

December 6, 2000

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 INSPECTION REPORT 50-305/00-20(DRP)

Dear Mr. Reddemann:

On November 9, 2000, the NRC completed an inspection at your Kewaunee Nuclear Power Plant. The enclosed report presents the results of that inspection, which were discussed on November 9, 2000, with you, Mr. K. Weinbauer, and other members of your staff.

The inspection was an examination of 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. Within these areas, the inspection consisted of a selected 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 NRC requirements. However, because of the 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, its enclosure, and your response, should you chose to provide one, will be available **electronically** for public inspection in the NRC Public Document Room **or** from the *Publicly Available Records System (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).

M. Reddemann

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

Sincerely,

***/RA/***

Roger D. Lanksbury, Chief,  
Reactor Projects Branch 5

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

Enclosure: Inspection Report 50-305/00-20(DRP)

cc w/encl: K. Weinhauer, Assistant Site Vice President, Kewaunee Plant  
B. Burks, P.E., Director, Bureau of Field Operations  
Chairman, Wisconsin Public Service Commission  
State Liaison Officer

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 50-305/00-20(DRP)

Licensee: Nuclear Management Company, LLC

Facility: Kewaunee Nuclear Power Plant

Location: N 490 Highway 42  
Kewaunee, WI 54216

Dates: October 1 through November 9, 2000

Inspectors: J. Lara, Senior Resident Inspector  
Z. Dunham, Resident Inspector  
P. Krohn, Resident Inspector  
K. Riemer, Project Engineer

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

## 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:

<b>Reactor Safety</b>	<b>Radiation Safety</b>	<b>Safeguards</b>
<ul style="list-style-type: none"><li>● Initiating Events</li><li>● Mitigating Systems</li><li>● Barrier Integrity</li><li>● Emergency Preparedness</li></ul>	<ul style="list-style-type: none"><li>● Occupational</li><li>● Public</li></ul>	<ul style="list-style-type: none"><li>● Physical Protection</li></ul>

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 05000305-00-20, on 10/1-11/9/2000; Nuclear Management Company, LLC, Kewaunee Nuclear Power Plant, Unit 1. Post-maintenance testing, identification and resolution of problems.

The inspection was conducted by resident inspectors and a regional project engineer. The inspection identified two "No Color" findings, one of which was a Non-Cited Violation. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609 "Significance Determination Process." Findings for which the significance determination process does not apply are indicated by "No Color" or by the severity level of the applicable violation.

### A. Inspector-Identified Findings

#### Cornerstone: Mitigating Systems

- No Color. The inspectors identified a Non-Cited Violation for failure to complete component retest requirements following maintenance performed on the B train control room air conditioner compressor condenser. The unit had been returned to an operable status prior to the retest requirements being completed as prescribed in the associated maintenance procedure. This issue was determined to be a violation of the licensee's Operational Quality Assurance Program Manual, Section 8, "Maintenance Planning and Control."

Although the risk associated with this finding was very low and did not affect any cornerstones, the inspectors noted that this finding was similar to previous NRC-identified findings and therefore was of greater than minor significance and warranted documentation. (Section 1R19).

#### Cross-cutting Issues: Identification and Resolution of Problems

- No Color. The inspectors determined that a negative performance trend had developed in the licensee's ability to identify and promptly take appropriate corrective actions to prevent recurrence based on two previously identified examples (NCV 50-305/2000014-01) and one example identified during this inspection period (NCV 50-305/00-20-01). All three examples related to the licensee returning safety-related equipment to service prior to completing all required post-maintenance retesting.

While the risk of the individual examples was very low, the licensee had failed to ensure that all retest requirements had been completed before returning safety-related equipment to service. These findings collectively indicated a problem with the licensee's ability to provide timely and adequate corrective actions to prevent recurrence. (Section 4OA2).

## Report Details

Summary of Plant Status: The unit was operated at approximately 96 percent power during the inspection period.

### 1. REACTOR SAFETY

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

#### 1R04 Equipment Alignment

##### .1 "B" Train Emergency Diesel Generator

###### a. Inspection Scope

On October 10, 2000, the inspectors conducted a walkdown of the "B" train emergency diesel generator and its associated support systems while the opposite train diesel generator was out-of-service for surveillance testing. The inspectors verified the correct valve positions using the system piping and instrumentation drawings and the system lineup checklist. The inspectors observed that instrumentation valve configurations were acceptable and that pressure and temperature indications were appropriate for the operating conditions. The inspectors observed proper installation of hangers and supports, verified operational status of support systems, observed proper control room switch positions and local breaker positions for the system, and reviewed abnormal system operating procedures. The inspectors also evaluated other conditions, such as adequacy of housekeeping, the absence of ignition sources, and proper component labeling. The following documents were reviewed:

- N-DGM-10-CLB, "Diesel Generator B Prestartup Checklist," Revision F
- Updated Safety Analysis Report (USAR), Section 8.2.3, Emergency Power
- Integrated Plant Emergency Operating Procedures (EOPs)

###### b. Findings

No findings of significance were identified.

##### .2 "A" Train Safety Injection

###### a. Inspection Scope

On October 17, 2000, the inspectors conducted a walkdown of the "A" train of the safety injection system and its associated support systems while the "B" train was out-of-service for quarterly surveillance testing. The inspectors verified the correct valve positions using the system piping and instrumentation drawings and the system lineup checklist. The inspectors observed that instrumentation valve configurations and appropriate pressure and flow meter indications were also acceptable. The inspectors observed proper installation of hangers and supports, verified operational status of

support systems such as boric acid heat tracing circuits, observed proper control room switch positions and local breaker positions for the system, and reviewed abnormal system operating procedures. The inspectors also evaluated other conditions such as adequacy of housekeeping, the absence of ignition sources, and proper component labeling. The following documents were reviewed:

- Surveillance Procedure SP-33-098, "Safety Injection Pump and Valve Test - IST," Revision AR
- N-SI-33-CL, "Safety Injection System Prestartup Checklist," Revision AE
- USAR, Section 6.2, Safety Injection System
- Integrated Plant EOPs

b. Findings

No findings of significance were identified.

.2 "A" Train Service Water

a. Inspection Scope

On November 8, 2000, the inspectors conducted a walkdown of the "A" train service water and its associated support systems while service water pump 1B was out-of-service for replacement and inspection. The inspectors verified the correct valve positions using the system piping and instrumentation drawings and the system lineup checklist. The inspectors observed that instrumentation valve configurations and appropriate pressure and flow meter indications were also acceptable. The inspectors also observed proper installation of hangers and supports, verified operational status of support systems, observed proper control room switch positions and local breaker positions for the system, and reviewed abnormal system operating procedures. Additionally, the inspectors evaluated other conditions such as adequacy of housekeeping, the absence of ignition sources, and proper component labeling. The following documents were reviewed:

- N-SW-02-CL, "Service Water System Prestartup Checklist," Revision AO
- USAR, Section 9.6.2, Service Water System
- Integrated Plant EOPs

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors performed walkdowns of the following areas:

- Auxiliary Building, 606-foot elevation
- Screen House

Emphasis was placed on control of transient combustibles and ignition sources; the material condition, operational lineup, and operational effectiveness of the fire protection systems, equipment, and features; and the material condition and operational status of fire barriers used to prevent fire damage or limit fire propagation.

In particular, the inspectors verified that all observed transient combustibles were being controlled in accordance with the licensee's administrative procedures; observed the physical condition of fire suppression devices, such as overhead sprinklers; and verified that any observed deficiencies did not impact the operational effectiveness of the system. The inspectors also observed the physical condition of portable fire fighting equipment, such as portable fire extinguishers, and verified the equipment was located appropriately, that access to the extinguishers was unobstructed, and that fire hoses were installed at their designated locations. Additionally, the inspectors verified that the physical condition of the hoses was satisfactory and that access to the hoses was unobstructed; observed the physical condition of passive fire protection features such as fire doors, ventilation system fire dampers, fire barriers, fire zone penetration seals, and fire retardant structural steel coatings; and verified that the passive fire protection features were properly installed and in good physical condition.

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
- OP N-FP-08-CL, "Fire Protection System Checklist," Revision AL
- Kewaunee Fire Protection Program Plan, Revision 4

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures

a. Inspection Scope

On October 31, 2000, the inspectors conducted an inspection of the facilities relay room which had an internal flooding initiating event frequency of  $1.5E-4/\text{year}$ . The core damage probability associated with an internal flooding event of the relay room was  $3.3E-7/\text{year}$ . This core damage probability was the highest for all internal flooding events analyzed for the facility. The inspectors reviewed the licensee's individual plant examination on internal flooding and interviewed licensee personnel to evaluate the licensee's internal flooding assumptions. The inspectors inspected the relay room to confirm the flooding analysis assumptions, inspected door seals and clearances, inspected available drainage capability, and examined the room for unsealed penetrations which could be potential flood sources from outside the room.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification

a. Inspection Scope

On October 31, 2000, the inspectors observed a licensed operator requalification simulator dynamic exam. The inspectors observed the performance of the licensed operators to determine whether plant operating procedures and standards were implemented during the scenario. The inspectors observed the post-scenario critique to determine whether performance issues were accurately identified and addressed. The inspectors verified that emergency plan requirements were recognized and addressed during the scenario.

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 into the calculations for unavailability, and scoped within the maintenance rule and that select structures, systems, or components were properly categorized and classified as (a)(1) or (a)(2) in accordance with 10 CFR 50.65. The inspectors also verified that issues were identified at an appropriate threshold and entered in the corrective action program.

Specific components or system problems evaluated were:

- Emergency Direct Current Power Distribution
- Technical Support Center Diesel Generator
- Residual Heat Removal System

The inspectors reviewed various corrective action program documents (KAPs-Kewaunee Assessment Process documents), 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 and emergent work activities listed below.

- Maintenance and Planning Work Schedules for October 23 to November 3, 2000
- Component Cooling Water Heat Exchanger Train B Out-of-Service for Flushing and Boroscopic Examination

In particular, the inspectors verified that the licensee's planning and management of on-line risk were adequate. The inspectors also verified that licensee actions to address increased on-line risk during these periods were in accordance with approved administrative procedures. The inspectors reviewed appropriate sections of Surveillance Procedures, the USAR and technical specifications, interviewed licensee personnel, reviewed Nuclear Administrative Directive 8.2, "Work Request/Work Order," Revision D, and reviewed the licensee's Individual Plant Examination, Section 5.0, "Core Damage Frequency Quantification."

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the technical adequacy of the following operability evaluation to ensure that the system operability was properly justified and the system remained available, such that no unrecognized increase in risk occurred.

- Safety Injection Pump B with Auxiliary Basement Fan Coil Unit B Out-of-Service

b. Findings

No findings of significance were identified.

1R16 Operator Work-Arounds

.1 Operator Work-Around 00-11

a. Inspection Scope

The inspectors reviewed Operator Work Around 00-11, Volume Control Tank Level Transmitter L112 Out-of-Service for Design Change Request 3075 Implementation. The inspectors reviewed applicable logic print drawings, the facility's Integrated Plant EOPs, Alarm Response Procedures, and the USAR to determine whether there was any additional impact on operator response or other mitigating systems which had not been evaluated by the operator work-around.

b. Findings

No findings of significance were identified.

.2 Operator Work-Around 00-10

a. Inspection Scope

The inspectors reviewed Operator Work-Around 00-10, Temporary Change Request 00-023 Disabled the Inadequate Core Cooling Monitoring Station (ICCMS) (Trains A and B) Outputs to Process Plant Computer (reference Section 1R23). The inspectors reviewed applicable logic print drawings, the facility's Integrated Plant EOPs, Alarm Response Procedures, and the USAR to determine whether there was any additional impact on operator response or other mitigating systems which had not been evaluated by the operator work-around.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing

a. Inspection Scope

During post-maintenance testing activities, the inspectors verified 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 also verified that the impact of the testing had been properly characterized during the pre-job briefing, the test was performed as written and all testing prerequisites were satisfied, and the test acceptance criteria were satisfied. Following completion of the test, the inspectors verified that the test equipment was removed and that the equipment was returned to a condition in which it could perform its safety function. Post-maintenance test activities were observed for the following:

- Steam Exclusion Damper Resistance Temperature Detector Calibrations

- Containment Fan Coil Unit Circuit 1A Circuit Breaker (BKR 15101) Maintenance and Testing
- Cleaning and Inspection of B Train Control Room Air Conditioning Compressor Condenser Tube
- Cleaning and Inspection of Auxiliary Basement Fan Coil Unit 1D

The following documents were reviewed:

- Surveillance Procedure SP 14-314.01 through .33, "Steam Exclusion Damper, Loop Resistance Temperature Detector Calibrations"
- General Maintenance Procedure (GMP) 240, "ELV-480V Supply, Source, and/or Tie Breaker Maintenance & Testing," Revision I
- GMP-137, "Brush/Tube Scrubber Cleaning Heat Exchanger Tubes and Inspection," Revision D
- Preventative Maintenance Procedure 17-02, "Aux Bldg Ventilation (ACA) QA-1Fan Coil Units, Inspection and Cleaning," Revision S
- Quality Programs (QPs) Procedure 8.2.18, "System Pressure Tests," Original Revision

b. Findings

One Non-Cited Violation (NCV) (No Color) was identified by the inspectors during a review of post-maintenance test activities following maintenance performed on the "B" train control room air conditioning compressor condenser.

On October 16, 2000, the inspectors identified that the licensee had not completed component retest requirements following maintenance performed on the B train control room air conditioning compressor condenser as required by Procedure GMP-137 prior to returning the affected equipment to an operable status. Specifically, Section 6.5 of Procedure GMP-137 required that Procedure QP 8.2.18 be completed for work performed on the control room air conditioning compressor condenser. Procedure QP 8.2.18 prescribed a 4-hour hold time (in accordance with the American Society of Mechanical Engineers code requirements) following pressurization of the system to nominal operating pressure. A leak check was then to be performed on all mechanical joints which had been broken during the maintenance procedure. However, the licensee instead conducted a visual leak check immediately following pressurization of the system and then returned the equipment to an operable status prior to the completion of the 4-hour hold time. The licensee performed an additional leak check 4 hours later in accordance with Procedure QP 8.2.18 and did not identify any leakage.

The Operational Quality Assurance Program Manual (Revision 13) specified that when post-maintenance testing was required, directives (such as Procedure GMP-137) shall require that the appropriate testing be performed prior to returning the equipment to service. The failure to complete the component retest requirements prior to returning the affected equipment to an operable status was determined to be a violation of the licensee's Operational Quality Assurance Program Manual, Section 8, Step 3.5.1. This violation is being treated as an NCV, consistent with Section VI.A.1 of the NRC Enforcement Policy (NCV 50-305/00-20-01, Failure to Complete Component Retest Requirements Prior to Returning Equipment to an Operable Status). The licensee

documented the issue in their corrective action program as KAP 00-003677. The licensee took immediate interim corrective actions to prevent recurrence by implementing a retest requirement sign-off sheet which was to be used for all maintenance procedures and was to ensure that all retest requirements were completed prior to returning the affected equipment to service. Additionally, the licensee formed a root cause evaluation team to address associated issues surrounding the applicability of certain retest requirements and procedural problems. The root cause evaluation team had not completed its evaluation at the end of this inspection period.

The inspectors noted that this issue was identical to previously identified NRC findings and an associated NCV for failure to complete component retest requirements prior to returning systems to service following maintenance activities (Inspection Report 2000014, Section 1R19, NCV 50-305/2000014-01). The inspectors determined that this latest NRC-identified example was of greater than minor significance because of the repeated nature of the licensee's failure to complete retest requirements prior to returning systems to service. The inspectors noted that this issue did not impact any Significance Determination Process cornerstones. However, because the issue was of greater than minor significance and was also determined to be a violation, extenuating circumstances existed which warranted documentation of this No Color finding.

## 1R22 Surveillance Testing

### a. Inspection Scope

The inspectors observed surveillance testing on risk-significant equipment and verified that the equipment was capable of performing its intended safety function and that the surveillance tests satisfied the requirements contained in technical specifications, the USAR, and licensee procedures. During the surveillance tests, the inspectors verified that the test was adequate to demonstrate operational readiness consistent with the design and licensing basis documents, and that the testing acceptance criteria were clear. The inspectors also verified 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 verified 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:

- Electrical Bus 1-5 and Bus 1-6 Loss of Voltage Relay Tests and Calibrations
- Station Battery BRA-101 and BRB-101 Quarterly Inspection and Resistance Checks
- Auxiliary Building Special Ventilation System Charcoal Filter Heat Detector Test and subsequent Auxiliary Building Special Ventilation Operability Retest

### b. Findings

No findings of significance were identified.

## 1R23 Temporary Plant Modifications

### a. Inspection Scope

On October 2, 2000, the licensee determined that during maintenance on a nonsafety-related electrical system, a power fluctuation occurred which caused a momentary loss of the facility's process computer. The momentary loss of the process computer caused an error message to be generated at the ICCMS. The ICCMS provided information to operators such as core sub-cooling margin, core exit thermocouple temperatures, and reactor vessel level indication. Additionally, the ICCMS provided input to the facility's process computer to allow automatic thermocouple mapping and automatic updating of critical function safety trees. The error message was subsequently cleared and the licensee identified that isolation circuitry, which was installed as part of the ICCMS design, should have prevented any interaction between a fault with the process computer and the ICCMS. The licensee determined that a faulty circuit card capacitor prevented the isolation circuitry from performing its function.

The licensee subsequently implemented Temporary Change Request 00-0023 to isolate the ICCMS Trains "A" and "B" from the plant process computer to ensure that any future interactions between the process computer and the ICCMS would be prevented. The inspectors attended the Plant Operating Review Committee meeting which approved the Temporary Change Request for implementation, reviewed the facility's Integrated Plant EOPs, reviewed affected electrical circuit drawings, and reviewed the facility's USAR. Additionally, the inspectors reviewed the licensee's compensatory measures to address the loss of automatic computer functions which provided aid to the operators.

### b. Findings

No findings of significance were identified.

## 4. **OTHER ACTIVITIES**

### 4OA1 Performance Indicator Verification

#### .1 Emergency Alternating Current Power System Unavailability

Cornerstone: Mitigating Systems

### a. Inspection Scope

The inspectors reviewed the licensee's data collection process and historical data through the third quarter of 2000 for the Emergency Alternating Current Power Safety System Unavailability Performance Indicator. 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 Logs and Shift Supervisor Logs
- KAP 00-003323

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems

a. Inspection Scope

The inspectors evaluated the licensee's effectiveness of identifying and resolving issues surrounding recent failures to complete required maintenance retest requirements prior to returning the associated equipment to an operable status.

b. Findings

The inspectors determined that a negative performance trend had developed in the licensee's ability to promptly take appropriate corrective actions to prevent recurrence. This determination was based on three examples in a 4 month period of returning safety-related equipment to service prior to completing all required post-maintenance retest requirements. The three examples are: (1) on June 26, 2000, the resident inspectors identified that maintenance technicians had not completed retest requirements associated with the control room post-accident system charcoal filter heat detector as required by procedure prior to the system being returned to an operable status (NCV 50-305/2000014-01); (2) on July 7, 2000, the resident inspectors identified that the licensee had not completed retest requirements associated with the zone special ventilation system charcoal filter heat detector as required prior to the system being returned to an operable status (NCV 50-305/2000014-01); and (3) on October 16, 2000, during this reporting period, the resident inspectors identified that the licensee returned the control room post-accident system air conditioning compressor heat exchanger to an operable status prior to completing all required retest requirements (NCV 50-305/00-20-01).

The causal relationship of these errors was a failure of the licensee to provide clear expectations to control room staff and a lack of timely corrective actions to ensure completion of all retest requirements prior to returning equipment to an operable status. Associated with the failure to provide adequate corrective actions in two of the examples were the inadequate use of maintenance procedures to ensure maintenance was completed prior to returning systems to service, a lack of acceptable oversight by the quality control organization to ensure that quality program procedures were completed prior to returning systems to service, and lack of guidance to operations personnel to determine the type of operational functional tests required to establish system operability. The licensee's failure to provide timely and adequate corrective actions to prevent recurrence for these examples is considered a substantive cross-cutting issue not captured in individual findings, and is a finding characterized as No Color

(FIN 50-305/00-20-02, Failure to Take Adequate Corrective Actions to Ensure Component Retest Requirements Completed According to Maintenance Procedures).

4OA6 Management Meetings

Exit Meeting Summary

On November 9, 2000, the inspectors presented the inspection results to Mr. M. Reddemann, Mr. K. Weinhauer, and other members of the Kewaunee 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.

## PARTIAL LIST OF PERSONS CONTACTED

### Nuclear Regulatory Commission - RIII

R. Lanksbury, Branch Chief, DRP, Branch 5

### Nuclear Management Company, LLC

D. Braun, Assistant Plant Manager - Operations  
D. Cole, Manager, Assessments  
K. Evers, Manager, Nuclear Support Services  
J. Fletcher, Security Director  
G. Harrington, Plant Licensing Supervisor  
K. Hoops, Plant Manager, Kewaunee Plant  
B. Koehler, Manager, Quality Programs  
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M. Reddemann, Site Vice President  
M. Reinhart, Superintendent, Radiation Protection  
J. Schweitzer, Manager, Engineering and Technical Support  
J. Stoeger, Superintendent, Operations  
T. Webb, Nuclear Licensing Director  
K. Weinbauer, Assistant Site Vice President, Kewaunee Plant

## ITEMS OPENED, CLOSED, AND DISCUSSED

### Opened

50-305/00-20-01	NCV	Failure to Complete Component Re-test Requirements Prior to Returning Equipment to an Operable Status (1R19)
50-305/00-20-02	FIN	Failure to Take Adequate Corrective Actions to Ensure Component Re-test Requirements Completed According to Maintenance Procedures (4OA2)

### Closed

50-305/00-20-01	NCV	Failure to Complete Component Re-test Requirements Prior to Returning Equipment to an Operable Status (1R19)
50-305/00-20-02	FIN	Failure to Take Adequate Corrective Actions to Ensure Component Re-test Requirements Completed According to Maintenance Procedures (4OA2)

### Discussed

None

## LIST OF ACRONYMS USED

CFR	Code of Federal Regulations
DRP	Division of Reactor Projects, Region III
EOP	Emergency Operating Procedure
FIN	Finding
FPP	Fire Plan Procedure
GMP	General Maintenance Procedure
ICCMS	Inadequate Core Cooling Monitoring Station
KAP	Kewaunee Assessment Process Document
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
PDR	Public Document Room
QP	Quality Program
USAR	Updated Safety Analysis Report