

September 28, 2006

Mr. David A. Christian  
Senior Vice President and  
Chief Nuclear Officer  
Innsbrook Technical Center  
5000 Dominion Boulevard  
Glen Allen, VA 23060-6711

SUBJECT: KEWAUNEE POWER STATION - STATUS OF NRC REVIEW OF RESPONSE  
TO GENERIC LETTER 2003-01, "CONTROL ROOM HABITABILITY"  
(TAC NO. MB9815)

Dear Mr. Christian:

The U.S. Nuclear Regulatory Commission (NRC) staff acknowledges the receipt of your response to Generic Letter (GL) 2003-01 "Control Room Habitability" which was provided in letters dated August 7, 2003 (Agencywide Documents Access and Management System [ADAMS] Accession No. ML032260513); November 25, 2003 (ADAMS Accession No. ML033300162); March 15, 2005 (ADAMS Accession No. ML050810283); and, April 1, 2005 (ADAMS Accession No. ML050970303). The purpose of this letter is to provide the status of the NRC staff review of your response to GL 2003-01, and describe the actions that are necessary to complete your response to GL 2003-01.

The GL requested that you confirm that your control room meets the design bases (e.g. General Design Criteria [GDC] 1, 3, 4, 5, & 19, draft GDC, or principal design criteria), with special attention to: (1) determination of the most limiting unfiltered and/or filtered inleakage into the control room and comparison to values used in your design bases for meeting control room operator dose limits from accidents (GL 2003-01, Item 1a); (2) determination that the most limiting unfiltered inleakage is incorporated into your hazardous chemical assessments (GL 2003-01, Item 1b); and (3) determination that reactor control capability is maintained in the control room or at the alternate shutdown location in the event of smoke (GL 2003-01, Item 1b). The GL further requested information on any compensatory measures in use to demonstrate control room habitability, and plans to retire them (GL 2003-01, Item 2).

In your response to GL 2003-01, you reported the results of the American Society for Testing Materials, Standard E741 (Test Method for Determining Air Change in a Single Zone by Means of a Tracer Gas Dilution) tracer gas tests for the Kewaunee Power Station control room which operates in recirculation mode for accident mitigation. You determined that the maximum tested value for inleakage into the Control Room Envelope (CRE) 447 (+/- 51) cubic feet per minute (cfm) which exceeds the value of 200 cfm assumed in the design basis radiological analyses for Control Room Habitability (CRH). In addition, you reported that there are three compensatory measures currently in place to demonstrate CRH due to unfiltered inleakage exceeding the value in your design basis radiological analysis and committed to retire these compensatory measures upon submittal and subsequent approval of an application for license amendment to revise the design basis analysis.

Your response to GL 2003-01 further indicated that based on the conclusions of your hazardous chemical assessment, the maximum tested inleakage into the CRE will not affect the ability to safely shutdown the plant. You also indicated that reactor control capability is maintained from either the control room or the dedicated shutdown panel in the event of smoke.

The GL further requested that you assess your Technical Specifications (TS) to determine if they verify the integrity of the CRE, including ongoing verification of the inleakage assumed in the design basis analysis for CRH, in light of the demonstrated inadequacy of a delta P measurement to provide such verification (GL 2003-01, Item 1c). As permitted by the GL, you provided a schedule for revising the surveillance requirement in the TS to reference an acceptable surveillance methodology. In your April 1, 2005, response, you stated that you would submit an application for license amendment to propose changes to the TS based upon TSTF-448, adjusted, as needed, to account for plant specific CRE design and licensing basis. You committed to submit the proposed TS change within 180 days following NRC staff approval of TSTF-448.

The information you provided also supported the fact that you meet the intent of the GDC for CRH.

Your commitment to submit a license amendment request (LAR) based on TSTF-448 (within 180 days following our formal review and approval), is acceptable for purposes of closing out your response to GL 2003-01. The staff will monitor submission of the LAR and interact with you as necessary during the amendment process.

If you have any questions regarding this correspondence, please contact me at 301-415-1439.

Sincerely,

*/RA/*

David H. Jaffe, Senior Project Manager  
Plant Licensing Branch III-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-305

cc: See next page

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David H. Jaffe, Senior Project Manager  
Plant Licensing Branch III-1  
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OFFICE	LPL3-1/PM	LPL3-1/LA	ACVB/BC	PGCB/BC	LPL3-1/BC (A)
NAME	DJaffe:ca	THarris	RDennig	CJackson	MMurphy
DATE	09/ /06	09/ /06	09/13 /06	09/18/06	09/28/06

Kewaunee Power Station

cc:

Resident Inspectors Office  
U.S. Nuclear Regulatory Commission  
N490 Hwy 42  
Kewaunee, WI 54216-9510

Regional Administrator, Region III  
U.S. Nuclear Regulatory Commission  
Suite 210  
2443 Warrenville Road  
Lisle, IL 60532-4351

Ms. Leslie N. Hartz  
Dominion Energy Kewaunee, Inc.  
Kewaunee Power Station  
N 490 Highway 42  
Kewaunee, WI 54216

Mr. Chris L. Funderburk  
Director, Nuclear Licensing and  
Operations Support  
Innsbrook Technical Center  
5000 Dominion Boulevard  
Glen Allen, VA 23060-6711

Mr. Thomas L. Breene  
Dominon Energy Kewaunee, Inc.  
Kewaunee Power Station  
N490 Highway 42  
Kewaunee, WI 54216

Ms. Lillian M. Cuoco, Esq.  
Senior Counsel  
Dominion Resources Services, Inc.  
Millstone Power Station  
Building 475, 5th Floor  
Rope Ferry Road  
Waterford, CT 06385