

August 30, 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 50-305/01-10(DRS)

Dear Mr. Reddemann:

On August 3, 2001, the NRC completed an inspection at your Kewaunee Nuclear Power Plant. The enclosed report documents the inspection findings, which were discussed on August 3, 2001, with you and members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel. Specifically, this inspection focused on emergency preparedness and the biennial exercise of your emergency plan.

No findings of significance were identified. Your post-exercise drill critiques did identify a number of performance weaknesses which are described in the report. It is our intent to review your corrective actions for these weaknesses during the Problem Identification and Resolution Inspection to be conducted during 2002.

In accordance with 10 CFR Part 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).

Sincerely,

***/RA by Roy Caniano Acting For/***

John A. Grobe, Director  
Division of Reactor Safety

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

Enclosure: Inspection Report 50-305/01-10(DRS)

See Attached Distribution

M. Reddemann

-2-

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

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 50-305/01-10(DRS)

Dear Mr. Reddemann:

On August 3, 2001, the NRC completed an inspection at your Kewaunee Nuclear Power Plant. The enclosed report documents the inspection findings, which were discussed on August 3, 2001, with you and members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel. Specifically, this inspection focused on emergency preparedness and the biennial exercise of your emergency plan.

No findings of significance were identified. Your post-exercise critique identified a number of performance weaknesses which are described in the report. It is our intent to review your root cause analyses and corrective actions for these weaknesses during a Problem Identification and Resolution Inspection to be conducted during 2002.

In accordance with 10 CFR Part 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).

Sincerely,

*/RA by Roy Caniano Acting For/*

John A. Grobe, Director  
Division of Reactor Safety

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

Enclosure: Inspection Report 50-305/01-10(DRS)

See Attached Distribution

DOCUMENT NAME: C:\Program Files\Adobe\Acrobat 4.0\PDF Output\kew01-10DRS.wpd

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RIII	RIII	RIII	RIII
NAME	TPloski:sd	RLanksbury	JHouse	JGrobe
DATE	08/ 18 /01	08/ 29 /01	08/ 28 /01	08/ 30 /01

**OFFICIAL RECORD COPY**

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

ADAMS Distribution:

CMC1

DFT

JGL1

RidsNrrDipmlipb

GEG

HBC

JFL

C. Ariano (hard copy)

DRPIII

DRSIII

PLB1

JRK1

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 50-305/01-10(DRS)

Licensee: Nuclear Management Company, LLC

Facility: Kewaunee Nuclear Power Plant

Location: N 490 Highway 42  
Kewaunee, WI 54216

Dates: July 30 through August 3, 2001

Inspectors: T. Ploski, Senior Emergency Preparedness Analyst  
R. Jickling, Emergency Preparedness Analyst  
Z. Dunham, Resident Inspector

Observers: M. Dziejczak, Summer Intern  
S. Bakhsh, Summer Intern

Approved by: John House, Acting Chief  
Plant Support Branch  
Division of Reactor Safety

## SUMMARY OF FINDINGS

IR 05000305-01-10(DRS), on 07/30-08/03/2001, Nuclear Management Company LLC, Kewaunee Nuclear Power Plant. Emergency Preparedness Specialist Report.

The report covers a one week baseline inspection by two regional emergency preparedness inspectors and a resident inspector. The inspection focused on the Reactor Safety, Emergency Preparedness Cornerstone during the biennial emergency preparedness exercise. No findings of significance were identified.

The significance of most findings is indicated by their color (Green, White, Yellow, Red) using 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 violations.

## Report Details

### Summary of Plant Status

The plant was at approximately 96 percent power throughout the inspection period.

#### **1. REACTOR SAFETY**

##### **Cornerstone: Emergency Preparedness**

#### 1EP1 Exercise Evaluation

##### a. Inspection Scope

The inspectors reviewed the 2001 exercise's objectives and scenario to ensure that the exercise would acceptably test major elements of the licensee's emergency plan, and to verify that the exercise's simulated problems provided an acceptable framework to support demonstration of the licensee's capability to implement its plan. The inspectors also reviewed records of a practice drill, which was conducted in June 2001, to determine whether the associated accident scenario was sufficiently different from the scenario used in the July 31 exercise.

The inspectors evaluated the licensee's exercise performance, focusing on the risk-significant activities of emergency classification, notification, and protective action decision making, as well as implementation of accident mitigation strategies in the following emergency response facilities:

- Control Room Simulator
- Technical Support Center
- Operational Support Facility
- Emergency Operations Facility

The inspectors also assessed the licensee staff's recognition of abnormal plant conditions, transfer of responsibilities between facilities, internal communications, interface with offsite officials, readiness of emergency facilities and related equipment, and overall implementation of the licensee's emergency plan.

The inspectors attended post-exercise critiques in the Simulator, Technical Support Center, and Emergency Operations Facility to evaluate the licensee's initial self-assessment of its exercise performance. The inspectors later met with the licensee's lead exercise evaluators to obtain the licensee's refined assessments of its exercise participants' performances. These self-assessments were then compared with the inspectors' independent observations and assessments. On August 3, the inspectors summarized the preliminary conclusions from the NRC's exercise inspection at the public and media briefing which was conducted by Federal Emergency Management Agency staff in Algoma, Wisconsin.

b. Findings

No findings of significance were identified. The licensee identified a number of exercise weaknesses during their exercise critiques:

- There was one incorrect emergency classification and two untimely initial notifications to State and county officials.
- The Technical Support Center staff did not effectively prioritize Operations Support Facility activities to support accident assessment and mitigation.
- The Emergency Operations Facility staff was not able to obtain information from the Technical Support Center staff regarding the radiological release pathway and release rate.
- The Emergency Operations Facility protective measures staff had to rely on offsite radiological survey measurements as the basis for their protective action recommendations.
- Licensee control room response to the scenario was unrealistic because reactor operators and their immediate supervisor were exercise controllers rather than participants.
- The exercise scenario provided a minimal challenge to the Operations Support Facility staff.

4. **OTHER ACTIVITIES**

4OA6 Meetings

Exit Meeting

The inspectors presented the inspection results to Mr. M. Reddemann and other members of licensee management and staff at the conclusion of the inspection on August 3, 2001. The licensee acknowledged the information presented. No proprietary information was identified.



## KEY POINTS OF CONTACT

### Licensee

S. Baker, Radiation Protection Manager  
W. Bartleme, EP Coordinator  
D. Braun, Administrative Supervisor  
D. Gauthier, Senior Auditor  
K. Hoops, Plant Manager  
M. Kwitek, Maintenance Manager  
B. Loften, Supply Chain Manager  
K. Peveler, Oversight Manager  
R. Pulec, Assessment Manager  
M. Reddemann, Site Vice President  
R. Repshas, Site Services Manager  
J. Riste, Licensing Leader  
T. Schmidli, Radiation Protection General Superintendent  
J. Schweitzer, Engineering Manager  
J. Stoeger, Operations Superintendent  
T. Taylor, Operations Manager  
W. Yarosz, EP Supervisor

## LIST OF ACRONYMS USED

CFR	Code of Federal Regulations
CRS	Control Room Simulator
DRS	Division of Reactor Safety
EOF	Emergency Operations Facility
EP	Emergency Preparedness
EPIP	Emergency Plan Implementing Procedure
IR	Inspection Report
KNPP	Kewaunee Nuclear Power Plant
NRC	Nuclear Regulatory Commission
OSF	Operational Support Facility
PI	Performance Indicator
RAF	Radiological Analysis Facility
RPO	Radiation Protection Office
TSC	Technical Support Center

## LIST OF DOCUMENTS REVIEWED

### 1EP1 Exercise Evaluation

	Kewaunee Nuclear Power Plant Emergency Plan 2001 Emergency Response Exercise Manual Scenario Summary of Practice Drill	Revision 24
EPIP-AD-01	Response to the Plant Emergency Siren	Revision G
EPIP-AD-02	Emergency Class Determination	Revision AA
EPIP-AD-03	KNPP Response to an Unusual Event	Revision AB
EPIP-AD-04	KNPP Response to an Alert or Higher	Revision AC
EPIP-AD-07	Initial Emergency Notifications	Revision AM
EPIP-AD-11	Emergency Radiation Controls	Revision P
EPIP-AD-18	Potassium Iodide Distribution	Revision O
EPIP-AD-19	Protective Action Guidelines	Revision P
EPIP-ENV-01	Environmental Monitoring Group Responsibilities	Revision U
EPIP-ENV-03C	Dose Projection Using RASCAL Software	Revision U
EPIP-EOF-02	EOF Activation	Revision X
EPIP-EOF-03	Corporate Action for an Unusual Event	Revision Z
EPIP-EOF-04	Corporate Action for Alert or Higher	Revision AF
EPIP-EOF-08	Continuing Emergency Notifications	Revision S
EPIP-OSF-02	OSF Operations	Revision S
EPIP-OSF-03	Work Requests During an Emergency	Revision N
EP-RET-2	Search and Rescue	Revision D
EPIP-OSF-04	In-plant Radiation Emergency Team	Revision S
EP-RET-2A	RPO-RAF Activation	Revision R
EP-RET-2D	Radiation Entry Controls and Implementation	Revision M
EPIP-SEC-03	Personnel Assembly and Accountability	Revision Y
EPIP-SEC-05	Personnel Evacuation	Revision F
EPIP-TSC-01	TSC Organization and Responsibilities	Revision O
EPIP-TSC-02	TSC Activation	Revision R