

December 28, 2007

Mr. David A. Christian  
President and Chief Nuclear Officer  
Virginia Electric and Power Company  
Innsbrook Technical Center  
5000 Dominion Boulevard  
Glen Allen, VA 23060-6711

SUBJECT: KEWAUNEE POWER STATION  
BIENNIAL EMERGENCY PREPAREDNESS EXERCISE BASELINE  
INSPECTION 05000305/2007502(DRS)

Dear Mr. Christian:

On December 7, 2007, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Kewaunee Power Station. The enclosed report documents the inspection findings, which were discussed on December 7, 2007, with Mr. S. Scace 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. Specifically, this inspection focused on emergency preparedness, including your staff's determinations of performance indicators for the Emergency Preparedness Cornerstone.

On the basis of the results of this inspection, no findings of 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 System (PARS) component of NRC's Agencywide

D. Christian

-2-

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 by J. Maynen acting for/***

Eric Duncan, Chief  
Plant Support Branch  
Division of Reactor Safety

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

Enclosure: Biennial Emergency Preparedness Exercise Baseline  
Inspection Report 05000305/2007502(DRS);  
w/Attachment: Supplemental Information

cc w/encl: S. Scace, Site Vice President  
T. Webb, Director, Nuclear Safety and  
Licensing  
C. Funderburk, Director, Nuclear Licensing  
and Operations Support  
T. Breene, Manager, Nuclear Licensing  
L. Cuoco, Esq., Senior Counsel  
D. Zellner, Chairman, Town of Carlton  
J. Kitsembel, Public Service Commission of Wisconsin  
State Liaison Officer, State of Wisconsin  
W. King, FEMA, Region V

D. Christian

-2-

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 by J. Maynen acting for/***

Eric Duncan, Chief  
Plant Support Branch  
Division of Reactor Safety

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

Enclosure: Biennial Emergency Preparedness Exercise Baseline  
Inspection Report 05000305/2007502(DRS);  
w/Attachment: Supplemental Information

cc w/encl: S. Scace, Site Vice President  
T. Webb, Director, Nuclear Safety and  
Licensing  
C. Funderburk, Director, Nuclear Licensing  
and Operations Support  
T. Breene, Manager, Nuclear Licensing  
L. Cuoco, Esq., Senior Counsel  
D. Zellner, Chairman, Town of Carlton  
J. Kitsembel, Public Service Commission of Wisconsin  
State Liaison Officer, State of Wisconsin  
W. King, FEMA, Region V

**DISTRIBUTION**

See next page

DOCUMENT NAME: KEW 2007 502 DRS Emer Prep Exercise.doc

Publicly Available       Non-Publicly Available       Sensitive       Non-Sensitive

To receive a copy of this document, indicate in the concurrence box "C" = Copy without attach/encl "E" = Copy with attach/encl "N" = No copy

OFFICE	RIII		RIII		RIII		RIII	
NAME	RJickling:co		JCameron		DFunk JM for		EDuncan JM for	
DATE	12/28/07		12/28/07		12/28/07		12/ /07	

**OFFICIAL RECORD COPY**

Letter to David A. Christian from Eric Duncan dated December 28, 2007

SUBJECT: KEWAUNEE POWER STATION  
BIENNIAL EMERGENCY PREPAREDNESS EXERCISE BASELINE  
INSPECTION 05000305/2007502(DRS)

DISTRIBUTION:

DXC1

TEB

MHC

RidsNrrDirslrib

MAS

KGO

JKH3

SXB3

CAA1

LSL (electronic IR's only)

C. Pederson, DRP (hard copy - IR's only)

DRPIII

DRSIII

PLB1

TXN

[ROPreports@nrc.gov](mailto:ROPreports@nrc.gov) (inspection reports, final SDP letters, any letter with an IR number)

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 05000305/2007502(DRS)

Licensee: Dominion Energy Kewaunee, Inc.

Facility: Kewaunee Power Station

Location: Kewaunee, WI 54216

Dates: December 3 through December 7, 2007

Inspectors: R. Jickling, Senior Emergency Preparedness Analyst  
J. Cassidy, Health Physicist  
P. Higgins, Resident Inspector

Approved by: E. Duncan, Chief  
Plant Support Branch  
Division of Reactor Safety

Enclosure

## SUMMARY OF FINDINGS

IR 05000305/2007502; 12/03/2007 - 12/07/2007; Kewaunee Power Station, Biennial Emergency Preparedness Exercise Baseline Inspection.

The report covers a 1 week baseline inspection by one regional emergency preparedness inspector, a resident inspector, and a health physics inspector. The inspection focused on the Emergency Preparedness Cornerstone in the Reactor Safety strategic performance area during the biennial emergency preparedness exercise. This inspection also included a review of records related to the three emergency preparedness performance indicators for the period July 1, 2006 through September 30, 2007.

The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process."

**A. Inspector-Identified and Self-Revealed Findings**

None.

**B. Licensee-Identified Violations**

None.

## REPORT DETAILS

### 1. REACTOR SAFETY

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

#### 1EP1 Exercise Evaluation (71114.01)

##### a. Inspection Scope

The inspectors reviewed the December 4, 2007, 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 2005, 2006, and 2007, to verify that the drill scenarios were sufficiently different from the scenario used in the December 4, 2007 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 (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.

These activities completed one of one inspection sample.

##### b. Findings

No findings of significance were identified.

#### 4. OTHER ACTIVITIES

##### 4OA1 Performance Indicator (PI) Verification (71151)

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

##### .1 Reactor Safety Strategic Area

###### a. Inspection Scope

The inspectors reviewed the licensee's records associated with each of the three emergency preparedness PIs to verify that the licensee's program was implemented consistent with the industry guidelines in the applicable revision of Nuclear Energy Institute Publication No. 99-02, "Regulatory Assessment Performance Indicator Guideline," and related licensee procedures. Specifically, licensee records related to the performance of the Alert and Notification System (ANS), key Emergency Response Organization (ERO) members' drill participation, and Drill and Exercise Performance (DEP) were reviewed to verify the accuracy and completeness of the PI data submitted to NRC for the period from July 1, 2006 through September 30, 2007. The following three PIs were reviewed:

- ANS;
- ERO Drill Participation; and
- DEP.

These activities completed three of three PI samples.

###### b. Findings

No findings of significance were identified.

##### 4OA6 Meetings

##### .1 Exit Meeting

On December 7, 2007, at the conclusion of the on-site inspection activities, the inspectors presented preliminary inspection results to Mr. S. Scace and other members of licensee management. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

ATTACHMENT: SUPPLEMENTAL INFORMATION

**SUPPLEMENTAL INFORMATION**

**KEY POINTS OF CONTACT**

Licensee

S. Scace, Vice President Kewaunee Power Station  
M. Crist, Plant Manager  
L. Armstrong, Engineering Director  
A. Burish, Emergency Preparedness Process Assistant  
K. Davison, Recovery Director  
J. Egdorf, Emergency Preparedness Supervisor  
J. Peterson, Emergency Preparedness Specialist  
W. Renz, Dominion Emergency Preparedness Director  
J. Ruttar, Nuclear Operations Manager  
P. Serra, Dominion Emergency Preparedness Manager  
T. Webb, Safety and Licensing Director  
T. Wiltman, Emergency Preparedness Specialist  
S. Wood, Emergency Preparedness Manager

Nuclear Regulatory Commission

P. Higgins, 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 of 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, 2005 Biennial Evaluated Exercise Report; dated November 1, 2005

Kewaunee Power Station, 2006 Exercise Report; dated November 8, 2006

Kewaunee Power Station Functional October 2007 Exercise (KOCT07FE) Management Critique

Kewaunee Power Station 2007 Exercises; dated June 18, 2007 and September 25, 2007

Kewaunee 2007 Emergency Preparedness Security Event Drill; dated March 5, 2007

CAP 042608; Event Classification Time Preceded Announcement during Emergency Exercise; dated March 7, 2007

CAP 029976; During November 1, 2005 Exercise the TSC Fax Machine Did Not Work Properly; dated November 11, 2005

CAP 026285; The Emergency Director "Back-Timed the Site Area Emergency Notification Form; dated March 17, 2005

### 4OA1 Performance Indicator Verification

Memorandum from J. Egdorf; July Drill and Exercise Performance Opportunities; dated July 06, 2007

DNAP-2605; Drill/Exercise Performance Indicator - NEP; dated September 5, 2006 through October 2, 2007

Remote Transmitting Units Status Reports; dated January 3, 2007 through September 19, 2007

Drill and Exercise Performance Indicator Performance Data and Records; dated July 2006 through September 2007

Emergency Telephone Directory 01A; ERO Tracker Monthly Report; dated March through September 2007

## LIST OF ACRONYMS USED

ADAMS	Agencywide Documents Access and Management System
ANS	Alert and Notification System
CAP	Corrective Action Program
CFR	Code of Federal Regulations
CRS	Control Room Simulator
DEP	Drill and Exercise Performance
DRS	Division of Reactor Safety
EOF	Emergency Operations Facility
ERO	Emergency Response Organization
NRC	U.S. Nuclear Regulatory Commission
PARS	Publicly Available Records
PI	Performance Indicator
TSC	Technical Support Center