April 15, 2002

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

SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT
NRC INSPECTION REPORT 50-263/02-03(DRP)

Dear Mr. Forbes:

On March 31, 2002, the NRC completed an inspection at your Monticello Nuclear Generating Plant. The results of this inspection were discussed on March 26, 2002, with you and other members of your staff. The enclosed report presents the results of that inspection.

The inspection was an examination of activities conducted under your license as they relate to reactor safety, verification of performance indicators, event followup, physical security, radiation protection, licensed operator requalification and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of this inspection, the inspectors identified one issue of very low safety significance (Green). This issue was determined to involve a violation of Technical Specifications. However, because of its very low safety significance and because it has been entered into your corrective action program, the NRC is treating this issue as a Non-Cited Violation, in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny this Non-Cited Violation, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-001; with copies to the Regional Administrator, Region III; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Monticello facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http:www.nrc.gov/NRC/ADAMS/index.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 50-263/02-03(DRP)

cc w/encl: J. Purkis, Plant Manager
R. Anderson, Executive Vice President
and Chief Nuclear Officer
Nuclear Asset Manager
Site Licensing Manager
Commissioner, Minnesota Department of Health
J. Silberg, Esquire
Shaw, Pittman, Potts, and Trowbridge
R. Nelson, President
Minnesota Environmental Control Citizens
Association (MECCA)
Commissioner, Minnesota Pollution Control Agency
D. Gruber, Auditor/Treasurer
Wright County Government Center
Commissioner, Minnesota Department of Commerce
A. Neblett, Assistant Attorney General

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	50-263
License No:	DPR-22
Report No:	50-263/02-03(DRP)
Licensee:	Nuclear Management Company, LLC
Facility:	Monticello Nuclear Generating Plant
Location:	2807 West Highway 75 Monticello, MN 55362
Dates:	February 14 through March 31, 2002
Inspectors:	S. Burton, Senior Resident Inspector D. Kimble, Resident Inspector S. Ray, Senior Resident Inspector - Prairie Island Station G. Pirtle, Physical Security Inspector M. Mitchell, Radiation Specialist Inspector D. McNeil, Operator Licensing Examiner
Approved by:	Bruce L. Burgess, Chief Branch 2 Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000263/02-03(DRP), on 02/14-03/31/2002; Nuclear Management Company, LLC; Monticello Nuclear Generating Plant. Occupational Radiation Safety.

The inspection was conducted by resident inspectors and regional inspectors. The report covers a 6½-week period of resident inspection. The inspection identified one Non-Cited Violation Green finding. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609 "Significance Determination Process" (SDP). The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at http://www.nrc.gov/NRR/OVERSIGHT/index.html. Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violation. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at http://www.nrc.gov/NRR/OVERSIGHT/index.html.

A. Inspector Identified Findings

Cornerstone: Occupational Radiation Safety and Public Radiation Safety

Green. The inspector reviewed incidents related to access control deficiencies and radiation worker practices. During an on-the-job training tour of vital areas, workers failed to follow the requirements of the radiation work permit resulting in a small unintended dose. The failure of the workers to follow licensee procedures constitutes a Non-Cited Violation of Technical Specification 6.5.1. The finding was of very low safety significance as the event did not involve an overexposure or a substantial potential for an overexposure and did not compromise the licensee's ability to assess personnel dose (Section 2OS1).

B. Licensee Identified Violations

None.

Report Details

Summary of Plant Status

The plant operated at or near full power throughout the entire inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

The inspectors performed a partial walkdown of the following equipment trains to verify operability and proper equipment lineup. The systems were selected based upon risk significance, plant configuration, system work or testing, or inoperable or degraded conditions.

- Core Spray System
- No. 12 Emergency Diesel Generator (EDG)

The inspectors verified the position of critical redundant equipment and looked for any discrepancies between the existing equipment lineup and the required lineup.

Due to the system's risk significance, the inspectors selected the control rod drive system for a complete walkdown. The inspectors walked down the system to verify mechanical and electrical equipment lineups, component labeling, component lubrication, component and equipment cooling, hangers and supports, operability of support systems, and to ensure that ancillary equipment or debris did not interfere with equipment operation.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

a. Inspection Scope

The inspectors walked down the following risk significant areas looking for any fire protection issues. The inspectors selected areas containing systems, structures, or components that the licensee identified as important to reactor safety.

- Fire Zone 12A, Lower 4 kV Bus Area
- Fire Zone 12B, Hydrogen Seal Oil Area

- Fire Zone 14A, Upper 4 kV Bus Area
- Fire Zone 14B, Isophase Bus Area

The inspectors reviewed the control of transient combustibles and ignition sources, fire detection equipment, manual suppression capabilities, passive suppression capabilities, automatic suppression capabilities, and barriers to fire propagation.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

a. Inspection Scope

The inspectors reviewed the licensee's flooding mitigation plans and equipment to determine consistency with design requirements and the risk analysis assumptions related to seasonal external flooding. Walkdowns and reviews performed considered design measures, seals, drain systems, contingency equipment condition and availability of temporary equipment and barriers, performance and surveillance tests, procedural adequacy, and compensatory measures.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification (71111.11)

a. Inspection Scope

The inspectors reviewed the pass/fail results of individual written tests, operating tests, and simulator operating tests (required to be given per 10 CFR 55.59(a)(2)) administered by the licensee during calendar year 2002.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation (71111.12)

a. Inspection Scope

The inspectors reviewed the licensee's implementation of the Maintenance Rule (10 CFR 50.65) to ensure rule requirements were met for the selected systems. The following systems were selected based on being designated as risk significant under the Maintenance Rule, or being in the increased monitoring (Maintenance Rule category a(1)) group:

- Reactor Vessel Pressure Control System
- Reactor Protection System
- Reactor Building Closed Cooling Water

The inspectors verified the licensee's categorization of specific issues, including evaluation of the performance criteria. The inspectors reviewed the licensee's implementation of the maintenance rule requirements, including a review of scoping, goal-setting, and performance monitoring; short-term and long-term corrective actions; functional failure determinations associated with the condition reports reviewed; and current equipment performance status.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

The inspectors reviewed and observed emergent work, preventive maintenance, or planning for risk significant maintenance activities. The inspectors observed maintenance or planning for the following activities or risk significant systems undergoing scheduled or emergent maintenance.

- Weekly Scheduling and Planning Meetings
- Daily Planning and Emergent Work Review
- Inspection of EDG Floor Drain Line Backwater Check Valves

The inspectors also reviewed the licensee's evaluation of plant risk, risk management, scheduling, and configuration control for these activities in coordination with other scheduled risk significant work. The inspectors verified that the licensee's control of activities considered assessment of baseline and cumulative risk, management of plant configuration, control of maintenance, and external impacts on risk. In-plant activities were reviewed to ensure that the risk assessment of maintenance or emergent work was complete and adequate, and that the assessment included an evaluation of external factors. Additionally, the inspectors verified that the licensee entered the appropriate risk category for the evolutions.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed the technical adequacy of the following operability evaluations to determine the impact on Technical Specifications (TS), the significance of the evaluations, and to ensure that adequate justifications were documented.

- On-line Maintenance of Direct Current (DC) Circuit Breakers May Impact High Energy Line Break (HELB) Qualification Requirements
- Isokinetic Probe Used for Building Differential Pressure Measurement Reads Inaccurate
- Support SR-360 on Torus Ring Header is Binding

Operability evaluations were selected based upon the relationship of the safety-related system, structure, or component to risk.

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds (OWA) (71111.16)

a. Inspection Scope

The inspectors reviewed OWA No. 02-07, "Unable to Operate HWC [Hydrogen Water Chemistry] at Rated Conditions with Both Recombiner Trains in Service." The inspectors reviewed each workaround's potential to impact the operators' ability to respond to an offgas system problem, and general potential as a transient initiator. Additionally, the inspectors reviewed various selected operations logs and records to verify that no undocumented OWAs were present.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors selected the following post-maintenance activities for review. Activities were selected based upon the structure, system, or component's ability to impact risk.

- Leaking Scram Outlet Valve for Hydraulic Control Unit 18-31
- Transformer 1AR Abnormal Voltage Indications

- Reactor Manual Control Relay Card Replacement
- Repair of Alternate Nitrogen Supply Check Valve AI-700

The inspectors verified by witnessing the test or reviewing the test data that post-maintenance testing activities were adequate for the above maintenance activities. The inspectors reviews included, but were not limited to, 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, TS applicability, 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.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors selected the following surveillance test activities for review. 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.

- No. 11 EDG Monthly Surveillance
- Residual Heat Removal System Pump and Valve Tests
- Shutdown Cooling High Pressure Isolation Interlock

The inspectors observed the performance of surveillance testing activities, including reviews 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.

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed the following temporary modifications.

- Jumper/Bypass No. 02-07, Bypass of Main Turbine Generator High Vibration Trips

- Jumper/Bypass No. 02-09, Temporary Fall Protection for Work on 14 Residual Heat Removal (RHR) Pump

The inspectors reviewed the safety screening, design documents, USAR, and applicable TS to determine that the temporary modifications were 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 modifications on the permanent systems and interfacing systems were adequately verified.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

2OS1 Access Control to Radiologically Significant Areas (71121.01)

.1 Plant Walkdowns and RWP Reviews

a. Inspection Scope

The inspector reviewed the radiological conditions of work areas within radiation areas and high radiation areas (HRA) in the reactor, radwaste, and turbine buildings. The inspector performed walkdowns and reviewed licensee controls to determine if the controls (i.e., surveys, postings, and barricades) were adequate to meet 10 CFR Part 20 and Technical Specification (TS) requirements. Additionally, the inspector selectively reviewed year 2001 and year to date 2002 condition reports (CR), including CR20022533, that described access control deficiencies and radiation worker practices, to verify that the licensee had effectively implemented the corrective action program.

b. Findings

Inspector identified one finding of very low safety significance (Green) and an associated Non-Cited Violation (NCV).

On March 14, 2002, two of three security personnel, conducting an on-the-job training tour of vital areas, climbed on the top of a security storage cabinet and accessed the HRA above the 8 foot high radiation shield wall on turbine building elevation 951' while attempting to visually locate specific building structures. The personnel were granted access to the radiologically controlled area (RCA) under radiation work permit (RWP) Number 1, Revision 23, which authorizes general entry into the radiologically controlled area (RCA) to perform tasks which are passive in nature. The RWP specifically required personnel to obtain approval from the Radiation Protection Coordinator prior to accessing areas above 8 feet on the turbine floor when the plant is operating. Additionally, signs located on the radiation shield adjacent to the storage cabinet direct personnel that they are not to access areas above 8 feet in the area. One of the individual's electronic dosimeter (ED) activated in the 124 millirem/hour exposure field. The employees immediately left the area, exited the RCA and upon logging out and returning the EDs to storage were directed by the ED computer system to notify radiation protection personnel of exposure to an excessive dose rate. One individual received 1 millirem, another received 2 millirem total exposure and the third individual did not receive a measured dose.

The licensee immediately restricted access to the RCA by these individuals and counseled the individuals regarding the station procedures and RWP requirements. Further, the licensee implemented a radiation protection radiological controlled area orientation checklist and initial entry review for all personnel entering the RCA for the first time. The event was entered in the licensee's corrective action system (CR20022533). The inspector reviewed the licensee's assessment of ED functionality, personnel training, and immediate corrective actions to prevent recurrence.

The inspector evaluated this finding using NRC Inspection Manual Chapter IMC 0610*, Appendix B, "Thresholds for Documentation," and determined it to be more than minor in that the failure of personnel to follow established RWPs could be reasonably viewed as a precursor to a significant event. Specifically, the occurrence involved individual workers unplanned and unintended dose as a result of actions contrary to the licensee's procedures and the RWP. During the screening process, the inspector determined that the finding was not an As-Low-As-Is-Reasonably-Achievable (ALARA) finding, did not involve an overexposure or a substantial potential for an overexposure and did not compromise the licensee's ability to assess personnel dose. Therefore, the finding was of very low safety significance (Green).

TS 6.5.1 required the establishment of procedures as recommended in Regulatory Guide 1.33, Revision 2, Appendix A. Regulatory Guide 1.33, Revision 2, Appendix A, recommends procedures for access control to radiation areas including a radiation work permit system. Procedure MNGP 4AWI-08.04.01, Revision 12, Section 4.6.5.B.1, required site personnel performing work in the RCA to perform the work in accordance with a valid RWP. RWP Number 1, Revision 23, authorized general entry into the radiologically controlled area (RCA) to perform tasks which were passive in nature and specifically required personnel to obtain approval from the Radiation Protection Coordinator prior to accessing areas above 8 feet on the turbine floor when the plant is operating. Contrary to the above, on March 14, 2002, two security personnel, conducting an on-the-job training tour of vital areas, climbed on the top of a security storage cabinet and accessed the HRA above the 8 foot high radiation shield wall on

turbine building elevation 951' while attempting to visually locate specific building structures. This violation is being treated as a NCV consistent with Section VI.A of the NRC Enforcement Policy (NCV 50-263/02-03-01).

Cornerstone: Public Radiation Safety

2PS1 Radioactive Material Processing and Transportation (71122.02)

.1 Walkdown of Radioactive Waste Systems

a. Inspection Scope

The inspector reviewed the liquid and solid radioactive waste system description in the Updated Safety Analysis Report (USAR) and the most recent information regarding the types and amounts of radioactive waste generated and disposed. The inspector 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 inspector reviewed the current processes for transferring waste resins into transportation containers to determine if appropriate waste stream mixing and/or sampling procedures were utilized. During this inspection, the licensee was not conducting waste processing.

b. Findings

No findings of significance were identified.

.2 Waste Characterization and Classification

a. Inspection Scope

The inspector reviewed the licensee's radiochemical sample analysis results for each of the licensee's waste streams, including dry active waste and resins. The inspector 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 inspector 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 accordance with 10 CFR 61.55. The inspector 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.

b. Findings

No findings of significance were identified.

.3 Transportation Records

a. Inspection Scope

The inspector reviewed five non-exempted package shipment manifests completed in year 2001 to verify compliance with NRC and Department of Transportation requirements (i.e., 10 CFR Parts 20 and 71 and 49 CFR Parts 172 and 173). The licensee had one non-exempt package preparation underway during the inspection. The inspector observed radiation workers in the process of shipment package loading, and interviewed the shipping staff regarding the procedures used for regulatory compliance.

b. Findings

No findings of significance were identified.

.4 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed quality assurance audits of the radioactive waste and transportation program, along with departmental self-assessments of the radioactive waste and transportation program to evaluate the effectiveness of the self-assessment process to identify, characterize, and prioritize problems. The inspector also reviewed corrective action documentation to verify that previous radioactive waste and radioactive materials transportation related issues were adequately addressed. The inspector selectively reviewed year 2001 and 2002 CRs that addressed radioactive waste and radioactive materials transportation program deficiencies, to verify that the licensee had effectively implemented the corrective action program.

b. Findings

No findings of significance were identified.

3. SAFEGUARDS

Cornerstone: Physical Protection

3PP1 Access Authorization (AA) Program (Behavior Observation Only) (71130.01)

a. Inspection Scope

The inspectors interviewed five supervisors and five non-supervisors (both licensee and contractor employees) to determine their knowledge level and practice for implementing the licensee's behavior observation program responsibilities. Selected procedures pertaining to the Behavior Observation Program and associated training activities were reviewed. Also licensee fitness-for-duty semi-annual test results were reviewed. In addition, the inspectors reviewed a sample of licensee self-assessments and security logged events. The inspectors also interviewed security managers to evaluate their knowledge and use of the licensee's corrective action program.

b. Findings

No findings of significance were identified.

3PP2 Access Control (Identification, Authorization and Search of Personnel, Packages, and Vehicles) (71130.02)

a. Inspection Scope

The inspectors reviewed the licensee's protected area access control equipment testing and maintenance procedures. The inspectors observed licensee testing of all access control equipment to determine if testing and maintenance practices were performance based. On two occasions, during peak ingress periods, the inspectors observed in-processing search of personnel, packages, and vehicles to determine if search practices were conducted in accordance with regulatory requirements. Interviews were conducted and records were reviewed to verify that security staffing levels were consistently and appropriately implemented. Also the inspectors reviewed the licensee's process for limiting access to only authorized personnel to the protected area and vital equipment. The inspectors reviewed the licensee's program to control security keys and security-related computer data.

The inspectors reviewed a sample of licensee self-assessments, maintenance request records, and security logged events for identification and resolution of problems. In addition, the inspectors interviewed security managers to evaluate their knowledge and use of the licensee's corrective action system.

b. Findings

No findings of significance were identified.

3PP4 Security Plan Changes (71130.04)

a. Inspection Scope

The inspector reviewed Revision 17 (dated May 31, 2001) and Revision 18 (dated September 12, 2001) to the Security Training and Qualification Plan. Additionally, the inspector reviewed Revision 51 (dated May 31, 2001) and Revision 52 (dated September 7, 2001) to the Monticello Nuclear Plant Physical Security Plan. The review was conducted to verify that the changes did not decrease the effectiveness of the security plans. The referenced revisions were submitted in accordance with 10 CFR 50.54(p).

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

Cornerstone: Physical Protection, Initiating Events

.1 Physical Protection Performance Indicators

a. Inspection Scope

The inspector verified the data for the Physical Protection Performance Indicators (PI) pertaining to Fitness-For-Duty Personnel Reliability, Personnel Screening Program, and Protected Area Security Equipment. Specifically, a sample of plant reports related to security events, security shift activity logs, fitness-for-duty reports, and other applicable security records were reviewed for the period between January 1 and December 31, 2001.

b. Findings

No findings of significance were identified.

.2 Unplanned Transients per 7000 Critical Hours

a. Inspection Scope

The inspectors verified the accuracy and completeness of the “Unplanned Transients per 7000 Critical Hours” performance indicator data submitted by the licensee from January 1, 2001, through December 31, 2001. The inspectors reviewed data reported to the NRC since the last verification. The review was accomplished, in part, through evaluation of the TS requirements, plant records, procedural reviews, and reactor coolant sample data.

b. Findings

No findings of significance were identified.

.3 (Closed) Unresolved Item 50/263/01-07-05: "Unplanned Transient per 7000 Critical Hours Performance Indicator."

a. Inspection Scope

Unresolved Item 50/263/01-07-05 identified a potential discrepancy with reporting data associated with the "Unplanned Transient per 7000 Critical Hours Performance Indicator." The issue related to the transients terminated by a Notice of Enforcement Discretion (NOED). NRR has indicated in resolutions to frequently asked questions that this issue does not count against the performance indicator. This data was incorporated during the above review (Section 4OA1.2) of the performance indicator thereby closing URI 50/263/01-07-05.

b. Findings

No findings of significance were identified.

4OA6 Meetings

Exit Meetings

The results of the Safeguards Inspection were presented to Mr. B. Sawatzke (Acting Plant Manager) and other members of the licensee management at the conclusion of the inspection on March 8, 2002. The results of Licensed Operator Requalification Testing for Calendar Year 2002 and Applicability of NRC Inspection Manual Chapter 0609, Appendix I, "Operator Requalification Human Performance Significance Determination Process (SDP)" were presented to Mr. G. Lashinski on March 19, 2002. The results of the Occupational Radiation Safety Program inspection were presented to Mr. J. Forbes and other members of the licensee management at the conclusion of the inspection on March 22, 2002. The inspectors presented the routine resident inspection results to Mr. J. Forbes and other members of licensee management on March 26, 2002. The licensee acknowledged the findings presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. Proprietary information was controlled properly.

KEY POINTS OF CONTACT

Licensee

G. Bregg, Manager, Quality Services
D. Fadel, Director of Engineering
J. Forbes, Site Vice-President
R. Frederickson, Superintendent Material Inspection and Repair
J. Grubb, General Superintendent, Operations
K. Jepson, General Superintendent, Chemistry and Radiation Services
D. Neve, Acting Licensing Project Manager
J. Purkis, Plant Manager
B. Sawatzke, General Superintendent, Maintenance
C. Schibonski, General Superintendent, Safety Assessment
E. Sopkin, General Superintendent, Engineering
C. Johnson, Nuclear Security Consultant
B. Linde, Security Manager
T. Gallagher, Nuclear Security Consultant
G. Lashinski, Operations Training Supervisor

NRC

B. Burgess, Chief, Reactor Projects Branch 2

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-263/02-03-01	NCV	Radiation Worker Violated Radiation Work Permit Requirements (Section 20S1)

Closed

50-263/01-07-05	URI	Unplanned Transients per 7000 Critical Hours Performance Indicator (Section 4OA1.3)
50-263/02-03-01	NCV	Radiation Worker Violated Radiation Work Permit Requirements (Section 20S1)

Discussed

None.

LIST OF ACRONYMS USED

AA	Access Authorization
ALARA	As-Low-As-Is-Reasonably-Achievable
ASME	American Society of Mechanical Engineers
AWI	Administrative Work Instruction
CAM	Continuous Air Monitor
CFR	Code of Federal Requirements
CR	Condition Report
CRD	Control Rod Drive
DC	Direct Current
d/p	Differential Pressure
DRP	Division of Reactor Projects
DRS	Division of Reactor Safety
EDG	Emergency Diesel Generator
ESW	Emergency Service Water
EWI	Engineering Work Instruction
FFD	Fitness For Duty
HELB	High Energy Line Break
HRA	High Radiation Area
HWC	Hydrogen Water Chemistry
IP	Inspection Procedure
IPE	Individual Plant Examination
IPEEE	Individual Plant Examination of External Events
IR	Inspection Report
kV	Kilovolt
NCR	Non-Conformance Report
NCV	Non-Cited Violation
NMC	Nuclear Management Company
NRC	Nuclear Regulatory Commission
NUMARC	Nuclear Management and Resources Council
OWA	Operator Workaround
OWI	Operations Work Instruction
PI	Performance Indicator
PIDS	Perimeter Intrusion Detection System
RFO	Refueling Outage
RHR	Residual Heat Removal
RMC	Reactor Manual Control
RPS	Reactor Protection System
RWP	Radiation Work Permit
SAP	Security Administrative Procedure
SCR	Screening
SDP	Significance Determination Process
SIP	Security Implementing Procedure
SWI	Scheduling Work Instruction
TS	Technical Specification
USAR	Updated Safety Analysis Report
WO	Work Order

LIST OF DOCUMENTS REVIEWED

1R04 Equipment Alignment

	Operations Manual:	
B.1.2	- Control Rod Drives	
B.1.3	- Control Rod Drive Hydraulic System	
B.3.1	- Core Spray System	
B.9.8	- Emergency Diesel Generators	
B.8.1.2	- EDG Emergency Service Water	
	Prints and Drawings:	
M-118	- Control Rod Hydraulic System	Revision AW
M-119	- Control Rod Hydraulic System	Revision S
M-121	- Core Spray System	Revision AH
NL-95926-1	- 20 Inch Suction Header Supports SS-359 and SR-360	Revision B
NL-95926-2	- 20 Inch Suction Header Supports SS-359 and SR-360	Revision A
NL-95926-3	- 20 Inch Suction Header Supports SS-359 and SR-360	Revision B
NL-95926-4	- 20 Inch Suction Header Supports SS-359 and SR-360	Revision B
NL-95926-5	- 20 Inch Suction Header Supports SS-359 and SR-360	Revision A
M-133	- Diesel Oil System	Revision AD
M-811	- Service Water System Intake Structure	Revision CE
M-112	- RHR and Emergency Service Water Systems	Revision BF
	USAR:	Revision 18
Section 3.5	- Reactivity Control Mechanical Characteristics	
Section 8.4.1	- Safeguards EDG Systems	
Section 10.4.4	- Emergency Service Water System	
	Design Basis Document:	
B.1.2/3	- Control Rod Drive Mechanical and Hydraulic System	Revision B
	Technical Specifications and Bases:	
3/4.3	- Control Rod Drive System	
3/4.9.B.3	- Standby Diesel Generators	
	Procedures and Forms:	
0081	- Control Rod Drive Scram Insertion Time Test, Performed 1/22/02	Revision 35
0081	- Control Rod Drive Scram Insertion Time Test, Performed 1/27/02	Revision 35
2145-09	- Control Rod Drive Prestart Valve Checklist	Revision 27
0000-J	- Operations Daily Log, Part - J, Outplant	

1R05 Fire Protection

NX-16991	Monticello Updated Fire Hazards Analysis Technical Manual	
	Monticello Fire Strategies:	
A.3-12-A	- Lower 4 kV Bus Area	Revision 6
A.3-14-A	- Upper 4 kV Bus Area	Revision 6
A.3-12-B	- Hydrogen Seal Area	Revision 4*
A.3-14-B	- Isophase Bus Area	Revision 2*
	Procedures and Forms:	
4AWI-08.01.01	- Fire Prevention Practices	Revision 17
4AWI-08.01.02	- Combustion Source Use Permit	Revision 6
4AWI-08.01.04	- Fire Protection Combustible Loading	Revision 0
0271	- Fire Hose Station and Yard Hydrant Hose House Equipment Inspection	Revision 27
0274	- Fire Hose Hydrostatic Test Interior Hose Stations	Revision 19
0275-1	- Fire Barrier Penetration Seal Visual Inspection	Revision 9
0275-2	- Fire Barrier Wall, Damper, and Floor Inspection	Revision 16
QUAD-5-80-009	Specifications for Installation of Electrical and Mechanical Penetration Seals at the Monticello Nuclear Generating Plant by Quadrex Corporation	Revision 7
	Operations Manual:	
A.3	- Fire Fighting Procedures	
B.08.05	- Fire Protection	

1R06 Flood Protection Measures

	Design Basis Documents:	
T.5	- External Flooding	Revision 3
T.8	- Internal Flooding	Revision 2
NSPLMI-95001	Individual Plant Examination of External Events (IPEEE)	Revision 1
NSPNAD-92003	Individual Plant Examination (IPE)	Revision 0
	USAR:	Revision 18
Section 12.2.1.7.1	- External Flooding	
Section 12.2.1.7.2	- Internal Flooding	
Section 2.4.1	- Surface Water	
Section 1.3.1.4	- Hydrology	
	Operations Manual:	
A.6	- Acts of Nature	Revision 13*
B.7.1	- Liquid Radwaste	

	Procedures:	
1478	- Annual Flood Surveillance	Revision 0
4AWI-04.02.01	- Housekeeping	Revision 6
1252	- RHR Pump Room Sump Pump Surveillance	Revision 6
1306	- Portable Diesel Oil Pump Operability Test	Revision 8

1R12 Maintenance Rule Implementation

	NUMARC:	
93-01	- Nuclear Energy Institute Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants	Revision 2
93-01, Section 11	- Assessment of Risk Resulting from the Performance of Maintenance Activities	February 22, 2000
	Regulatory Guides:	
1.160	- Monitoring the Effectiveness of Maintenance at Nuclear Power Plants	Revision 2
1.182	- Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants	May 2000
	Engineering Work Instruction:	
05.02.01	- Monticello Maintenance Rule Program Document	Revision 5
	Operations Manual:	
B.2.5	- Reactor Building Closed Cooling System	
B.5.6	- Plant Protection System	
B.5.9	- Main Steam Pressure Control	
	Maintenance Rule Program System Basis Document:	
B.2.5	- Reactor Building Closed Cooling System	Revision 1
B.5.6	- Plant Protection System - Reactor Protection System	Revision 1
B.5.9	- Main Steam Pressure Control System	Revision 0
	USAR:	Revision 18
Section 7.6.1	- Reactor Protection System	
Section 7.7	- Turbine Generator System Instrumentation and Control	
Section 10.4.3	- Reactor Building Closed Cooling Water System	
CR 20020480	Received “B” RPS Half Scram While Placing Reactor Mode Switch to Refuel	
CR 20020457	Reactor Scram 113 While at 100 Percent Power	
CR 20020516	Calculated As-Found Value Outside Stated Band for MPR During Test 1045	

CR 20020599	Test 1045 Halted Due to Turbine Control System Oscillations	
CR 20020608	Turbine Control System Oscillation During Performance of Test 1045 on 1/25/02	
WO 0105762	MO-3501 Failed Open	

1R13 Maintenance Risk Assessments and Emergent Work Control

	Procedures:	
4AWI-04.01.01	- General Plant Operating Activities	Revision 28
SWI-14.01	- Risk Management of On-line Maintenance	Revision 0
4001-11-01	- Swing Check Valve Inspection	Revision 6
CR 20022543	During Disassembly and Inspection of 11 EDG Room Backwater Check Valve, the Bottom 30 Percent Was Covered in Fine Silt	
CR 20022403	The EDG Room Backwater Check Valves Have Not been Inspected and Cleaned Since 1995. Corrective Actions For Prior Issue Not Completed	
WO 0201715	Inspect EDG Room Backwater Check Valves NW-7, NW-8, and NW-9	
	Drawings and Prints:	
A-10159-K	- Josam Manufacturing Company - Series 1100 and 1100-S Backwater Sewer Line Valves	
NF-36753	- Plumbing and Drainage - EDG Building	Revision D
02-10	Jumper/Bypass - Temporary Floor Drain Covers in No. 12 EDG Room	March 13, 2002
SCR 02-0153	10 CFR 50.59 Screening - Inspect EDG Room Backwater Check Valves	Revision 0

1R15 Operability Evaluations

CR 20021384	Online Maintenance Performed On MCC-311 and MCC-312 May Require MO-2035 Be Declared Inoperable	
NF-36298-2	DC Electrical Load Distribution One Line Diagram	Revision A
WO 0201683	Investigate Potential Problem With Isokinetic Probe	

CR 20012892	Investigate Potential Problem With Isokinetic Sensing Probe for Reference Side of d/p Instruments	
CR 19991350	Low Reactor Building Differential Pressure Indication On Panel C-24B. DPI-4424 @ -0.15 Inch Water Column While DPI-4425 @ -1.07 Inch Water Column	
CR 19991362	Add Instructions to Operations Manual B.4.2 or B.8.7 for How to Purge Moisture From the Reactor Building d/p instrument Reference Tubing	
CR 20021972	Support SR-360 on Torus Ring Header is Binding	
NCR N94-366	SR-360 Configuration Concern	
	Prints and Drawings:	
NL-95926-1	- 20 Inch Suction Header Supports SS-359 and SR-360	Revision B
NL-95926-2	- 20 Inch Suction Header Supports SS-359 and SR-360	Revision A
NL-95926-3	- 20 Inch Suction Header Supports SS-359 and SR-360	Revision B
NL-95926-4	- 20 Inch Suction Header Supports SS-359 and SR-360	Revision B
NL-95926-5	- 20 Inch Suction Header Supports SS-359 and SR-360	Revision A

1R16 Operator Workarounds

OWA 02-07	Unable to Operate HWC at Rated Conditions with Both Recombiner Trains in Service	
CR 20021116	Operation with One Recombiner Train in Service and the Other in Standby to Allow Full HWC is and Operator Workaround	
OWI-01.07	Operations Department Self Assessment	Revision 16

1R19 Post-Maintenance Testing

	Thermography Records (multiple)	2/20/2002
	Operations Manual	
B.1.2	- Control Rod Drive	
B.1.3	- Control Rod Drive Hydraulic System	

	Prints and Drawings:	
M-118	- Control Rod Hydraulic System	Revision AW
M-119	- Control Rod Hydraulic System	Revision S
	Procedures and Forms:	
0045	- Rod Block Monitor Functional Test and Calibration Test	Revision 28
0074	- Control Rod Drive Exercise - Weekly Control Rod Drive Exercise	Revision 29
0081	- Control Rod Drive Scram Insertion Time Test	Revision 35
3069	- Post Maintenance Testing Activities Control Cover Sheet	Revisions 9 and 10
4001-11-03	- Lift Check Valve Inspection	Revision 5
0137-30	- Alternate Nitrogen Supply Pressure and Local Leak Rate Test	Revision 8
0255-17-IA-5	- Alternate Nitrogen System Train A Valve Test	Revision 15
3/4.9	Technical Specification and Basis - Auxiliary Electrical Systems	
3186-G-01-03	Quality Control Inspection Record for WO 0200350	Revision 5
4858-04-OCD	1AR Transformer Maintenance Isolation	Revision 4
Isolation 02-00350	Scram Valve Leaks By Seat. CRD Temperature Elevated.	Version 1
NX-7831-341	Reactor Manual Control Subsystem of Cont Rod Drive System - Technical Manual	Revision 25
NX-7866-85	Rod Position Information System - Technical Manual	Revision 1
RFO 154265	Repair Monticello Plant 1AR Voltage Regulator	Revision 2
WO 0201541	Investigate Abnormal 1AR Voltage Indications	
WO 0005221	RMC Pushbutton Select Relay Card Replacement	
WO 0200350	Scram Valve Leaks By Seat. CRD Temperature Elevated.	
WO 0201892	AI-700 Has Excessive Leakage	
CR 20023052	AI-700 Failed to Properly Close During the Performance of 0255-17-IA-5	

1R22 Surveillance Testing

	Operations Manual:	
B.9.8	- Emergency Diesel Generators	
B.8.1.2	- EDG Emergency Service Water	
B.3.4	- Residual Heat Removal System	
	Prints and Drawings:	
M-133	- Diesel Oil System	Revision AD
M-811	- Service Water System Intake Structure	Revision CE
M-112	- RHR and Emergency Service Water Systems	Revision BF
M-120	- Residual Heat Removal System	Revision BH
M-121	- Residual Heat Removal System	Revision BL
	USAR:	Revision 18
Section 8.4.1	- Safeguards EDG Systems	
Section 10.4.4	- Emergency Service Water System	
Section 10.2.4	- Reactor Shutdown Cooling and Reactor Vessel Head Spray	
	Technical Specifications and Bases:	
3/4.9.B.3	- Standby Diesel Generators	
3/4.2	- Protective Instrumentation	
3/4.5	- Core and Containment Cooling Systems	
	Procedures and Forms:	
0187-01	- 11 EDG and 11 ESW System Tests	Revision 38
0255-04-IA-1	- RHR System Valve Tests	Revision 53
0391	- RHR Shutdown Cooling Supply	Revision 8

1R23 Temporary Plant Modifications

	Jumpers/Bypasses:	
02-07	- Bypass Turbine Generator High Vibration Trip	February 27, 2002
02-09	- Temporary Fall Protection for 14 RHR Pump Motor Work	March 11, 2002
01-29	- Temporary Fall Protection for 14 RHR Pump Motor Work	June 15, 2001
	10 CFR 50.59 Screenings:	
SCR 02-0129	- Bypass of Turbine Generator High Vibration Trip	Revision 0
SCR 01-0121	- Temporary Beam For 14 RHR Motor Fall Protection	June 15, 2001
NRC IN 92-47	Intentional Bypassing of Automatic Actuation of Plant Protective Features	June 29,1992
4AWI-04.04.03	Bypass Control	Revision 17

	USAR:	Revision 18
Section 11.2	- Turbine Generator System	
Section 12.2	- Plant Principle Structures and Foundations	
	Operations Manual:	
B.6.1	- Turbine	
	Alarm Response Procedure:	
7-B-34	- Turbine Supervisory Instrument No Voltage	Revision 1

2OS1 Access Control to Radiologically Significant Areas (71121.01)

MNGP 5841	Electronic Dosimeter Alarm Record	Revision 0
MNGP 5842	Radiation Protection Radiological Controlled Area Orientation Checklist	Revision 0
RWP Number 1	Radiation Work Permit-General Entry	Revision 23
RWP Number 118	985 Reactor - Radwaste Pump and Tank Room	Revision 0
CR20022533	Two Individuals Entered the Overhead Area of TB 951 without Contacting RPC as Required by RWP #1	March 13, 2002

2PS1 Radioactive Material Processing and Transportation (71122.02)

MNGP R.11.08	Selection and Entry of 10 CFR Part 61 Correlation Factors	Revision 4
MNGP 4AWI 08.03.03	Software Quality Assurance Requirements	Revision 3
MNGP 4AWI 08.05.01	Radwaste Management Program	Revision 6
MNGP 4AWI 08.05.02	Radioactive Material Shipping	Revision 5
MNGP 8084	Procedure for Shipping Excepted Packages of Radioactive Material	Revision 11
MNGP 8110	Master Radioactive Material Shipping Procedure	Revision 30
MNGP 8178	Procedure for Shipping Radioactive Waste Using the 14-210H, 14-215H or 14-215	Revision 15
MNGP 8205	High Integrity Container Handling Procedure	Revision 18

CR20012330	Hazwaste Shipment 01-001 Was Allowed to Leave Site on a Vehicle That Did Not Meet Safety Requirements	May 15, 2001
CR20015865	ALARA Dose Rates Higher than Expected for Work on Radwaste Valves	December 14, 2001
CR20022775	Radwaste Inventory Discrepancy with Actual Drums in Barrel Storage Aisle	March 20, 2002
Audit No. AG 2001-S-2	Remp/Radioactive Waste and Sealed Sources	July 20, 2001
	Radioactive Waste Characterization and Classification Team Performance Assessment Report - First Quarter 2001	
	Radioactive Waste Shipping Packages 01-27, 01-30, 01-41, 01-51, 02-07	

3PP1 Access Authorization Program

CR 20017536	Explosive Vapor Detector Test	November 26, 2001
CR 20017979	FFD Testing	December 10, 2001
	FFD Performance Data	June 30, 2001
	FFD Performance Data	December 31, 2001
N1ACD 2.12	FFD Program	
	Nuclear Generation FFD Handbook	

3PP2 Access Control

0305	Metal Detector Performance Test Procedure	November 12, 2001
0307	Access Control System Functional Test	December 5, 2001
0483	Explosive Vapor Detector Performance Test	November 12, 2001
	Annual Security Key Audit Letter	July 19, 2001
CR 20012817	Repetitive Failures For Explosive Detector B	May 24, 2001
4AWI08.06.02	Plant Security Key Control	May 19, 1999
4AWI08.06.03	Unescorted Access Authorization and Processing	September 30, 1999

	Master Listing of Security Condition Reports	April 1 through December 27, 2001
	Master Listing of Security Work Orders	April 1, 2001 through February 26, 2002
	Security Event Report Master Listing	April 1, 2001 through February 28, 2002
	Self Assessment Audit M 2401 “Access Authorization ”	June 5- July 27, 2001
	Self Assessment Audit M3101 “Key Control”	August 1-19, 2001
SIP 01.02	Admittance and Exit of Personnel	February 12, 2002
SIP 01.03	Admittance and Control of Vehicles	February 12, 2002
SIP 01.05	Escort Responsibilities	June 26, 2000
SIP 02.02	System Descriptions	February 12, 2001
SIP 04.01	Testing and Inspection of Systems and Equipment	February 12, 2002
WO 0109105	Set up and Adjust X-Ray B	

3PP4 Security Plan Changes

	Revision 17 to Security Training and Qualification Plan	May 31, 2001
	Revision 18 to Security Training and Qualification Plan	September 12, 2001
	Revision 51 to Security Plan	May 31, 2001
	Revision 52 to Security Plan	September 7, 2001

4OA1 Performance Indicator Verification

CR 20014522	Resource to Repair Security Equipment	July 31, 2001
SAP 02.09	NRC Physical Protection Cornerstone Performance Indicators	August 2, 2000
	Guard Force Utilization - PIDS Forms	January through December 2001
	Performance Indicator Physical Protection Worksheets	January 1 through December 31, 2001

	Security Shift Activity reports	April, July, October and November 2001
3530-04	NRC Performance Indicator Initiating Events Worksheets (1st, 2nd, 3rd, 4th Quarters 2001)	Revision 0