September 22, 2000

Mr. J. Sorenson
Site General Manager
Prairie Island Nuclear Generating Plant
Nuclear Management Company, LLC
1717 Wakonade Drive East
Welch, MN 55089

SUBJECT: PRAIRIE ISLAND - NRC INSPECTION REPORT 50-282/2000014(DRS); 50-306/2000014(DRS)

Dear Mr. Sorenson:

On August 28 through September 1, 2000, the NRC completed a routine inspection at your Prairie Island Nuclear Generating Plant. The enclosed report presents the results of that inspection, which were discussed on September 1, 2000, with Mr. J. Sorensen and other members of your staff.

The inspection was an examination of activities conducted under your license as they relate to radiation safety and to 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. Specifically, this inspection focused on the implementation of your radioactive gaseous and liquid effluent treatment and monitoring programs.

Based on the results of this inspection, there were no findings identified.

In accordance with 10 CFR 2.790 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/NRC/ADAMS/index.html (the Public Electronic Reading Room).

We will gladly discuss any question you have concerning this inspection.

Sincerely,

/RA/

Gary L. Shear, Chief
Plant Support Branch
Division of Reactor Safety

Docket Nos. 50-282; 50-306
License Nos. DPR-42; DPR-60

Enclosure: Inspection Report 50-282/2000014(DRS);
50-306/2000014(DRS)

cc w/encl: Site General Manager, Prairie Island
Plant Manager, Prairie Island
J. Bernstein, Deputy Commissioner, Minnesota
Department of Public Service
State Liaison Officer, State of Wisconsin
Tribal Council, Prairie Island Dakota Community

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos:	50-282, 50-306
License Nos:	DPR-42, DPR-60
Report No:	50-282/2000014(DRS); 50-306/2000014(DRS)
Licensee:	Nuclear Management Company
Facility:	Prairie Island Nuclear Generating Plant
Location:	1717 Wakonade Drive East Welch, MN 55089
Dates:	August 28 to September 1, 2000
Inspector:	M. Mitchell, Radiation Specialist
Approved by:	Gary Shear, Chief Plant Support Branch Division of Reactor Safety

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting and assessing safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety	Radiation Safety	Safeguards
● Initiating Events	● Occupational	● Physical Protection
● Mitigating Systems	● Public	
● Barrier Integrity		
● Emergency Preparedness		

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: http://www.nrc.gov/NRR/OVERSIGHT/index.html.

SUMMARY OF FINDINGS

IR 50-282/2000014(DRS), IR 50-306/2000014(DRS), on 08/28-09/01/2000; Nuclear Management Company; Prairie Island Nuclear Generating Plant; Units 1 & 2. Radiation safety specialist report.

The inspection was conducted by a regional radiation specialist. There were no findings identified during this inspection.

Report Details

Summary of Plant Status: Both units operated at or near 100 percent power throughout the inspection period.

2. RADIATION SAFETY

Cornerstone: Public Radiation Safety

2PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems

.1 Walkdowns of Effluent Treatment and Monitoring Systems

a. Inspection Scope

The inspector interviewed members of the licensee's chemistry staff responsible for implementing the liquid and gaseous radioactive waste effluent treatment and monitoring program, and the system engineers responsible for maintaining the safety-related ventilation systems. The interviews were conducted to assess staff knowledge in their areas of responsibility, and to obtain system performance information. Additionally, the configurations of the liquid and gaseous radioactive waste collection and processing equipment and the filter housings for the control room emergency filtration/pressurization system and the primary plant ventilation system were inspected and found to be as described in the Final Safety Analysis Report, and adequate material condition was verified.

Findings

There were no findings identified.

.2 Review of Radiological Effluent Data, Release Packages and Procedures

a. Inspection Scope

The inspector reviewed the following documents to ensure that reports were submitted in compliance with regulatory requirements, to ensure that procedures were technically sound and consistent with industry standards, and to verify that the procedures and the Offsite Dose Calculation Manual were properly implemented:

The 1999 Annual Radioactive Effluent and Waste Disposal Report.

The Offsite Dose Calculation Manual (ODCM), Revision 15, including changes involving the liquid and gaseous radioactive waste effluent treatment and monitoring program.

Selected implementing procedures for the liquid and gaseous radioactive waste effluent program as described in the ODCM.

Three randomly selected batch radioactive liquid waste effluent release permits for discharges from the plant effluent tanks for the period of April 1999 through August 2000.

Three randomly selected liquid waste sample analyses for effluents released from the turbine building sumps and auxiliary building for the period between January and August, 2000.

Three randomly selected batch radioactive gaseous waste effluent release permits for discharges from the waste gas storage tanks and containment vents and purges from Units 1 and 2 for the period of April 1999 through April 2000.

Two randomly selected gaseous waste sample analyses for effluents continuously released from the Reactor and Auxiliary Building vents for the period of April 1999 through August 2000.

Offsite dose calculation methodologies and the dose results calculated from liquid and gaseous radioactive waste effluents released during the period of January 1999 through December 1999.

b. Findings

There were no findings identified.

.3 Control of Gaseous and Liquid Radiological Effluents

a. Inspection Scope

The inspector observed the following activities and verified they were performed in accordance with station procedures:

The collection of gaseous effluent silica gel samples from the reactor building, shield building, auxiliary building and radioactive waste building ventilation stack radiation monitors and the procedural preparation for performance of radiochemistry analyses for airborne particulates, iodine, tritium, and noble gas.

The collection of liquid effluent samples from the Chemical and Volume Control System (CVCS) Waste Tank; performance of the radiochemistry analyses for principal gamma radionuclides, including iodine-131 and dissolved and entrained noble gases; and the preparation and completion of a liquid radioactive waste effluent batch release permit.

b. Findings

There were no findings identified.

.4 Effluent Monitor and Analytical Instrument Calibration

a. Inspection Scope

The inspector reviewed quality control documents and calibration procedures and records for selected effluent monitors and laboratory analytical instruments, and verified that the equipment was properly maintained consistent with station procedures. Also, effluent monitor alarm setpoint calculations were reviewed for accuracy and agreement with the ODCM. The following specific documents were reviewed:

Quality control procedures and records of calibrations completed in 2000, for the chemistry counting room gamma analysis instrumentation, liquid scintillation counting systems, and gross alpha/beta proportional counting systems.

The chemistry laboratory's interlaboratory analysis comparison program performance during 1999.

Procedures and records of liquid and gaseous effluent radiation monitor checks and calibrations performed during the period of January 1999 through December 1999.

b. Findings

There were no findings identified.

.5 Air Cleaning System Surveillance

a. Inspection Scope

The inspector reviewed the most recent results of the in-place filter testing of high efficiency particulate filters and charcoal adsorbers for the control room emergency filtration/pressurization system and the primary plant ventilation systems. The inspector verified the air cleaning systems were tested in compliance with Technical Specifications and that test results met acceptance criteria. The inspector also reviewed the results of the laboratory tests performed on the charcoal adsorber material sampled from the control room emergency filtration/pressurization system and the primary plant ventilation system.

b. Findings

There were no findings identified.

.6 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed condition reports (CRs) related to the liquid and gaseous radioactive waste effluent program generated in 2000, and quality assurance audit reports of the radioactive waste effluent program completed since January 1999. The

inspector confirmed that identified problems were entered into the licensee's corrective action program and timely and appropriately resolved.

b. Findings

There were no findings identified.

4OA6 Management Meetings

Exit Meeting Summary

The inspector presented the inspection results to Mr. J. Sorensen and other members of licensee management on September 1, 2000. The inspector asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

F. Engler, Radiation Protection Technician Supervisor
J. Friedrich, Radiation Protection Engineer
J. Hauschildt, Chemistry Technician
A. Johnson, General Superintendent Radiation Protection and Chemistry
D. LaLone, System Engineer
D. Lattimer, Effluents and Chemistry Supervisor
D. Schuelke, Plant Manager
J. Sorensen, Site General Manager
P. Waldenberg, Plant Health Physicist

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

LIST OF ACRONYMS USED

CFR	Code of Federal Regulations
CR	Condition Report
CVCS	Chemical Volume Control System
DRS	Division of Reactor Safety
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records
PERR	Public Electronic Reading Room
PINGP	Prairie Island Nuclear Generating Plant
ODCM	Offsite Dose Calculation Manual

LIST OF DOCUMENTS REVIEWED

Audits, Assessments and Documents

Abnormal Airborne Effluent Release, Unit 1 Containment, May 20 through 21, 1999
Design Change-99vc02- CVCS Holdup Tank Level Upgrade
Instrument Quality Assurance Report
USAR Section 7.5 (Revision 21)
Containment Prerelease Authorization Documents for 121 CVCS
Observation Report 1999109, “Radioactive Effluent Controls”
Observation Report 1999089, “PINGP Remp”
Observation Report 1999098, “PI Remp/Process Control Program Changes”
Observation Report 1999243, “Review of NRC PI Data”

Condition Reports (CR) Nos.

CR-20000017, CR-20000908, CR-20000919, CR-20002067, CR-20002124, CR-20002539, CR-20002582, CR-20002613, CR-20002658, CR-20002779, CR-20002895, CR-20003227, CR-20003094, CR-20003281, CR-20003330, CR-20003386, CR-20003387,

Procedures

C-21.1-5.11 (Revision 18) Releasing 121 CVCS Monitor Tank to the River
PINGP 4513 (Revision 3) Monthly Release Report
PINGP 4102 (Revision 10) Tritium Sampling
PINGP 4505 (Revision 9) Liquid Waste Tank Release Instructions
PITQ-187 Training Request
PM 3155-1 Radiation Monitor Sample Pump Quarterly PM
RPIP 4501 (Revision 5) Spectrum Analyst Efficiency Calibration
RPIP 4502 (Revision 6) Gamma Spectrum Analysis Energy Calibration
SP-1027 Radiation Monitoring Annual Calibration
SP 1028 Radiation Monitoring Monthly Calibration
SP-1055.1 (Revision 8) 121 Control Room Clean Up Ventilation System Filter Removal Efficiency Test
SP-1055.2 (Revision 9) 122 Control Room Clean Up Ventilation System Filter Removal efficiency Test
SP-1080.2 (Revision 9) 12 Shield Building Ventilation Filter Removal efficiency Test

SP-1140.1 (Revision 12) 121 Spent Fuel Pool Special and In-service Purge Ventilation System Filter Removal Efficiency Test
SP-1172 (Revision 27) Ventilation System Monthly Operation
SP-1184 (Revision 11) Spent Fuel Pool Special Ventilation Flow Verification
SP-1229 Effluent Radiation Monitor Quarterly Functional Test
SP-1296 Flow Totalizer Replacement and Calibration
SP-1724.1 (Revision 2) 121 Sample Room Exhaust Filter Replacement and Leakage Test
SP-1783.1 (Revision 4) Westinghouse Radiation Monitor Electronic Calibration
SP-1783.1 (Revision 5) Westinghouse Radiation Monitor Electronic Calibration
SP-1783.1 (Revision 4) NMC Rad Monitor Electronic Calibration
SP-1783.2 (Revision 5) Westinghouse Radiation Monitor Electronic Calibration