



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

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

January 23, 2014

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  
EMERGENCY PREPAREDNESS BIENNIAL EXERCISE INSPECTION  
REPORT 05000305/2013010**

Dear Mr. Heacock:

On December 16, 2013, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your permanently shut-down Kewaunee Power Station. The enclosed report documents the results of this inspection, which were discussed on December 16, 2013, with Mr. B. Harris 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. No findings were identified during this inspection.

Your staff adequately demonstrated reasonable assurance of its ability to implement its emergency plan to adequately protect the public health and safety in the event of a radiological emergency during the conduct of its biennial exercise.

The NRC recognizes that your staff had, and will continue to change the Kewaunee emergency plan. Our review of these changes will be completed in accordance with our process and the results of these reviews are not included in this report but will be provided under separate correspondence.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its Enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS)

D. Heacock

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component of NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

*/RA/*

Richard A. Skokowski, Chief  
Plant Support Branch  
Division of Reactor Safety

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

Enclosure:  
Inspection Report 05000305/2013010;  
w/Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 0500305/2013010

Licensee: Dominion Energy Kewaunee, Inc.

Facility: Kewaunee Power Station

Location: Kewaunee, WI

Dates: October 28, 2013, through December 16, 2013

Inspectors: R. Jickling, Senior Emergency Preparedness Inspector  
J. Beavers, Emergency Preparedness Inspector  
R. Krsek, Senior Resident Inspector  
R. Edwards, Resident Inspector

Approved by: R. Skokowski, Chief  
Plant Support Branch  
Division of Reactor Safety

Enclosure

## **SUMMARY OF FINDINGS**

IR 05000305/2013010; 10/28/2013 – 12/16/2013; Kewaunee Power Station; Emergency Preparedness Biennial Exercise Inspection.

This report covers a seven-week period of announced baseline inspection by two regional inspectors and two resident inspectors. On May 14, 2013, Kewaunee certified the permanent removal of fuel from the reactor vessel (ADAMS Accession No. ML13135A209). On May 31, 2013, the NRC notified Kewaunee that the Operating Reactor Assessment Program had ceased and that implementation of the Decommissioning Power Reactor Inspection Program would begin on June 1, 2013, (ADAMS Accession No. ML13151A375).

Currently, the Kewaunee Power Station is a permanently shut-down and defueled power reactor facility that was maintained in a Safe Storage of Spent Fuel condition with spent fuel in wet storage.

### **Emergency Preparedness Exercise Evaluation**

Your staff adequately demonstrated reasonable assurance of its ability to implement the emergency plan to adequately protect the public health and safety in the event of a radiological emergency during the conduct of its biennial exercise.

The NRC recognizes that your staff had, and will continue to change the Kewaunee Power Station emergency plan. Our review of these changes will be completed in accordance with our process and the results of these reviews are not included in this report but will be provided under separate correspondence.

## REPORT DETAILS

### 1. REACTOR SAFETY

#### Cornerstone: Emergency Preparedness

#### 1EP1 Exercise Evaluation (71114.01)

##### .1 Exercise Evaluation

##### a. Inspection Scope

The inspectors reviewed the October 30, 2013, Biennial Emergency Preparedness Exercise objectives and scenario to ensure 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 2011, 2012, and 2013 to verify that those drills' scenarios were sufficiently different from the scenario used in the October 30, 2013, 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);
- Operational Support Facility (OSF);
- 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, OSF, 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.

##### b. Findings

No findings were identified.

c. Conclusions

Your staff adequately demonstrated reasonable assurance of its ability to implement the emergency plan to adequately protect the public health and safety in the event of a radiological emergency during the conduct of its biennial exercise.

The NRC recognizes that your staff had, and will continue to change the Kewaunee Power Station emergency plan. Our review of these changes will be completed in accordance with our process and the results of these reviews are not included in this report but will be provided under separate correspondence.

**4. OTHER ACTIVITIES**

4OA6 Management Meetings

.1 Exit Meeting Summary

On October 31, 2013, the inspectors presented the biennial exercise inspection observations and comments to Mr. S. Jordan and other members of the licensee staff.

On December 16, 2013, the inspectors completed the inspection and presented the results to the licensee's Emergency Preparedness Manager, Mr. B. Harris, via telephone on December 16, 2013. The licensee acknowledged the issues presented.

The inspectors confirmed that none of the potential report input discussed was considered proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### Licensee

S. Jordan, Site Vice President  
T. Olsen, Assistant Plant Manager  
M. Aulik, Engineering Manager  
A. Burish, Emergency Preparedness  
A. Christensen, Emergency Preparedness  
J. Egdorf, Emergency Preparedness Supervisor  
B. Harris, Emergency Preparedness Manager  
J. Helbing, Maintenance Manager  
M. Kanz, Local Affairs Manager  
L. Leanna, Plant Support Manager  
B. McMahon, Operations Manager  
B. Presl, Security Manager  
R. Repshas, Licensing Manager  
J. Stafford, Safety and Licensing Manager

#### Nuclear Regulatory Commission

R. Krsek, Senior Resident Inspector  
R. Edwards, Resident Inspector

### **LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED**

#### Opened, Closed, and Discussed

None

## PARTIAL LIST OF DOCUMENTS REVIEWED

The following is a partial 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.

### Exercise Evaluation

- Kewaunee Power Station October 30, 2013, Graded Exercise; August 16, 2013
- Kewaunee Power Station Emergency Plan; Revision 38
- EP-KW0EIP-AD-019; Determining Protective Action Recommendations; Revision 1
- Two Years of Drill and Exercise Corrective Action Program Issues; October 2011 -October 2013
- Two Years of Drill and Exercise Scenario Timelines; October 2011 – October 2013
- CR 531194; Exercise-JIC General Emergency Media Briefing Was Delayed; October 31, 2013
- CR 531176; Exercise-Control Room Simulation of Drill Participants May Prevent Demonstration of Emergency Response Activities; October 31, 2013
- CR 531162; Exercise-EOF Controller Injected During Dose Assessment; October 31, 2013
- CR 531147; Exercise-Virginia Call Center Incorrectly Stated Unusual Event Vice Alert to Mock Media Question; October 31, 2013
- CR 531139; Exercise-Delayed Manning of the NRC HPN Line; October 31, 2013
- CR 531100; Exercise-TSC Did Not Always Provide Effective Communications; October 31, 2013
- CR 531063; Exercise-Initial Dose Assessment Was Incorrect; October 30, 2013
- CR 531040; Exercise-ENS Was Initially Unavailable Due to Handset Off-Hook; October 30, 2013
- CR 531022; Exercise-TSC Was Not Able to Activate ERDS; October 30, 2013



## LIST OF ACRONYMS USED

ADAMS	Agencywide Documents Access and Management System
CFR	Code of Federal Regulations
CR	Condition Report
CRS	Control Room Simulator
DRS	Division of Reactor Safety
ENS	Emergency Notification System
EOF	Emergency Operations Facility
EP	Emergency Preparedness
ERDS	Emergency Response Data System
HPN	Health Physics Network
IR	Inspection Report
JIC	Joint Information Center
NRC	U.S. Nuclear Regulatory Commission
OSF	Operational Support Facility
PARS	Publicly Available Records System
TSC	Technical Support Center

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component of NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

*/RA/*

Richard A. Skokowski, Chief  
Plant Support Branch  
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