



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

August 7, 2009

Mr. David A. Heacock
President and Chief Nuclear Officer
Dominion Energy Kewaunee, Inc.
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

**SUBJECT: KEWAUNEE POWER STATION BASELINE EMERGENCY PREPAREDNESS
BIENNIAL EXERCISE INSPECTION REPORT 05000305/2009502**

Dear Mr. Heacock:

On June 26, 2009, the U. S. Nuclear Regulatory Commission (NRC) completed a Baseline Emergency Preparedness Biennial Exercise inspection at your Kewaunee Power Station. The enclosed report documents the inspection findings, which were discussed on June 26, 2009, with Mr. M. Wilson and other 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.

Based on the results of this inspection, no NRC-identified and no self-revealed findings of very low safety significance were identified.

In accordance with 10 CFR 2.390 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), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA by Bruce Palagi for/

Hironori Peterson, Chief
Operations Branch
Division of Reactor Safety

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

Enclosure: Inspection Report 05000305/2009502
w/Attachment: Supplemental Information

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Letter to David A. Heacock from Hironori Peterson dated August 7, 2009.

SUBJECT: KEWAUNEE POWER STATION BASELINE EMERGENCY PREPAREDNESS
BIENNIAL EXERCISE INSPECTION REPORT 05000305/2009502

cc w/encl: S. Scace, Site Vice President
M. Wilson, Director, Nuclear Safety and Licensing
C. Funderburk, Director, Nuclear Licensing and
Operations Support
T. Breene, Manager, Nuclear Licensing
L. Cuoco, Senior Counsel
D. Zellner, Chairman, Town of Carlton
J. Kitsembel, Public Service Commission of Wisconsin
P. Schmidt, State Liaison Officer

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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 05000305/2009502

Licensee: Dominion Energy Kewaunee, Inc.

Facility: Kewaunee Power Station

Location: Kewaunee, WI

Dates: June 22 through 26, 2009

Inspectors: Robert Jickling, Sr. Emergency Preparedness Inspector
Regina Russell, Emergency Preparedness Inspector
Carl Moore, Reactor Engineer

Approved by: Hironori Peterson, Chief
Operations Branch
Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000305/2009502; 06/22/2009 - 06/26/2009; Kewaunee Power Station; Emergency Preparedness Exercise.

This report covers a 1 week period of announced baseline inspection by three regional inspectors. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process." Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

A. NRC-Identified and Self-Revealed Findings

Cornerstone: Emergency Preparedness

No findings of significance were identified.

B. Licensee-Identified Violations

No violations of significance were identified.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

1EP1 Exercise Evaluation (71114.01)

.1 Exercise Evaluation

a. Inspection Scope

The inspectors reviewed the June 23, 2009, biennial emergency preparedness 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 other drills and exercises conducted in 2007, 2008, and 2009, to verify that those drills' scenarios were sufficiently different from the scenario used in the June 23, 2009, exercise.

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

- Control Room Simulator (CRS);
- Technical Support Center (TSC); and
- Emergency Operations Facility (EOF).

The inspectors also assessed the licensee's recognition of abnormal plant conditions, transfer of responsibilities between facilities, internal communications, interfaces 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 CRS, TSC, and EOF to evaluate the licensee's initial self-assessment of its exercise performance. The inspectors later met with the licensee's lead exercise evaluators and managers to obtain the licensee's findings and assessments of its exercise participants' performances. These self-assessments were then compared with the inspectors' independent observations and assessments to assess the licensee's ability to adequately critique its exercise performance. Documents reviewed are listed in the Attachment to this report.

This exercise evaluation inspection constituted one sample as defined in Inspection Procedure (IP) 71114.01-05.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification (71151)

.1 Drill/Exercise Performance

a. Inspection Scope

The inspectors sampled licensee submittals for the Drill/Exercise Performance PI for the period from the second quarter 2008 through first quarter 2009. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the Nuclear Energy Institute (NEI) Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 5, were used. The inspectors reviewed the licensee's records associated with the performance indicator to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI; assessments of PI opportunities during pre-designated control room simulator training sessions, performance during the 2007 exercise, and performance during other drills. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one drill/exercise performance sample as defined in IP 71151-05.

b. Findings

No findings of significance were identified.

.2 Emergency Response Organization Drill Participation

a. Inspection Scope

The inspectors sampled licensee submittals for the Emergency Response Organization (ERO) Drill Participation PI for the period from the second quarter 2008 through first quarter 2009. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 5, were used. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI; performance during the 2008 and 2009 exercises and drills; and revisions of the roster of personnel assigned to key emergency response organization positions. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one ERO drill participation sample as defined in IP 71151-05.

b. Findings

No findings of significance were identified.

.3 Alert and Notification System

a. Inspection Scope

The inspectors sampled licensee submittals for the Alert and Notification System (ANS) PI for the period from the second quarter 2008 through first quarter 2009. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 5, were used. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI and results of periodic scheduled ANS operability tests. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one alert and notification system sample as defined in IP 71151-05.

b. Findings

No findings of significance were identified.

4OA5 Other Activities

.1 (Closed) NRC Temporary Instruction (TI) 2515/175 "Emergency Response Organization, Drill/Exercise Performance Indicator, Program Review"

The inspector performed TI 2515/175, ensured the completeness of the TI's Attachment 1, and then forwarded the data to NRC, Headquarters.

4OA6 Management Meetings

.1 Exit Meeting Summary

On June 26, 2009, the inspectors presented the inspection results to Mr. M. Wilson, and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors confirmed that none of the potential report input discussed was considered proprietary.

.2 Public and Media Briefing

On June 26, 2009, the inspector summarized the NRC's preliminary exercise inspection conclusions at a public and media briefing hosted by Department of Homeland Security/Federal Emergency Management Agency Region V Field Office staff in Algoma, Wisconsin.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

M. Wilson, Director, Safety and Licensing
T. Breene, Licensing Manager
A. Christensen, Senior Emergency Preparedness Manager
J. Egdorf, Emergency Preparedness Supervisor
T. Evans, Training Manager
J. Gadzala, Licensing
V. Higaki, Emergency Preparedness
D. Lawrence, Operations Manager
P. Serra, Emergency Preparedness Fleet Manager
D. Shannon, Radiation Protection Supervisor - Operations
S. Wood, Emergency Preparedness Manager

Nuclear Regulatory Commission

H. Peterson, Chief Operations Branch
S. Burton, Senior Resident Inspector

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened, Closed and Discussed

None

LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety, but rather, that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

1EP1 Exercise Evaluation

Kewaunee Power Station Emergency Plan; Revision 32

EPIP-TSC-01; Technical Support Center Organization and Responsibilities; Revision W

EPIP-TSC-04; Kewaunee Power Station Core Damage Assessment; Revision 15

EPIP-RET-02; Kewaunee Power Station In-Plant Radiation Emergency Team;
Revision 28

EPIP-RET-02B; Kewaunee Power Station Gaseous Effluent Release Path,
Radioactivity, and Release Rate Determination; Revision W

EPIP-ENV-03C; Kewaunee Power Station Dose Projection Using RASCAL Software;
Revision 27

EPIP-AD-07; Kewaunee Power Station Emergency Notifications; Revision 55

Kewaunee Power Station June 23, 2009, Graded Exercise Manual

Kewaunee Drill and Exercise Scenario Timelines; December 4, 2007 through
June 23, 2009

Kewaunee Corrective Action Program Issues Identified during Drills and Exercises; June
2008 through June 2009

Kewaunee Power Station Management Critique Reports; December 2007 through
May 2009

Kewaunee Exercise Core Damage Assessment Records; June 23, 2009

CR339543; Exercise - OSF Damage Control Teams Documentation Not
Completed per Procedure; dated June 26, 2009

CR339458; Exercise - Site Area Emergency DEP Failure; dated June 25, 2009

CR339321; Exercise - Problems Identified with the Scenario; dated June 24, 2009

CR339315; Exercise - Observed Problems in the JIC; dated June 24, 2009

CR339306; Exercise - No Fuel Damage Was Reported While Radiation Monitor R-9 Was Elevated; dated June 24, 2009

CR339302; Exercise - Problems with Facility Habitability and Contamination Control; dated June 24, 2009

CR339507; Exercise - Evaluated EPIP-SEC-05 for Alternate Transportation of Non-Essential Personnel during Site Evacuation; dated June 25, 2009

CR339141; Exercise - Problems Observed with Accountability; dated June 23, 2009

40A1 Performance Indicator Verification

Memorandum to S. Wood; 2008 Emergency Drill and Exercise Schedule; March 10, 2007

DNAP-2605; Drill and Exercise Performance Indicator-NEP; June 2008 through March 2009

Monthly ERO Participation Records; June 2008 through March 2009

Emergency Preparedness Attendance Reports; June 2008 through March 2009

Kewaunee Participation NEI 99-02 Records; June 2008 through March 2009

Alert and Notification System Monthly Summaries; April 2008 through March 2009

Radio Transmitter Unit Status Reports; April 2008 through March 2009

LIST OF ACRONYMS USED

ADAMS	Agency-wide Documents Access and Management System
ANS	Alert and Notification System
CFR	Code of Federal Regulations
CR	Condition Report
CRS	Control Room Simulator
EOF	Emergency Operations Facility
EP	Emergency Preparedness
ERO	Emergency Response Organization
IMC	Inspection Manual Chapter
IP	Inspection Procedure
KI	Potassium Iodide
NEI	Nuclear Energy Institute
NRC	U. S. Nuclear Regulatory Commission
OSF	Operations Support Facility
PAR	Protective Action Recommendation
PARS	Publicly Available Records
PI	Performance Indicator
SDP	Significance Determination Process
TI	Temporary Instruction
TSC	Technical Support Center