

April 26, 2001

Mr. M. Reddemann  
Site Vice President  
Kewaunee and Point Beach Nuclear Plants  
Nuclear Management Company, LLC  
6610 Nuclear Road  
Two Rivers, WI 54241

SUBJECT: KEWAUNEE NUCLEAR POWER PLANT  
NRC INSPECTION REPORT 50-305/01-06

Dear Mr. Reddemann:

On March 31, 2001, the NRC completed an inspection at your Kewaunee Nuclear Power Plant. The enclosed report documents the inspection results which were discussed on March 29, 2001, with you, Mr. K. Hoops, and other members of your staff. On April 9, a regional inspector contacted you and Mr. Hoops by telephone to further discuss a finding associated with containment atmosphere sample panel testing.

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, one issue of very low safety significance (Green) was identified for failure to implement a program that ensured the capability to obtain and analyze containment atmosphere samples under accident conditions. The issue was determined to involve a violation of NRC requirements. However, because of its very low safety significance and because the issue 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 20555-0001; 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 Kewaunee facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, your response, if you choose to reply, and the letter's 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).

Sincerely,

**/RA/**

Roger D. Lanksbury, Chief  
Branch 5  
Division of Reactor Projects

Docket No. 50-305  
License No. DPR-43

Enclosure: Inspection Report 50-305/01-06

cc w/encl: K. Hoops, Manager, Kewaunee Plant  
D. Graham, Director, Bureau of Field Operations  
Chairman, Wisconsin Public Service Commission  
State Liaison Officer

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Sincerely,

/s/Roger D. Lanksbury

Roger D. Lanksbury, Chief  
Branch 5  
Division of Reactor Projects

Docket No. 50-305  
License No. DPR-43

Enclosure: Inspection Report 50-305/01-06

cc w/encl: K. Hoops, Manager, Kewaunee Plant  
D. Graham, Director, Bureau of Field Operations  
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State Liaison Officer

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-305  
License No: DPR-43

Report No: 50-305/01-06

Licensee: Nuclear Management Company, LLC

Facility: Kewaunee Nuclear Power Plant

Location: N 490 Highway 42  
Kewaunee, WI 54216

Dates: February 14 through March 31, 2001

Inspectors: J. Lara, Senior Resident Inspector  
Z. Dunham, Resident Inspector  
W. Slawinski, Senior Radiation Specialist  
T. Ploski, Senior Emergency Preparedness Specialist

Approved By: Roger D. Lanksbury, Chief  
Branch 5  
Division of Reactor Projects

## SUMMARY OF FINDINGS

IR 05000305-01-06, on 02/14-03/31/2001, Nuclear Management Company, LLC, Kewaunee Nuclear Power Plant. Radiation Monitoring and Accident Assessment Instrumentation.

The inspection was conducted by resident inspectors, a regional senior radiation specialist, and a regional senior emergency preparedness specialist. The inspection identified one Green finding, which was a non-cited violation. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter 0609, "Significance Determination Process" (SDP). 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: Emergency Preparedness

Green. A Non-Cited Violation of Technical Specification 6.14 was identified for the failure to implement a program that ensured the capability to obtain and analyze containment atmosphere samples under accident conditions. The finding was determined to be of very low safety significance because post-accident sampling system equipment, including a containment air sample panel, was installed consistent with the licensee's Emergency Plan and alternate means of assessing the containment atmosphere under accident conditions were available. (Section 2OS3).

### B. Licensee-Identified Findings

Violations of very low significance which were identified by the licensee have been reviewed by the inspectors. Corrective actions taken or planned by the licensee appear reasonable. These violations are listed in Section 4OA7 of this report.

## Report Details

Summary of Plant Status: The unit was operated at approximately 96 percent power during the inspection period except for a brief reduction in power to facilitate quarterly scheduled main turbine stop and control valve testing.

### 1. REACTOR SAFETY

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

#### 1R04 Equipment Alignment

##### .1 Equipment Alignment Inspections of the Chemical and Volume Control System and Residual Heat Removal (RHR) System

###### a. Inspection Scope

The inspectors performed partial walkdowns of the chemical and volume control system and the RHR system. The inspectors reviewed the system lineup checklists, normal operating procedures, and system drawings to verify the correct system lineup. Valve positions and electrical power availability were also examined. The following documents were reviewed in addition to Technical Specifications (TSs) and the Updated Safety Analysis Report (USAR):

- RHR-34-CL, "Residual Heat Removal Prestartup Checklist," Revision AD
- N-RHR-34, "Residual Heat Removal System Operation," Revision AN
- N-CVC-35B-CL, "Charging and Volume Control Prestartup Checklist," Revision AI

###### b. Findings

No findings of significance were identified.

##### .2 Semi-Annual Equipment Alignment Inspection of the Auxiliary Feedwater System

###### a. Inspection Scope

The inspectors performed a complete walkdown of the auxiliary feedwater system. The inspectors reviewed the system lineup checklist, normal and abnormal operating procedures, vendor manuals, and system drawings to verify the correct system lineup. A review of any outstanding design issues, operator work arounds (OWAs), maintenance work requests, and temporary modifications was conducted to determine the impact on the system. During the walkdown, the following aspects of the system were examined:

- Valve position
- Material condition of system components
- Electrical power availability
- Labeling of components

- Hanger and support installation
- Support system operability
- General housekeeping

The USAR and TSs were reviewed in addition to the following documents:

- Pacific Pump Vendor Manual
- Terry Turbine Vendor Manual
- N-FW-05B-CL, "Auxiliary Feedwater System Prestartup Checklist," Revision AH
- N-FW-05B, "Auxiliary Feedwater System," Revision AB
- A-FW-05B, "Abnormal Auxiliary Feedwater System Operation," Revision AA
- N-MS-06-CL, "Main Steam and Steam Dump Prestartup Checklist," Revision AB
- Drawing OPERM-M204
- Drawing OPERM-M205
- Drawing E-1602

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors walked down the following areas to assess the overall readiness of fire protection equipment and barriers:

- Relay Room
- Oil Storage Room

Emphasis was placed on the control of transient combustibles and ignition sources, the material condition of fire protection equipment, and the material condition and operational status of fire barriers used to mitigate fire damage or propagation. Additionally, fire hoses, sprinklers, portable fire extinguishers, and fire detection devices were inspected to verify that they were installed at their designated locations, were in satisfactory physical condition, and were unobstructed. Passive features such as fire doors, fire dampers, and fire zone penetration seals were also inspected.

The following documents were reviewed:

- Fire Plan Procedure (FPP) 08-07, "Control of Ignition Sources," Revision D
- FPP 08-01, "Fire Plan Operability, Surveillance, and Contingency Requirements," Revision C
- FPP 08-08, "Control of Transient Combustibles," Revision A
- FPP 08-12, "Fire Prevention Tour," Revision B
- FPP 08-14, "Fire Protection Shutdown Policy," Original Revision
- N-FP-08-CL, "Fire Protection System Checklist," Revision AL
- Kewaunee Fire Protection Program Plan, Revision 4
- STP-FP-08-01, "Relay Room Air Leakage Test," Revision A

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors reviewed the licensee's implementation of the maintenance rule requirements to ensure that component and equipment failures were identified, entered, and scoped within the maintenance rule and that selected structures, systems, or components were properly categorized and classified as (a)(1) or (a)(2) in accordance with 10 CFR 50.65. The appropriateness of performance criteria for (a)(2) classified systems and the adequacy of corrective actions and goals for (a)(1) classified systems were also evaluated. Additionally, the inspectors reviewed equipment and system issues to verify that problems were identified at an appropriate threshold and entered into the licensee's corrective action program.

Specific systems evaluated were:

- 1B Diesel Generator
- Primary Sampling System
- Containment Isolation System

The inspectors reviewed various Kewaunee Assessment Process (KAP, the problem reporting system) reports associated with the above systems in addition to the following documents:

- Nuclear Administrative Directive 8.20, "Maintenance Rule Implementation," Revision A
- General Nuclear Procedure 8.20.1, "Maintenance Rule Scoping and Performance Criteria," Revision A
- General Nuclear Procedure 8.20.2, "Maintenance Rule Data Evaluation and Goal Setting," Revision A

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessment and Emergent Work Evaluation

a. Inspection Scope

The inspectors reviewed the licensee's evaluation of plant risk, scheduling, and configuration control during the planned work activities listed below. In particular, the licensee's planning and management of maintenance was evaluated to verify that on-line risk was acceptable. Licensee actions to address increased on-line risk during these periods were also inspected to verify that actions were in accordance with approved administrative procedures. Surveillance Procedures (SPs), USAR, TSs, Nuclear



Administrative Directive 8.2, "Work Request/Work Order," Revision D, and General Nuclear Procedure 8.21.01, "Risk Assessment for Plant Configurations," Revision B, were reviewed. Additionally, the inspectors interviewed licensee personnel.

- Valve CC-400A and RHR Train 'A' maintenance performed on March 14, 2001
- Weekly work scheduled for week of March 5, 2001
- Motor-operated Valve SI-9B packing adjustment, testing, and breaker maintenance

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the technical adequacy of operability evaluations to ensure that system operability was properly justified and the system remained available, such that no unrecognized increase in risk occurred. Additionally, design documentation and the USAR were referenced during the inspection.

The inspectors reviewed the following operability evaluations:

- Auxiliary building special ventilation duct vibration, KAP Work Request 01-001560
- Valve RC-402 failure to close (indicated mid-position), KAP Work Request 01-001359

b. Findings

No findings of significance were identified.

1R16 OWAs

a. Inspection Scope

The inspectors reviewed OWAs to identify any cumulative effects on safety system reliability, initiating event frequency, and mitigating systems availability. Additionally, the cumulative effects of OWAs on the ability of operators to respond in a correct and timely manner to plant transients and accidents and to implement abnormal and emergency operating procedures were also evaluated. The inspectors also evaluated whether there were OWAs which had not been identified by the licensee. The following OWA was reviewed:

- OWA 01-03, Control Room Alarm for Main Generator Hydrogen Cooling Not Responding

b. Findings

No findings of significance were identified.

## 1R19 Post-Maintenance Testing

### a. Inspection Scope

The inspectors observed the post-maintenance testing activities associated with the maintenance activities listed below to verify that the test was adequate for the scope of the maintenance work which had been performed and that the testing acceptance criteria were clear and demonstrated operational readiness consistent with the design and licensing basis documents. The inspectors attended pre-job briefings to verify that the impact of the testing had been properly characterized; observed the test to ensure that the test was performed as written and all testing prerequisites were satisfied; and reviewed the test acceptance criteria. Following the completion of the test, the inspectors conducted walk downs of the affected equipment to verify that the test equipment was removed and that the equipment was returned to a condition in which it could perform its safety function.

- Valve SI-9B packing adjustment, KAP Work Order 01-002121-000
- 1B Diesel Generator Output Breaker Emergent Work

### b. Findings

No findings of significance were identified.

## 1R22 Surveillance Testing

### a. Inspection Scope

The inspectors observed surveillance testing on risk-significant equipment to verify that the equipment was capable of performing its intended safety function and that the surveillance tests satisfied the requirements contained in TSs, the USAR, and licensee's procedures. During the surveillance tests, the inspectors reviewed the test to ensure that it was adequate to demonstrate operational readiness consistent with the design and licensing basis documents, and that the testing acceptance criteria were clear. Portions of the test were observed to verify that the test was performed as written, that all testing prerequisites were satisfied, and that the test data were complete, appropriately verified, and met the requirements of the testing procedure. Following the completion of the test, the inspectors conducted walk downs of the affected equipment to ensure that the test equipment was removed and that the equipment was returned to a condition in which it could perform its safety function.

The inspectors observed and reviewed the performance of the following surveillance testing on risk significant equipment:

- SP 23-100, "Containment Spray Pump and Valve Test - IST [Inservice Testing]," Revision AI
- SP 05B-105, "Turbine Driven AFW [Auxiliary Feedwater] Pump and Valve Test - IST," Revision BB
- SP 42-312B, "Diesel Generator B Availability Test," Revision J
- RT-DGM-10-TSC, "Technical Support Center Diesel Generator," Revision S

b. Findings

No findings of significance were identified.

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies

- .1 (Closed) Inspection Follow-up Item (IFI) 50-305/99-11-01: During the 1999 emergency preparedness exercise, offsite officials received a late notification of a general emergency declaration. The inspector determined this item was included in the licensee's exercise critique and was tracked in the licensee's corrective action tracking system. As a result, this item is not a finding having safety significance based on the inspectors' screening of this item using the emergency preparedness Significance Determination Process.
- .2 (Closed) IFI 50-305/99-02-01: During a baseline inspection, it was determined that the licensee should reassess its Emergency Plan Figure 5-2 that included staffing and augmentation guidelines. The inspector determined that this item was encompassed by the licensee's ongoing reassessment of its onshift emergency staffing and staff augmentation provision. This reassessment was in response to a White finding that was documented in Inspection Report No. 50-305/00-15 (DRS). The inspector's review of the licensee's actions related to the White finding were documented in Inspection Report 50-305/01-07.

2. **RADIATION SAFETY**

**Cornerstone: Occupational Radiation Safety**

2OS1 Access Control to Radiologically Significant Areas

.1 Plant Walkdown and Radiological Boundary Verification

a. Inspection Scope

The inspector conducted a walkdown of portions of the radiologically controlled area (RCA) and completed independent confirmatory radiation surveys to verify the adequacy of radiological boundaries, area access controls, and radiological postings. Specifically, the inspector walked-down selected radiologically significant area boundaries (high and locked high radiation areas) in the auxiliary building, to verify that these areas and that selected radiation areas were properly posted, and access into these areas were controlled in accordance with 10 CFR Part 20 and licensee Technical Specifications.

b. Findings

No findings of significance were identified.

## 2OS3 Radiation Monitoring and Accident Assessment Instrumentation

### .1 Tests and Calibrations

#### a. Inspection Scope

The inspector reviewed records to determine if radiological instrumentation associated with monitoring transient high and/or very high radiation areas and high range containment monitors used for remote emergency assessment had been calibrated consistent with industry standards and in accordance with station procedures. The inspector reviewed selected surveillance records associated with the high radiation sample system to confirm that instrumentation was tested in accordance with station procedures. The inspector also reviewed the licensee's reactor coolant system sampling capability using the high radiation sample system to determine if it was adequately tested by the licensee. The inspector completed walk-downs of selected area radiation monitors (ARMs) to confirm they were functional and were located as described in the Updated Safety Analysis Report (USAR). The inspector reviewed discrepancies with the location of one ARM and the response range of another as listed in the current revision of the USAR to verify that these discrepancies would not adversely impact area radiological assessment. The inspector also assessed whether ambiguity and other deficiencies with radiation monitoring instrumentation calibration and test procedures and with untimely supervisory review of some calibration records impacted safety. The inspector selectively reviewed calibration procedures and the most recent calibration records for the following ARM instrumentation:

- Containment High Level Radiation Monitors 1A and 1B
- Containment Sump "C" Radiation Monitor (Channel R-30)
- Reactor Coolant Letdown Line Monitor (Channel R-9)
- In-Core Instrument Seal Table Monitor (Channel R-7)

The inspector discussed surveillance practices with licensee staff and reviewed calendar year 2000 and 2001 calibration records and procedures for selected portable survey instrumentation and for those instruments utilized for surveys of personnel and equipment prior to release from the RCA. The inspector observed radiation protection staff complete functional tests of selected portable survey instruments, a personnel contamination monitor, portal monitors, and a small article monitor, to verify that these instruments were source tested and calibrated consistent with station procedures and industry standards, and to verify that monitor alarm setpoints were appropriately established. Calibration records for the following instruments and monitors were reviewed:

- PNR-4 Portable Neutron Rem Survey Meter
- Two RM-14 Portable Geiger-Mueller Friskers
- RO-2 and PIC-6B Portable Ion Chamber Survey Meters
- Xetex 330A Telescan Portable Geiger-Mueller Survey Meter
- Eberline PM-7 Portal Monitor
- Two Eberline PCM-1C Personnel Contamination Monitors
- Two NE Technology Small Article Monitors (SAM-11)

The inspector observed portable survey instruments maintained in the licensee's instrument calibration facility and instrument issue area near the radiation protection office, to verify

that those instruments designated “ready for use” had current calibrations, were operable, and in good physical condition. Additionally, the inspector observed radioactive sources used for instrument calibrations and tests to ensure they were properly maintained and to assess material condition.

b. Findings

One Green finding and an associated violation of regulatory requirements was identified for failure to implement a program that ensured the capability to obtain and analyze containment atmosphere samples under accident conditions.

Assessment facilities and equipment which supported the implementation of the licensee’s Emergency Plan included a High Radiation Sample System (or Post-Accident Sampling System) that was designed to monitor containment radiation levels, to obtain reactor coolant and containment atmosphere samples under accident conditions and to monitor the plant gaseous effluent. The High Radiation Sample System (HRSS) consisted of a liquid acquisition sub-system for reactor coolant system (RCS) and residual heat removal system sampling, a containment air sub-system for sampling the containment atmosphere for gaseous and iodine activity, and plant effluent monitors for particulate, iodine and noble gas release determination. A separate liquid acquisition panel and containment air sample panel (CASP) were installed for collecting RCS and containment atmosphere samples, respectively, under accident conditions.

The licensee regularly tested and calibrated instruments associated with in-line monitors maintained in the high radiation sample room, including the containment hydrogen monitors. Additionally, the licensee regularly collected and analyzed RCS samples obtained from the liquid acquisition sub-system of the HRSS to demonstrate its capability to obtain those samples under accident conditions. However, procedures had not been developed, nor had the licensee tested its capability, to obtain a containment atmosphere sample using the CASP. According to the licensee, the CASP had not been exercised and its sampling capabilities had not been tested for many years due to difficulties obtaining samples during at-power operations and the lack of meaningful radiological data that could be used for comparisons if samples were collected during non-operational periods. The licensee could not recall if and when containment air samples were last obtained using the CASP, or provide data to demonstrate their ability to obtain samples using the panel.

This issue, if left uncorrected, could become a more significant safety concern because if not regularly tested and maintained, the CASP may not function as intended when called upon during accident conditions. Also, chemistry staff responsible for collecting CASP samples may not be sufficiently familiar or knowledgeable of sample panel operations should they not have the opportunity to regularly test their skills. Since this issue involved a failure to meet a regulatory requirement, it represents a “finding” as provided by the reactor safety, emergency planning criteria specified in the initial assessment section of NRC Manual Chapter 0609, “Significance Determination Process.” The inspector evaluated the risk significance of this finding using the Emergency Preparedness Significance Determination Process (Appendix B to NRC Manual Chapter 0609) and concluded that the finding did not represent a failure to meet the planning standards of 10 CFR 50.47(b), pending the outcome of the licensee’s test of the CASP’s capability to obtain a representative sample. Since other calibrated, operable equipment was available to the

licensee to evaluate the containment atmosphere during accident conditions and to assess core damage including the containment high range radiation monitors, the containment hydrogen monitors, and through reactor coolant system sampling via the liquid acquisition sub-system, this issue is categorized as a Green finding. The licensee intended to test the CASP's capabilities during its next outage scheduled for fall 2001, and develop a procedure to regularly test the panel thereafter.

Technical Specification 6.14 required, in part, that the licensee implement a post-accident sampling program which ensures the capability to obtain and analyze reactor coolant and containment atmosphere samples under accident conditions. However, contrary to this requirement and as described above, the licensee had not developed procedures and implemented a sampling program which tested and verified its capability to obtain and analyze containment atmosphere samples using the CASP. This violation is considered non-cited (NCV 50-305/01-06-02), consistent with Section VI.A of the NRC Enforcement Policy. This problem was entered into the licensee's corrective action program as KAP Work Request No. 01-002088 and KAP Work Order No. 01-006578-000.

.2 Respiratory Protection Program

a. Inspection Scope

The inspector reviewed aspects of the licensee's respiratory protection program for compliance with the requirements of Subpart H of 10 CFR Part 20, to ensure that self-contained breathing apparatus (SCBA) were properly maintained, inventoried, and stored. The inspector also reviewed records for selected emergency response personnel required to use SCBAs to verify they were trained and that qualifications were current. Specifically, the inspector reviewed SCBA use and maintenance procedures for adequacy and consistency with industry standards and reviewed equipment inspection and inventory records for calendar year 2000, for those units designated for emergency use in various areas of the plant. The inspector walked-down the SCBA air bottle filling station and SCBA storage locations in the control room and in several emergency support areas of the station. The inspector examined numerous SCBA units stored in these areas to assess material condition and to verify that air bottle hydrostatic tests were current. The inspector also reviewed the licensee's capability for refilling and transporting SCBA bottles to the control room and support locations in the plant. Additionally, the inspector evaluated respiratory protection training lesson plans to ensure consistency with regulatory requirements and recent industry event notices, and reviewed qualification records to confirm that control room operators and other selected emergency response personnel were trained and qualified for SCBA use.

b. Findings

No findings of significance were identified.

.3 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed: (1) the results of a recent combined Institute for Nuclear Power Operations/licensee self-assessment of the radiation protection program which included aspects of radiation monitoring instrumentation and SCBA equipment; (2) Nuclear Oversight (quality assurance) audits of radiation monitoring instrumentation related activities completed in calendar year 2000; and (3) the licensee's KAP database and several individual KAPs related to the radiation monitoring system generated in 2000 and 2001. The inspector evaluated the effectiveness of these processes to identify, characterize and prioritize problems and to develop corrective actions. Additionally, the inspector reviewed other procedure adherence issues identified during the inspection and associated with HRSS testing and with the use of unapproved calibration procedures to confirm they were of minor safety significance and captured in KAPs.

b. Findings

No findings of significance were identified.

**4. OTHER ACTIVITIES [OA]**

4OA1 Performance Indicator Verification

.1 Safety System Unavailability - RHR System

a. Inspection Scope

The inspectors reviewed the licensee's performance indicator data collection process and historical data through the fourth quarter of 2000 to verify the accuracy of collected and submitted data. The following documents were reviewed:

- Nuclear Administrative Directive 3.18, "NRC Performance Indicators," Revision A
- "Guideline for Data Collection and Reporting NRC Performance Indicators," dated June 22, 2000
- Nuclear Energy Institute 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 0
- Reactor Operator and Shift Manager Logs

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up

- .1 (Closed) Licensee Event Report (LER) 305/2000-014-00 and LER 305/2000-014-01: All Three Auxiliary Feedwater Pumps Declared Inoperable Due to the Potential to Plug Their Suction Strainers.

The inspectors reviewed the issue and the licensee's corrective actions as stated in LER 2000-014-00, LER 2000-014-01, and in KAP 00-002948. A "Green" finding and a Non-Cited Violation (NCV) were identified as discussed in Inspection Report 50-305/00-12 and NRC letter dated February 21, 2001. No additional findings of significance were identified during the review.

- .2 (Closed) LER 305/2000-015-00 and LER 305/2000-015-01: Service Water Traveling Water Screens Not Sealed As Per USAR.

The inspectors reviewed the issue and the licensee's corrective actions as stated in LER 2000-015-00, LER 2000-015-01, and in KAP 00-003941. No findings of significance were identified. This event did not constitute a violation of NRC requirements.

- .3 (Closed) LER 305/2000-016-00: Inadvertent Engineering Safety Feature Actuation Caused by Unanticipated Temperature Control Switch Response During Testing.

The inspectors reviewed the issue and the licensee's corrective actions as stated in LER 2000-016-00 and in KAP 00-004376. No findings of significance were identified. This event did not constitute a violation of NRC requirements.

#### 4OA6 Meetings

##### Exit Meeting

On March 29, 2001, the inspectors presented the inspection results to Mr. M. Reddemann, Mr. K. Hoops, and other members of the Nuclear Management Company staff. 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. On April 9, a regional inspector contacted Messrs. Reddemann and Hoops by telephone to further discuss a finding associated with the containment atmosphere sample panel testing.

#### 4OA7 Licensee-Identified Violation

The following finding of very low significance was identified by the licensee and is a violation of NRC requirements which meets the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as an NCV. If you deny this NCV, you should provide a response with the basis of your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; 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 Kewaunee facility.



NCV Tracking Number

Requirement Licensee Failed to Meet

(1) NCV 50-305/01-06-01

10 CFR Part 50, Appendix R, Section III.G.2.a required, in part, separation of cables and equipment of redundant trains by a fire barrier having a 3-hour rating. On February 20, 2001, the licensee determined that the installed fusible link arrangement on roll-up fire Doors 279 and 281, which separated both trains of service water pumps, would not actuate as designed to ensure that the doors would automatically close to provide a 3-hour fire barrier. This issue was documented by the licensee in KAP Work Order 01-002053. This is being treated as an NCV.

## KEY POINTS OF CONTACT

### Nuclear Management Company, LLC

M. Bernsdorf, Plant Analytical Chemist  
R. Farrell, Superintendent, Radiation Protection  
J. Fletcher, Security Manager  
W. Flint, Chemistry Manager  
G. Harrington, Licensing Leader  
K. Hoops, Plant Manager  
O. Kilgore, Nuclear Oversight  
B. Koehler, Manager, Quality Assurance Programs  
C. Long, KAP Liaison  
M. Reddemann, Site Vice President  
J. Schweitzer, Manager, Engineering and Technical Support  
J. Stoeger, Superintendent, Operations  
T. Taylor, Assistant Plant Manager, Operations  
T. Webb, Nuclear Licensing Director

### NRC

R. Lanksbury, Branch Chief, DRP, Branch 5

## ITEMS OPENED, CLOSED, AND DISCUSSED

### Opened

50-305/01-06-01	NCV	Failure of 3-hour Rated Fire Barrier (Section 4OA7)
50-305/01-06-02	NCV	Failure to Implement a Program That Ensured the Capability to Obtain and Analyze Containment Atmosphere Samples Under Accident Conditions, as Required by TS 6.14 (Section 2OS3.1.b.)

### Closed

50-305/99-02-01	IFI	Evaluation of Emergency Plan Figure 5-2, "Plant Staffing and Augmentation Guidelines" (Section 1EP5)
50-305/99-11-01	IFI	Exercise Weakness, Late Notification of Offsite Authorities of Declaration of a General Emergency (Section 1EP5)
50-305/2000-014-00 50-305/2000-014-01	LER	All Three Auxiliary Feedwater Pumps Declared Inoperable Due to the Potential to Plug Their Suction Strainers (Section 4OA3)
50-305/2000-015-00 50-305/2000-015-01	LER	Service Water Traveling Water Screens Not Sealed As Per USAR (Section 4OA3)
50-305/2000-016-00	LER	Inadvertent Engineering Safety Feature Actuation Caused by Unanticipated Temperature Control Switch Response During Testing (Section 4OA3)
50-305/01-06-01	NCV	Failure of 3-hour Rated Fire Barrier (Section 4OA7)
50-305/01-06-02	NCV	Failure to Implement a Program That Ensured the Capability to Obtain and Analyze Containment Atmosphere Samples Under Accident Conditions, as Required by TS 6.14 (Section 2OS3.1.b.)

### Discussed

None

## LIST OF ACRONYMS USED

ARM	Area Radiation Monitor
CASP	Containment Air Sample Panel
CFR	Code of Federal Regulations
FPP	Fire Plan Procedure
HRSS	High Radiation Sample System
KAP	Kewaunee Assessment Process
LER	Licensee Event Report
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
OWA	Operator Work Around
RCA	Radiologically Controlled Area
RCS	Reactor Coolant System
SCBA	Self-Contained Breathing Apparatus
RHR	Residual Heat Removal
SP	Surveillance Procedure
TS	Technical Specification
USAR	Updated Safety Analysis Report

## LIST OF DOCUMENTS REVIEWED

In addition to the documents listed in the inspection report, the documents listed below were reviewed by the inspectors.

### Calibration/Test Surveillance Records

RCC 205(c), Analysis Comparisons Between Routine Primary Sampling & HRSR Sampling (2000 and 2001, Comparison Records)  
RCC 205(b), HRSR Collection and Analysis - Byte Valve Volume Verification (1999 and 2001, Verification Records)  
SP 56C-093, Containment Hydrogen Monitor Operational Test (2000 and 2001, Test records)  
HP 02.002, Attachment C, Monthly Inventory of SCBA Respirators (2000 Inventory Records)  
HP 02.002, Attachment D, Monthly SCBA Air Cylinder Inventory (2000 Inventory Records)  
ICP 45-04A, Reactor Cavity Sump "C" Channel R-30 Calibration (April 10, 2000, Calibration Data)  
ICP 45.14, Containment High Level Radiation to DAR, Channel 1R3 & 1W3 Calibration (October 7, 1999, Calibration Data)  
ICP 45.34, Containment High Level Radiation Detector Functional Check (November 8, 1998, Functional Check Data)  
ICP 45-28, Channel R-7 In-core Instrument Seal Table Area Radiation Monitor Calibration and Functional Test (November 3, 1999, Calibration Data)  
ICP 45-30, Channel R-9 Letdown Line Area Radiation Monitor Calibration and Functional Test (March 24, 2000, Calibration Data)  
PNR-4, Neutron Rem Meter, Serial No. 2234 (December 20, 2000, Calibration Data)  
RM-14, Serial No. 4723 (March 3, 2001, Calibration Data)  
PIC 6B, Serial No. 106 (February 8, 2001, Calibration Data)  
RM-14, Serial 7975 (June 12, 2000, Calibration Data)  
RO-2, Serial No. 5632 (November 16, 2000, Calibration Data)  
Xetex 330A Telescan, Serial No. 42838 (January 3, 2001, Calibration Data)  
PM-7, Serial No. 429 (October 14, 2000, Calibration Data)  
SAM-11, Serial No. 221 and No. 227 (October 28, 2000, Calibrations)  
PCM-1C, Serial No. 362 and No. 143 (February 23, 2001, and January 6, 2001, Calibrations)

### Station Procedures

FPP 08-03, Revision D, Fire Plan Qualifications and Training  
NAD 01.18, Revision C, Post Accident Sampling and Monitoring Program  
EPIP-RET-03, Revision O, Chemistry Emergency Team  
EP-RET-3D, Revision M, Containment Air Sampling Analysis Using CASP  
HP 02.002, Revision H, Respiratory Protection Equipment  
HP 01.006, Revision G, Quality Assurance for Radio-Counting Equipment  
HP 6.099, Revision A, Instrument Operating Procedure For PM-7 Portal Monitor  
HP 6.072, Revision B, Instrument Operating Procedure For PCM-1, Personnel Contamination Monitor  
HP 6.74, Original Rev, Instrument Operating Procedure For TCM-2, Tool Contamination Monitor  
HP 6.100, Revision A, Instrument Operating Procedure For SAM-11, Small Article Monitor  
NAD 3.01, Revision H, Directive and Procedure Control  
GNP 3.01.01, Revision B, Directive and Procedure Administrative Controls

HP 07.100 (Draft), Small Article Monitor Instrument Calibration  
HP 07.099, (Draft), PM-7 Portal Monitor Instrument Calibration

#### Audits and Self-Assessments

Report of INTO Assist/Self-Assessment of Radiation Protection Program, November 27 -  
December 1, 2000  
Nuclear Oversight Audit 00-0001, 1<sup>st</sup> Quarter 2000  
Nuclear Oversight Audit, 00-002, 2<sup>nd</sup> Quarter 2000

#### KAPs and Related

KAP database for 2000 and 2001 related to radiation monitoring instrumentation and SCBAs  
Individual KAPs 01-002088/01-006578-000, 00-000701-000, 00-000177-000, and  
99-300032-000.

#### Other Documents

Integrated Logic Diagram For Radiation Monitors, Revision T, Drawing E2021  
November 15, 1983 Letter, Wisconsin Public Service Corporation to NRC Re: Training Program for  
Post Accident Sampling System  
March 30, 1984 Letter, Wisconsin Public Service Corporation to NRC Re: Proposed Amendment  
to Kewaunee Technical Specifications for NUREG-0737USAR, Revision 14, Chapter 11.2  
Respiratory Qualification Matrix  
Lesson Plan T-FBT-LP-8-11, Revision B, Protective Breathing Apparatus  
Lesson Plan T-GET-LP RSP, Revision B, Respiratory Protection Training  
Listing of Radiation Protection Instruments and Instrument and Control Radiation Monitoring  
System Instruments