required to Complete the Action
04004189; EDG Room Ventilation Flowrate Data Challenged Proactive Operability Determination Prepared for 91 F Degree Day
04004245; Outside Air Temperature 91.9 F. A.6 Manual Directs to Evaluate EDG for Operability
04004179; Outside Air Temperature 91.9 F. A.6 Manual directs to evaluate EDG for Operability

1R17 Permanent Plant Modifications

Documents and Procedures:
Instrument Calibration and Maintenance Record for Instrument DPIS 2-129A; Recirculation Loop Differential Pressure Low Pressure Coolant Injection (LPCI) Loop Select; March 1987 through December 1992
Instrument Calibration and Maintenance Record for Instrument DPIS-2-129B; Jet Pump Water Supply Differential Pressure RHR Permissive Interlock; January 1998 through December 1992
Instrument Calibration and Maintenance Record for Instrument DPIS-2-129C; Jet Pump Water Supply Differential Pressure RHR Permissive Interlock; March 1989 through December 1992

Instrument Calibration and Maintenance Record for Instrument DPIS-2-129D; Jet Pump Water Supply Differential Pressure RHR Permissive Interlock; January 1998 through December 1992
Work Request Authorization; Number 92-5594; RHR LPCI Loop Select Differential Pressure Switch
3186-G-01-3; Quality Control Inspection Record; dated March 16, 1992
7110; RHR System Instrument Maintenance Procedure; Revision 8
3505; Nonconforming Item Report; Report Number 91-087 and attachment; dated February 8, 1991
ESM-03.02; Design Requirements, Practices & Topics (Instrumentation and Controls); Revision 5
Form 3313; Corrections and/or Supplemental Information: Nonconformance Item Report (NCI) 91-087; dated March 26, 1992
GENE-637-0089-0393; General Electric Sensitivity Analysis; Monticello LPCI Loop Select Logic Setpoint; dated May 1993

Technical Specifications:
3.5/4.5 and Bases; Core and Containment Spray/Cooling Systems

Updated Safety Analysis Report:
Section 6.2.3; Residual Heat Removal System; Revision 20
Section 14.7; Loss-of-Coolant Accident; Revision 20

1R19 Post-Maintenance Testing

Documents and Procedures:
0255-08-IA-1; RCIC Pump and Valve Test; Revision 56
American Society of Mechanical Engineers (ASME)/American National Standards Institution (ANSI) OMa-1988; Operations and Maintenance of Nuclear Power Plants; Part 6: Inservice Testing of Pumps in Light-Water Reactor Power Plants
RCE 0000857; Monticello Nuclear Generating Plant Root Cause Evaluation; Inappropriate Bypass of APRM Results in Only One Operable APRM on A RPS
3749; Monticello Impact Statement dated May 13,2004; APRM-1, Switch S-3; Revision 5
2057; Tagout Preparation Checklist; APRM-1; Revision 0
Warehouse Issue Ticket No. 04-00737; dated March 11, 2004
0012; APRM/Rod Block SCRAM Surveillance Check; Revision 29
Warehouse Issue Ticket No. 04-01639; dated June 3, 2004
4263; Maintenance and Construction Pre-job Briefing Checklist; Revision 11
4290; Recirculation Pump Seal Overhaul; Revision 9
3630; Alteration Package 04A045 - Recirculation Pump Alignment Pin
4290-02-OCD; “B” Recirculation Pump Mechanical Maintenance; Revision 8
Post-Maintenance Testing Activities Control Cover Sheet for WO 0402354; Revision 11
Magnetic Particle Examination Report Nos. 0402354-MT-1 & -2, for WO 0402354
3728; ANII Contact Log for WO 0402345; Revision 3
3063-05; ASME Section XI Repair/Replacement Plan for WO 0402354; Revision 8
3063-06; ASME Section XI Repair/Replacement Reconciliation Report for WO 0402354; Revision 0
Post-Maintenance Testing Activities Control Cover Sheet for WO 0402342; Revision 11
Post-Maintenance Testing Activities Control Cover Sheet for WO 0402343; Revision 11

Technical Specifications:
Section 3.1/4.1 and Bases; Reactor Protection System

Updated Safety Analysis Report:
Section 10.2.5; Reactor Core Isolation Cooling System (RCIC); Revision 20

Condition Reports:
03013024; During Performance of RCIC Quarterly Pump and Valve Test 0255-08-IA-1 Vibration Reading for P4V was in Alarm
CAP 033467; Inappropriate Bypass of APRM Results in Only One Operable APRM on A RPS
CAP 033469; APRM #1 Meter in C-37 Indicates 121.5% in HI/HI trip Setting Displayed on the Local Indicator on C-37, Was out of Spec. The Range Given Was 116-120%. The Reading was 121.5%

Work Orders:
0400005; Replace RCIC Pump Outboard Bearing
0400865; APRM S-3 Switch Is Intermittent
0402108; APRM-1 Hi-Hi Clamp Setpoint Is out of Range
0402098; Contingency WO to Replace 12 Recirculation Pump Seal
0402354; Repair Weld Check Valve [FW-97-1]
0402342; FW-97-1 has Leak at Hinge Plug
0402223; 12 Recirculation Pump Block Valve Apparently Did Not Close as Required
0402343; XR-8-1 has Packing and Cap Leak

1R20 Outage Activities

Ready Backlog Work Orders; June 15, 2004
Operable but Degraded Actions; June 14, 2004
C.3; Shutdown Procedure; Revision 37
C.1; Startup Procedure; Revision 41
Refueling Outage Daily Risk Data Sheets
Shift Manager Turnover Reports
2159; Predicted Critical for Plant Startup; Revision 7
Drywell Inspection List; June 18, 2004
Daily Outage Schedules; June 15 - 20, 2004
1371; Drywell Prestart Inspection; Revision 5

1R22 Surveillance Testing

Documents and Procedures:
0523; RWCU High Flow and High Room Temperature Trip Unit Instrument Test and Calibration; Revision 0
Operations Manual Section B.02.02-05; RWCU System Operation; Revision 23
0045; RBM Functional Test and Calibration; Revision 36
3087; Document Change, Hold and Comment Form on 0045 RBM Functional Test and Calibration; dated April 23, 2004
0187-01B; 11 Emergency Diesel Generator/11 ESW/DOL [Diesel Oil] Transfer Monthly Test; Revision 1

0255-03-IA-1-2; Core Spray Loop B Quarterly Pump and Valve Tests; Revision 38
0320; Fire Hose Hydrostatic Test - Exterior Hose Stations; Revision 14
1371; Drywell Prestart Inspection; Revision 5

Drawings and Prints:
NX-7823-4-1; Primary Containment Isolation System; Revision G
NX-7823-4-3; Primary Containment Isolation System; Revision L
NX-7823-4-4; Primary Containment Isolation System; Revision Z
NX-7823-4-10; Primary Containment Isolation System; Revision Q
NF-100338; RPS Channel A1 Analog Trip Cabinet C-304A Elementary Diagram E81EA01; Revision F
NF-100339; RPS Channel B1 Analog Trip Cabinet C-304B Elementary Diagram E81EA01; Revision E
NF-100340; RPS Channel A2 Analog Trip Cabinet C-304C Elementary Diagram E81EA01; Revision E
NF-100341; RPS Channel B2 Analog Trip Cabinet C-304D Elementary Diagram E81EA01; Revision E
NH-36248; Core Spray System; Revision AK

Technical Specifications:
Section 3.2/4.2 and Bases; Protective Instrumentation

Updated Safety Analysis Report:
Section 7.6.3; Primary Containment Isolation System; Revision 20
Section 6.2.2; Core Spray System; Revision 20

Operations Manual:
B.09.06-01; 4.16 kV Station Auxiliary Function and General Operation of Equipment; Revision 5
B.02.02-01; RWCU Functional and General Description of System; Revision 12

1R23 Temporary Plant Modifications

Documents and Procedures:
Configuration Change Process Screening Form QF-0506; Seal Service Water Leaks on Normal Service Water Supply to 11 and 12 EDG; dated April 9, 2004

Drawings and Prints:
NH-36665; Service System and Make-up Intake Structure; Revision CF

Updated Safety Analysis Report:
Section 10.4; Plant Cooling System; Revision 20
Appendix A; Seismic Design Criteria; Revision 4

1EP2 Alert and Notification System Testing

Documents and Procedures:
Form 1408; Annual PANS Performance Reviews; February 10, 2004 and January 31, 2003
Form 1409; Public Alert Notification Systems (PANS) Monthly Siren Activation Testing; February 4, 2004 Through January 1, 2003
Form 1359; Public Alert Notification Systems Weekly Cancel Signal Test; April 28, 2004 Through January 1, 2003
Memorandum From G. Holthaus; PANS Fixed Siren Trend Report; February 3, 2004
EPWE-01.05; Public Alert Notification System Maintenance and Testing; Revision 4

Condition Reports:
03012470; Sherburne County is Replacing Its EAS [Emergency Activation System] Tone Alert Radios With an Automated Telephone Dialing System Which Impacts Emergency Planning; December 8, 2003
03003534; PANS 41 of 44 Sirens in Sherburne County Indicated Failure During the Monthly Test; April 2, 2003

1EP3 Emergency Response Organization Augmentation Testing

Documents and Procedures:
ARMS 1317; Emergency Alert Notification Systems Tests; September 2002 Through April 2004
Memorandum From D. Pedersen; April 29, 2004 Emergency Alert Notification System Test; May 4, 2004

Memorandum From D. Pedersen; January 29, 2004 Emergency Alert Notification System Test; February 9, 2004
Memorandum From D. Pedersen; July 28, 2003 Emergency Alert Notification System Test; August 6, 2003
Memorandum From D. Pedersen; November 3, 2003 Emergency Alert Notification System Test; December 5, 2003
Memorandum From D. Pedersen; April 23, 2003 Emergency Alert Notification System Test; May 10, 2003
Memorandum From D. Pedersen; February 4, 2003 Emergency Alert Notification System Test; February 10, 2003
Memorandum From D. Pedersen; November 4, 2002 Emergency Alert Notification System Test; November 6, 2002

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies

Documents and Procedures:
Nuclear Oversight Observation Report 2004-001-5-020; Emergency Planning 10 CFR 50.54(t); March 16, 2004
Nuclear Oversight Observation Reports 2003-001-5-09, 10, and 11; Emergency Planning 10 CFR 50.54(t) Program Reviews; February 7, 10, and 17, 2003
Nuclear Oversight Observation Reports 2002-004-5-016 and 017; Emergency Planning 10 CFR 50.54(t); November 18 and December 5, 2002
Memorandum From M. Vonk; Monticello Emergency Preparedness Program Readiness Assessment; March 31, 2004
Memorandum From M. Vonk; 2003 Monticello Nuclear Plant Emergency Preparedness Evaluation; December 20, 2003
Emergency Planning Exercise Critique Report Conducted November 18, 2003
Monticello Nuclear Generating Plant Emergency Planning Drill Critique Report Conducted October 8, 2003

Condition Reports
04003664; EP Self-Assessment Performed By Corporate EP Utilizing INPO Guidelines; April 13, 2004
04003577; Documentation of Self-Assessment For EP Program Readiness Based on NRC Baseline Inspection Guidelines; April 9, 2004
04003441; NOS [Nuclear Operating Services] Audit of EAL [Emergency Action Level] Adequacy Determination of Current Site 50.54(q) Process; April 6, 2004
04002951; Third Quarter 2003 EP Performance Indicator Record Not Captured in PI Results Reported to NRC; March 25, 2004
04002671; Critique Report for the March 17, 2004 EP/Security Drill; March 16, 2004
04002124; Inadequate Documentation of No Decrease in Effectiveness Determination For EAL Change Made in Revision 22 of E-Plan; February 27, 2004
04000799; Emergency Action Level Changes Could Have Been Made Without Obtaining NRC Pre-Approval; January 22, 2004
04000714; No RO7 Dose Rate Meter Available As Required Per E-Plan Inventory of Emergency Equipment; January 21, 2004
03012945; ERDS [Emergency Response Data System] Data Point For Torus Temperature is Incorrect; December 17, 2003

03012737; Changes to ERDS Software Per MOD 00Q320 Were Not Submitted to NRC Within 30 Days as Required by 10 CFR Part 50, Appendix E, Section VI.3a; December 15, 2003
03012296; ERDS Modem Did Not Connect with NRC Computer During the Performance of Quarterly Surveillance 1416.IT HP Clock Reset; December 3, 2003
03011828; Protective Action Recommendations Made During EP Exercise Were Inaccurate; November 19, 2003
03011822; State/County Notifications of Alert and Site Area Emergency During EP Exercise Did Not Identify That the Event Involved a Radiological Release; November 19, 2003

03011538; NRC NCV 50-263/03-05-01 (Green) Requires ACE [Action to Correct Event] and Extent of Condition Review by Station Procedures; November 11, 2003
03010756; Input Errors in Off Site Dose Calculations During October 23, 2003, EP Drill, These Errors Could Lead to Issuance of Inaccurate PAR [Protective Action Recommendation]; October 23, 2003
03009979; Some Third Quarter 2003 Simulator Evaluations Did Not Include Classification and/or Notification Opportunities; October 10, 2003
03009928; PANS Sirens - 46 of 47 Sirens in Wright County Indicated Failure During Monthly Test, Second Attempt Within 25 Minutes All Operable; October 1, 2003
03009640; Procedure A.2.301 Needs to be Reviewed/Revised Based on the Need to Address the Issue of Evacuation During ERF [Emergency Response Facility] Activation; September 23, 2003
03006759; Sherburne County Primary Activation Method For Emergency Sirens is Not Working, Backup Method Verified Operational; June 25, 2003
03006736; Fire Department Responds to Training Center Communications Room Fire That Damages EOF [Emergency Operations Facility] SPDS [Safety Parameter Display System] and Backup MET [Meteorological Tower]; June 25, 2003
03003600; False Activation of Public Alert Notification System PANS By Sherburne County Sheriff's Department; April 3, 2003

1EP6 Drill Evaluation

Documents and Procedures:
Emergency Plan Drill Guide for June 2, 2004
Information Notice 02-25; Challenges to Licensees' Ability to Provide Prompt Public Notification and Information During an Emergency Preparedness Event; August 26, 2002
Nuclear Energy Institute (NEI) 99-02; Regulatory Assessment Performance Indicator Guideline: Section 2.4 Emergency Preparedness Cornerstone; Revision 2

Operations Manual:
A.2-103; Alert; Revision 16
A.2-101; Classification of Emergencies; Revision 32

Condition Reports:
033470; Actual MET Recorder Point 13 for 100-Meter Temperature Read 124 Degrees F During EP Drill per Drill Controller

033481; Three 30-Minute Responders Had Tag Board Times Shortly over 30 Minutes, Which Caused a Short Delay in the Announced Technical Support Center (TSC) Activation
021379; Documentation of June 2, 2004, Off-hours/Unannounced Drill

2OS1 Access Control to Radiologically Significant Areas

Documents and Procedures:
MNGP R.07.01; Use of Tags and Labels; Revision 10

Condition Reports:
03004469; Worker Entered High Rad Area Without Briefing on Dose Rates as Required by RWP, not a Technical Specification Violation; dated April 29, 2003
03004581; Contaminated LLRT Equipment Setup in Clean Area of Plant; dated May 1, 2003
03006460; NRC Resident Inspector Questions Unattached Radioactive Material Label; dated June 16, 2003
03007712; Adverse Trend - Two Instances of High Radiation Area Barricade Deficiencies In the Last Three Months; dated July 23, 2003
03009562; No RWP Generated for Ops Routine Inspection of Skimmer Tank Room After Status Changed to Lock High Radiation Area; dated September 19, 2003
03009714; Postings - High Radiation Area on 1027 Rx Found Not Posted; dated September 25, 2003
03010058; Adverse Trend - 2 Instances of TLD Cases Found with Missing Internal Components; dated October 26, 2003
03011823; Posting: High Radiation Area Left Unposted on Reactor 1027 Elevation; November 19, 2003
03011964; Adverse Trend Identified in High Radiation Area Postings; dated November 21, 2003
03012242; Incore Storage Tubes Inadequately Marked Resulted in Unnecessary Dose; dated December 2, 2003
03012718; Procedure Control - R.9.52 (LHRA Door Alarm and Lock Function Check) Does Not Address HELB Door Concerns; dated December 14, 2003
03012810; Bagged Equipment in Tool Decon Not Labeled in Accordance with Special Status Sign #77 Posted in the Area; dated December 16, 2003

2PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems

Documents and Procedures:
MNGP 1.05.09; Stack Vent Tritium Sampling; Revision 7
MNGP 1.05.27; Reactor Building Vent Noble Gas Sampling; Revision 3
MNGP 0147-02; B Train Standby Gas Treatment System Filter Tests; Revision 28
MNGP 0253-02; Standby Gas Treatment Train B Testing; Revision 30
2003-002-5-044; Nuclear Oversight Observation Report; dated July 2, 2003
MNGP 0163; Stack Wide Range Gas Monitor Calibration; Revision 25
MNGP 0163; Stack Wide Range Gas Monitor Calibration; Revision 27
MNGP 0171; Discharge Canal Monitor Calibration; Revision 13
MNGP 0171; Discharge Canal Monitor Calibration; Revision 15
MNGP 0248; Reactor Building Vent Wide Range Gas Monitor Calibration; Revision 20

MNGP 0248; Reactor Building Vent Wide Range Gas Monitor Calibration; Revision 21
MNGP 0290; Service Water Monitor Calibration; Revision 11
MNGP 0290; Service Water Monitor Calibration; Revision 13
MNGP 0363-01; Reactor Building Wide Range Gas Monitors Process and Sample Flow Instrument Calibration Procedure; Revision 5
MNGP 0363-01; Reactor Building Wide Range Gas Monitors Process and Sample Flow Instrument Calibration Procedure; Revision 6
MNGP 0363-02; Reactor Building Vent Wide Range Gas Monitors Process and Sample Flow Instrument Calibration Procedure; Revision 4
MNGP 0363-02; Reactor Building Vent Wide Range Gas Monitors Process and Sample Flow Instrument Calibration Procedure; Revision 5
MNGP 0372; Stack Wide Range Gas Monitors Process and Sample Flow Instrument Calibration Procedure; Revision 8
MNGP 0372-01; Stack Wide Range Gas Monitors Process and Sample Flow Instrument Calibration Procedure; Revision 0
MNGP 3530-06; Performance Indicator Radiation Safety Worksheet; Revision 2
MNGP 3530-08; Performance Indicator RCS Activity Worksheet; Revision 4
Monticello Nuclear Generating Plant 2003 Radioactive Effluent Release Report; dated May 15, 2004
Monticello Nuclear Generating Plant 2003 Annual Radiological Environmental Operating Report; dated May 15, 2004
Monticello Nuclear Plant Interlaboratory Comparison Data; dated May 11, 2004

Condition Reports:
CAP 028332; Received Annunciator C04-A-27 Discharge Canal; dated July 20, 2003
CAP 029042; Stack WRGM Background Levels Are Increasing; dated September 4, 2003
CAP 029057; Service Water Rad Monitor ODCM Action was Initiated; dated September 4, 2003
CAP 029111; Unplanned LCO Entry Due to Failure of A Stack WRGM; dated August 21, 2003
CAP 030579; Adverse Trend Noted by Maintenance Rule Expert; dated November 14, 2003
CAP 033386; No Spare Parts Exist for Turbine Building Normal Waste Sump Radiation Monitors; dated May 27, 2004
CAP 033530; Off-Gas Pretreatment Monitors Increased By Greater than 50 Percent; dated June 8, 2004
CR 04002705; MNGP Chemistry Focused Self-Assessment; dated February 16-20, 2004
CR 04003547; Rupture Found in Channel B RBV [Reactor Building Ventilation] WRGM High Flow Pump During Investigation of Unexpected Filter Paper Density; dated April 8, 2004

2PS2 <u>Radioactive Material Processing and Transportation</u>

Documents and Procedures:
Report 2003 10 CFR 61 Database Updates
Nuclear Oversight Observation 2003-002-5-044; dated July 2, 2003
Nuclear Oversight Observation 2003-002-5-040; dated July 2, 2003
Monticello QC [Quality Control] Quarterly Report; dated January 4, 2004

NMC Monticello Nuclear Generating Plant Radioactive Effluent Release Report; dated January to December 2002
4 AWI-08.05.02; Radioactive Material Shipping; Revision 7
MNGP 5844; Preparing Bead Resin for Shipment in a LSA [Low Specific Activity] Container; Revision 1
MNGP 5878; Procedure for Shipping Radioactive Waste Using the CNS 14-215H Cask; Revision 1
MNGP 5860; Master Radioactive Material Shipping Procedure; Revision 2
MNGP 5861; Procedure for Shipping Radwaste to Envirocare; Revision 1
MNGP 5863; Dewatering Resins in High Integrity Containers; Revision 2
MNGP 5872; Procedure for Shipping Radioactive Waste Using the CNS 8-120B Cask; Revision 5

MNGP 5877; Radioactive LSA/SCO [Surface Contaminated Object] Shipment - Not Exceeding TYPE A Quantity - in Exclusive Use Vehicles; Revision 0
MNGP 5890; Radioactive Material Shipment-Type B Quantity, Fissile Excepted; Revision 3
MNGP 5892; Procedure for Shipping Radwaste to Barnwell; Revision 1

Condition Reports:
03004239; Laundry Boxes Found in Radwaste With Missing Radioactive Material Tags; dated April 23, 2003
03004439; Laundry Shipment From Vendor Arrived Without Security Seal; dated April 28, 2003
03008484; Radwaste: Problems Removing Resin from T34-A, T34-B and Resin Volume Shortfall Results in Extra Work, Dose and Two Percons [Personnel Contaminations]
03008532; Seal Wire Broken and Tag Missing on Shipping Cask Lid Upon Receipt at MNGP, Resolved Prior to Shipment 03-47; dated August 18, 2003
03011319; Omission Results in 4% Underestimate of Curie Content of Second SFP [Spent Fuel Pool] Cleanup Shipment, Did Not Affect Classification; dated November 11, 2003
03013059; Radioactive Shipment from Vendor Did Not Contain All Items Listed in Shipping Manifest, Vendor Never Shipped One Item; dated December 19, 2003
04000737; Radiation Protection Not Made Aware of Intended Maintenance Activities That Have a Potential for Significant Exposure; dated January 21, 2004
04001282; Bagged Material in the 1001 Decon Area Not Labeled Per the Special Status Sign For That Area; dated February 5, 2004
04002302; A Box Had to Be Removed from a Shipping Container Due to Greater Than 10 millirem/hour at Two Meters; dated March 2, 2004
04002814; Small Shipping Cask Inappropriately Labeled Radioactive EMPTY Was Ground in WHSE [Warehouse] 5; dated March 19, 2004

4OA1 Performance Indicator Verification

Documents and Procedures
1Q/2004 Performance Indicators - Monticello; from NRC Oversight Website
3530-05; Safety System Unavailability Worksheet - 2nd Quarter, 2003; Revision 3
3530-05; Safety System Unavailability Worksheet - 3rd Quarter, 2003; Revision 4
3530-05; Safety System Unavailability Worksheet - 4th Quarter, 2003; Revision 4

3530-05; Safety System Unavailability Worksheet - 1st Quarter, 2004; Revision 4
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - 11 EDG - 2nd Quarter 2003; Revision 2
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - 12 EDG - 2nd Quarter 2003; Revision 2
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - 11 EDG - 3rd Quarter 2003; Revision 2
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - 12 EDG - 3rd Quarter 2003; Revision 2
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - 11 EDG - 4th Quarter 2003; Revision 3
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - 12 EDG - 4th Quarter 2003; Revision 3
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - 11 EDG - 1st Quarter 2004; Revision 3
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - 12EDG - 1st Quarter 2004; Revision 3
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - A Loop RHR - 1st Quarter 2003; Revision 2
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - B Loop RHR - 1st Quarter 2003; Revision 2
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - A Loop RHRSW - 1st Quarter 2003; Revision 2
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - B Loop RHRSW - 1st Quarter 2003; Revision 2
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - A Loop RHR - 2nd Quarter 2003; Revision 2
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - B Loop RHR - 2nd Quarter 2003; Revision 2
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - A Loop RHRSW - 2nd Quarter 2003; Revision 2
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - B Loop RHRSW - 2nd Quarter 2003; Revision 2
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - A Loop RHR - 3rd Quarter 2003; Revision 2
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - B Loop RHR - 3rd Quarter 2003; Revision 2
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - A Loop RHRSW - 3rd Quarter 2003; Revision 2
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - B Loop RHRSW - 3rd Quarter 2003; Revision 2
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - A Loop RHR - 4th Quarter 2003; Revision 3
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - B Loop RHR - 4th Quarter 2003; Revision 3
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - A Loop RHRSW - 4th Quarter 2003; Revision 3
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - B Loop RHRSW - 4th Quarter 2003; Revision 3

3530-10; NRC Performance Indicators Mitigating Systems Worksheet - A Loop RHR - 1st Quarter 2004; Revision 3
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - B Loop RHR - 1st Quarter 2004; Revision 3
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - A Loop RHRSW - 1st Quarter 2004; Revision 3
3530-10; NRC Performance Indicators Mitigating Systems Worksheet - B Loop RHRSW - 1st Quarter 2004; Revision 3
LER-2003-001; Degraded Fire Barrier Penetration Discovered During a Walkdown; Revision 0
NUREG-1022; Event Reporting Guidelines 10 CFR 50.72 and 50.73; Revision 2
NEI 99-02; Regulatory Assessment Performance Indicator Guidelines; Revision 2
EPWI-01.06; Emergency Plan Performance Indicator Program; Revision 5
Memorandum From G. Holthaus; First Quarter 2004 Classification Differences; April 19, 2004
Memorandum From D. Pedersen; First Quarter 2004 Drill/Exercise Performance Indicator Opportunities; January 5, 2004
Memorandum From D. Pedersen; Fourth Quarter 2003 Drill/Exercise Performance Indicator Opportunities; December 2, 2003
Quarterly Records of Key ERO Members' Drill and Exercise Participation; October 2003 Through March 2004
Form 3695; EP Performance Records; October 2003 Through March 2004
Quarterly ERO Participation Records; Fourth Quarter 2003 Through First 2004
Form 5790-001-01; Emergency Response Organization Quarterly Roster; Fourth Quarter 2003 Through First Quarter 2004
MTF-7100-051; Attendance Records; October 2003 Through March 2004
Quarterly Alert and Notification System Reliability Performance Indicator Records; Fourth Quarter 2003 Through First Quarter 2004
MNGP Monthly Calculated Noble Gas Dose Values for 2003

Condition Reports:
04002951; Third Quarter 2003 EP Performance Indicator Record Not Captured in PI Results Reported to NRC For Third Quarter 2003; March 25, 2004
04002945; PANS Siren W-21 Did Not Receive Cancel Signal During March 24, 2004, Weekly Test; March 24, 2004
04001831; CR 03011822 Planned Actions Insufficiently Timely to Prevent Recurrence, May Result in Additional Drill/Exercise Performance Indicator Hits; February 19, 2004
03009979; Some Third Quarter 2003 Simulator Evaluations Conducted Did Not Include Classification and/or Notification Opportunities; October 2, 2003

4OA2 Identification and Resolution of Problems

Condition Reports:
04003772; Scaffold Equipment Stored Between Sprinkler Piping in Intake Tunnel and Wall (NRC Identified)
033092; NRC Resident Question Concerning Storage of Scaffolding near Condensate Storage Tank and 1AR Transformer (NRC Identified)
033094; Possible Missile Hazard Found in the 345 kV Subyard (NRC Identified)

033775; NRC Resident Questioned Securing Method of V-MZ-6 Damper for HELB Issue (NRC Identified)
033795; NRC Resident Questioned Scaffolding in Place for Approximately 2 Years (NRC Identified)
033796; Furmanite Material Leaking from Enclosure on SW-42-1 (NRC Identified)
033894; Further Review of NRC Questions Concerning Wind Generated Missiles Is Required (NRC Identified)

4OA5 Other Activities

Documents and Procedures:
Monticello Generating Station Transmission Operation Guide; dated 5/3/2004
4 AWI-08.15.01; Risk Management for Outage and On-line Activities; Revision 0
SWI-14.01; Risk Management of On-Line Maintenance; Revision 2
0187-01; 11 Emergency Diesel Generator/11 ESW/DOL Transfer Quarterly Pump and Valve Tests; Revision 52
0187-02; 12 Emergency Diesel Generator/12 ESW/DOL Transfer Quarterly Pump and Valve Tests; Revision 50
NUMARC 93-01; Nuclear Energy Institute Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants; Revision 3
B.9.5; Maintenance Rule Program System Basis Document; 115 kV Substation; Revision 1
B.9.4; Maintenance Rule Program System Basis Document; 230 kV Substation; Revision 1
B.9.3; Maintenance Rule Program System Basis Document; 345 kV Substation; Revision 2
License Event Report 84-021; Loss of Offsite Power
License Event Report 81-009; Racking Out of Energized 4.16 kV Breaker and Subsequent Events
MWI-3-M-2.01; AC Electrical Load Study; Revision 6
M-SOE-91-02; Monticello Nuclear Generating Plant Significant Operating Even Investigation Report: Plant Equipment Vulnerability to Substation Transients
NRC Information Notice 91-22; Four Plant Outage Events Involving Loss of AC Power or Coolant Spills

Technical Specifications:
3.9/4.9 and Bases; Auxiliary Electrical Systems

Operations Manual:
B.09.08-05; Emergency Diesel Generators System Operation; Revision 17
B.09.03-05; 345 kV Substation System Operation; Revision 18
B.09.05-05; 115 kV Substation System Operation; Revision 5
C.4-B.09.02.B; Abnormal Procedures; Loss of Normal Offsite Power; Revision 9
B.09.06-01; 4.16kV Station Auxiliary; Function and General Description of System; Revision 5

Condition Reports:
00000112; Loss of Grid

00000655; Review Plant Jurisdiction Substation Equipment to Ensure it Is Covered by the PM Program (See SOER 99-001 Assessment)
00001001; Add Degraded and Loss of Grid Training to Operations Lesson Plans and Simulator Scenarios (See SOER 99-001 Assessment)
00001343; Evaluate Procedural Guidance for Preemptive Action During Grid Instabilities (Reference SOER 99-001, Recommendation 2a)
00001878; Evaluate the Need to Add SOER 99-001 as a Reference to Various Document and Substation Drawings
00001880; Provide Input for Development of Operations and Maintenance Support Departments Long Range Substation Maintenance Equipment Plan
00001882; Provide Input for Partnership Agreement Between Xcel and NMC About Maintenance and Testing Activities (See SOER 99-001 Condition Report)
00001884; Review Process Used by System Operations Related to Early Warning of Grid Instabilities and Revise as Required (See SOER 99-001 Assessment)
00001885; Work with System Operations in Developing Procedures That Address Specific Monticello Requirements (See SOER 99-001)
00001886; Assist in Updating the System Operations Restoration Manual to Address Specific Monticello Requirements (See SOER 99-001)
00001887; Review Load Shed Restoration Procedures to Provide Guidance for Operators to Clear Load Shed Jumpers (See SOER 99-001)
02005957; Enter PM Schedule into Repetitive Tasking for Plant Owned Subyard Equipment per SOER 99-001, Include 8N4 and 8N5
02005958; Create PM Procedures/Work Instructions for Plan Owned Subyard Equipment Due for PM During next Refuel Outage
02008568; Implement Process Changes to Ensure Margin in Overload Device Settings to Address Degraded Voltage Operations
04000124; Effectiveness Review of Level 1 Condition Report 00000112
03009189; SEN 242: Loss of Grid Event; August 14, 2003
03010852; Revise Shutdown Cooling Startup Procedures to Incorporate Lessons from SEN [Significant Event Notification] 242
03009731; Review Specific SEN 242 Paragraphs Identified and Determine Any Further Action Required
03010162; Determine Site Requirements of Operable Personal Computers, Network Switches, and Printers During a Station Blackout
03010711; Establish a Back-up Method of Performing Dose Calculations at the Backup EOF [Emergency Operations Facility]
03010712; Investigate and Develop a Feasible Means of Activating the ERO During Black out Conditions
03010713; Evaluate the Need to Establish a Minimum Inventory of Items at the Warehouse for Use in Emergencies
03009923; Loss of Grid Event; August 14, 2003; Revision 1
03009542; Callaway Operating Experience on Degraded Grid Issues
01000014; Concerns about Offsite Power Voltage Inadequacies and Grid Reliability Challenges Due to Industry Deregulation

LIST OF ACRONYMS USED

AC	Alternating Current
ANS	Alert and Notification System
APRM	Average Power Range Monitor
ASME	American Society of Mechanical Engineers
AWI	Administrative Work Instruction
CAP	Corrective Action Program
CARB	Corrective Action Review Board
CFR	Code of Federal Regulations
CR	Condition Report
CRS	Control Room Supervisor
degrees	degrees Fahrenheit
DOT	Department of Transportation
DRP	Division of Reactor Projects
EDG	Emergency Diesel Generator
EFT	Emergency Filtration Train
EOOS	Equipment Out Of Service
EP	Emergency Preparedness
EPZ	Emergency Planning Zone
ERDS	Emergency Response Data System
ERO	Emergency Response Organization
ESW	Emergency Service Water
EWI	Engineering Work Instruction
FIN	Finding
GDC	General Design Criterion
HCU	Hydraulic Control Unit
HELB	High Energy Line Break
HPCI	High Pressure Core Injection
HRA	High Radiation Area
IMC	Inspection Manual Chapter
INPO	Institute of Nuclear Power Operations
IP	Inspection Procedure
IPEEE	Individual Plant Examination of External Events
IR	Inspection Report
kV	Kilovolt
LCO	Limiting Condition for Operation
LER	Licensee Event Report
LHRA	Locked High Radiation Area
LLRT	Local Leak Rate Testing
LOOP	Loss of Offsite Power
LPCI	Low Pressure Coolant Injection
LPRM	Local Power Range Monitor
MNGP	Monticello Nuclear Generating Plant
MWI	Maintenance Work Instruction
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NMC	Nuclear Management Company

LIST OF ACRONYMS USED

NNPOSA	Nuclear Power Plant Operating Services Agreement
ODCM	Offsite Dose Calculation Manual
OWA	Operator Workaround
PARS	Publicly Available Records
PI	Performance Indicator
PM	Planned or Preventative Maintenance
PMF	Probable Maximum Flood
PMT	Post-Maintenance Testing
PRA	Probabilistic Risk Assessment
PRM	Power Range Neutron Monitoring
RA	Risk Assessment
Radwaste	Radioactive Waste
RBM	Rod Block Monitor
RCE	Root Cause Evaluation
RCIC	Reactor Core Isolation Cooling
RCS	Reactor Coolant System
RETS/ODCM	Radiological Environmental Technical Specifications/Offsite Dose Calculation Manual
RHR	Residual Heat Removal
RHRSW	Residual Heat Removal Service Water
RP	Radiation Protection
RPS	Reactor Protection System
RPT	Radiation Protection Technician
RWCU	Reactor Water Cleanup
RWP	Radiation Work Permit
Rx	Reactor
TI	Temporary Instruction
TSO	Transmission System Operator
SDP	Significance Determination Process
TIP	Transversing Incore Probe
TLD	Thermoluminescent Dosimeters
TS	Technical Specification
TSC-EVS	Technical Support Center - Emergency Ventilation System
TSO	Transmission System Operator
USAR	Updated Safety Analysis Report
VAC	Volts Alternating Current
VDC	Volts Direct Current
WEC	Work Execution Center
WGRM	Wide Range Gas Monitor
WO	Work Order