



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

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

March 4, 2011

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: ANNUAL ASSESSMENT LETTER FOR KEWAUNEE POWER STATION  
(05000305/2011001)

Dear Mr. Heacock:

On February 17, 2011, the NRC staff completed its end-of-cycle performance review of Kewaunee Power Station. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from January 1 through December 31, 2010. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. This performance review and enclosed inspection plan do not include security information. A separate letter will include the NRC's assessment of your performance in the Security Cornerstone and its security-related inspection plan.

The NRC determined that overall Kewaunee Power Station operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined the performance during the most recent quarter was within the Licensee Response column of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (i.e., green) safety significance, and all PIs indicated that your performance was within the nominal, expected range (i.e., green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

The enclosed inspection plan lists the inspections scheduled through June 30, 2012. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections in the last nine months of the inspection plan are tentative and may be revised at the mid-cycle review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes.

In addition to the ROP baseline, inspections are planned for Temporary Inspection (TI) 2515/179, "Verification of Licensee Responses to NRC Requirement for Inventories of Materials Tracked in NSTS," TI 2515/177, "Gas Accumulation in ECCS, DHR, and CSS," and Independent Spent Fuel Storage Installation (ISFSI) inspection 60855.1, "Operation of an ISFSI at Operating Plants."

D. Heacock

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In accordance with 10 CFR 2.390 of the NRC's Rules of Practice, a copy of this letter will be made 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 Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact me at (630) 829-9618 with any questions you have regarding this letter.

Sincerely,

*/RA/*

Michael A. Kunowski, Chief  
Branch 5  
Division of Reactor Projects

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

Enclosure: Kewaunee Power Station Inspection/Activity Plan

cc w/encl: Distribution via ListServe

D. Heacock

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Letter to D. Heacock from M. Kunowski dated March 4, 2011

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(05000305/2011001)

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**Kewaunee**  
**Inspection / Activity Plan**  
**03/01/2011 - 06/30/2012**

Planned Dates		Inspection Activity	Title	No. of Staff on Site
Start	End			
		<b>BI ENG - INSERVICE INSPECTION</b>		<b>2</b>
02/28/2011	03/18/2011	IP 7111108P	Inservice Inspection Activities - PWR	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
02/28/2011	03/04/2011	IP 2515/179	Verification of Licensee Responses to NRC Requirement for Inventories of Materials Tracked in NSTS	
02/28/2011	03/04/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
02/28/2011	03/04/2011	IP 71124.02	Occupational ALARA Planning and Controls	
		<b>ISFSI - ISFSI INSPECTION - SCHEDULE DEPENDENT</b>		<b>2</b>
05/01/2011	06/30/2011	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
04/11/2011	04/15/2011	IP 71124.05	Radiation Monitoring Instrumentation	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
06/06/2011	06/10/2011	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
06/06/2011	06/10/2011	IP 71151-BI01	Reactor Coolant System Activity	
06/06/2011	06/10/2011	IP 71151-OR01	Occupational Exposure Control Effectiveness	
06/06/2011	06/10/2011	IP 71151-PR01	RETS/ODCM Radiological Effluent	
		<b>BI ENG - TRIENNIAL FIRE PROTECTION INSPECTION</b>		<b>3</b>
09/06/2011	10/07/2011	IP 7111105T	Fire Protection [Triennial]	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
09/12/2011	09/16/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
09/12/2011	09/16/2011	IP 71124.02	Occupational ALARA Planning and Controls	
09/12/2011	09/16/2011	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
09/12/2011	09/16/2011	IP 71124.04	Occupational Dose Assessment	
		<b>BI EP - EP EXERCISE INSPECTION / PI VERIFICATION</b>		<b>3</b>
10/03/2011	10/07/2011	IP 7111401	Exercise Evaluation	
10/03/2011	10/07/2011	IP 71151	Performance Indicator Verification	
		<b>STRIKE - STRIKE CONTINGENCY - OPS/MAINT/RP</b>		<b>2</b>
10/01/2011	11/11/2011	IP 92709	Licensee Strike Contingency Plans	
		<b>TI - TEMPORARY INSTRUCTION 2515/177</b>		<b>2</b>
11/14/2011	12/02/2011	IP 2515/177	Managing Gas Accumulation In Emergency Core Cooling, Decay Heat Removal & Containment Spray System	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
12/05/2011	12/09/2011	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
		<b>BI ENG - COMPONENT DESIGN BASIS INSPECTION</b>		<b>6</b>
01/30/2012	03/02/2012	IP 7111121	Component Design Bases Inspection	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
02/06/2012	02/10/2012	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	

**Kewaunee**  
**Inspection / Activity Plan**  
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Start	End			
		<b>BI RP</b>	<b>- RADIATION PROTECTION BASELINE INSPECTION</b>	<b>1</b>
02/06/2012	02/10/2012	IP 71151	Performance Indicator Verification	
		<b>RENEWAL</b>	<b>- LICENSE RENEWAL INSPECTION 71003-PHASE 1</b>	<b>2</b>
04/07/2012	05/07/2012	IP 71003	Post-Approval Site Inspection for License Renewal	
		<b>BI ENG</b>	<b>- INSERVICE INSPECTION</b>	<b>1</b>
04/07/2012	05/07/2012	IP 7111108P	Inservice Inspection Activities - PWR	
		<b>BI RP</b>	<b>- RADIATION PROTECTION BASELINE INSPECTION</b>	<b>1</b>
04/30/2012	05/04/2012	IP 71124.05	Radiation Monitoring Instrumentation	
		<b>BI ENG</b>	<b>- TRIENNIAL HEAT SINK INSPECTION</b>	<b>2</b>
05/14/2012	05/18/2012	IP 7111107T	Heat Sink Performance	