

July 12, 2012

ATTN: Document Control Desk  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Serial No. 12-423  
LIC/JG/R0  
Docket No.: 50-305  
License No.: DPR-43

**DOMINION ENERGY KEWAUNEE, INC.**  
**KEWAUNEE POWER STATION**  
**INSERVICE INSPECTION PROGRAM FOURTH TEN-YEAR INTERVAL**  
**LIMITATION TO EXAMINATION RELIEF REQUEST NO. RR-G-5**  
**SUPPLEMENT AND RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION**

By application dated September 28, 2011 (Reference 1), Dominion Energy Kewaunee, Inc. (DEK), requested approval, pursuant to the provisions of 10 CFR 50.55a(g)(5)(iii), of relief request RR-G-5 for the Fourth Ten-year Interval of the Inservice Inspection (ISI) Program for Kewaunee Power Station (KPS). That submittal requested relief from inspecting those areas that either could not be examined in accordance with American Society of Mechanical Engineers (ASME) Section XI Code requirements or could not be examined without significant modifications to the plant. The initial submittal was supplemented on May 9, 2012 (Reference 2).

Subsequently, the Nuclear Regulatory Commission (NRC) staff transmitted a request for additional information (RAI) regarding the relief request (Reference 3). The RAI questions and associated DEK responses are provided in Attachment 1 to this letter.

The NRC staff also noted that the supplemental submittal (Reference 2), which discussed two Category B-J, Item 9.31, pipe branch connection welds (RC-W3BC and RC-W34BC), contained a note stating "RC-W3BC and RC-W34BC - 50% Limitation Relief Request is expected to be submitted at the end of the 3<sup>rd</sup> Period examinations." Note that RC-W34BC is a substitute for RC-W22BC. Because these welds will be the subject of a future relief request, DEK is removing them from the current submittal.

Specifically, DEK hereby revises Reference 1 by requesting withdrawal of the following two relief requests:

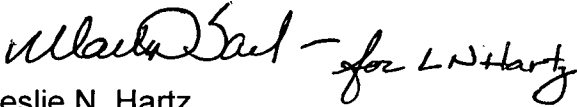
- RR-G-5-8: 8" Reactor Coolant Pipe Branch Connection Weld RC-W3BC
- RR-G-5-9: 6" Reactor Coolant Pipe Branch Connection Weld RC-W22BC

No further consideration should be afforded to the two specific relief requests listed above.

A047  
LRR

If you have questions or require additional information, please feel free to contact Mr. Jack Gadzala at 920-388-8604.

Very truly yours,

A handwritten signature in black ink, appearing to read "Leslie N. Hartz" with a stylized flourish at the end.

Leslie N. Hartz  
Vice President – Nuclear Support Services

Attachment:

1. Response to Request for Additional Information, Relief Request No. RR-G-5

References:

1. Letter from J. Alan Price (DEK) to Document Control Desk (NRC), "Inservice Inspection Program Fourth Ten-Year Interval Limitation to Examination Relief Request No. RR-G-5," dated September 28, 2011.
2. Letter from J. Alan Price (DEK) to Document Control Desk (NRC), "Inservice Inspection Program Fourth Ten-Year Interval Limitation to Examination Relief Request No. RR-G-5 Supplement and Response to Request for Additional Information," dated May 9, 2012.
3. Email from Karl D. Feintuch (NRC) to Jack Gadzala (DEK) and Craig Sly (DEK), "ME7378 - Kewaunee - Relief Req. RR-G-5-1 to -40 Request for Additional Information (RAI) - second round," dated June 17, 2012.

Commitments made by this letter: NONE

cc: Regional Administrator, Region III  
U. S. Nuclear Regulatory Commission  
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NRC Senior Resident Inspector  
Kewaunee Power Station

**ATTACHMENT 1**

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION  
RELIEF REQUEST NO. RR-G-5**

**FOURTH TEN-YEAR INTERVAL INSERVICE INSPECTION PROGRAM  
(JUNE 16, 2004 – JUNE 16, 2014)  
1ST PERIOD AND 2ND PERIOD**

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION  
RELIEF REQUEST NO. RR-G-5**

On June 17, 2012, the NRC transmitted a request for additional information (RAI) (Reference 1) to Dominion Energy Kewaunee (DEK) concerning Request for Relief (RR) RR-G-05. RR-G-05 requests relief from the requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, "*Rules for Inservice Inspection of Nuclear Power Plant Components*," for Kewaunee Power Station (KPS).

The RAI questions are provided below, followed by the DEK response.

**NRC Question ME7378-RAI-EPNB-McL-007-2012-07-09**

**Background**

There are two risk-informed program methodologies that are generally accepted for use by the NRC. They have been developed by the Electrical Power Research Institute (EPRI) and the Westinghouse Owners Group (WOG) and are documented in Topical Report TR-112657, *Revised Risk-Informed Inservice Inspection Evaluation Procedure, Revision B-A*, and Topical Report WCAP-14572, *Westinghouse Owners Group Application of Risk-Informed Methods to Piping Inservice Inspection Topical Report, Revision 1-NP-A*, respectively. The two programs use either ASME Code Case N-578-1<sup>1</sup>, *Risk-Informed Requirements for Class 1, 2 or 3 Piping, Method B Section XI*, or Code Case N-577<sup>1</sup>, *Risk-Informed Requirements for Class 1, 2 or 3 Piping, Method A*, both of which assign a new Examination Category R-A, listing welds, or other elements, according to expected forms of degradation.

The Kewaunee Risk-Informed Inservice Inspection (RI-ISI) program is based on the NRC-approved EPRI Topical Report TR-112657, Rev B-A. The NRC approved the Kewaunee RI-ISI program plan in its safety evaluation dated September 23, 2005 (Agencywide Documents Access & Management System (ADAMS) Accession Number ML052660057)

**RAI Item McL-001**

To ensure an efficient review and to clarify the Kewaunee RI-ISI program ranking of the subject welds submitted for relief from the ASME Code-required examination coverage, please provide the equivalent ranking of the Kewaunee RI-ISI program that is applicable

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1. ASME Code Cases N-577-1 or N-578-1 are not approved for use in RG-1.147, Revision 16. Licensees base their RI-ISI inspection sample size and examination methodology on Table 1 of ASME Code Case N-577-1 or N-578-1.

or equal to that of ASME Code, Item R-A and "damage mechanisms" in the enclosed tables below: [Table Template provided in NRC request.]

**Response:**

The requested information is provided in the table below:

Table 2.1.1 – Class 1 and 2 Piping Welds						
ASME Category	Code Item	Weld ID	Weld Type	Coverage Obtained	Damage Mechanism	R-A Code Item
B-F	B5.40	PR-W1DM	PZR 6" Nozzle-to-Safe End	68.0%	None	R1.20
B-F	B5.40	PR-W26DM	PZR 6" Nozzle-to-Safe End	37.0%	None	R1.20
B-F	B5.40	RC-W67DM	PZR 14" Nozzle-to-Safe End	26.0%	Thermal Transient (TT)	R1.11
B-J	B9.11	PR-W27	6" PZR Relief Circumferential Weld	50.0%	None	R1.20
B-J	B9.11	RC-W60	6" Reactor Coolant Circumferential Weld	50.0%	Thermal Transient (TT)	R1.11
B-J	B9.11	SI-W51	6" Safety Injection Circumferential Weld	86.7%	None	R1.20
B-J	B9.11	RHR-W9	8" Residual Heat Removal Circumferential Weld	50.0%	None	R1.20
B-J	B9.11	SI-W74	12" Safety Injection Circumferential Weld	50.0%	Thermal Transient (TT) and Intergranular Stress Corrosion Cracking (IGSCC)	R1.11 and R1.16
B-J	B9.31	RC-W3BC	8" Reactor Coolant Pipe Branch Connection	27.0%	Withdrawn	
B-J	B9.31	RC-W22BC	6" Reactor Coolant Pipe Branch Connection	50.0%	Withdrawn	
C-F-1	C5.13	ICS-W180	6" Containment Spray Circumferential Weld	50.0%	None	R1.20
C-F-1	C5.13	ICS-W181	6" Containment Spray Circumferential Weld	50.0%	None	R1.20
C-F-1	C5.13	RHR-W419	6" Residual Heat Removal Circumferential Weld	50.0%	None	R1.20
C-F-1	C5.13	ICS-W45	8" Containment Spray Circumferential Weld	50.0%	None	R1.20

**Table 2.1.1 – Class 1 and 2 Piping Welds**

ASME Category	Code Item	Weld ID	Weld Type	Coverage Obtained	Damage Mechanism	R-A Code Item
C-F-1	C5.14	SI-W429	6" Safety Injection Circumferential Weld	50.0%	None	R1.20
C-F-1	C5.21	SI-W249	3" Safety Injection circumferential Weld	50.0%	None	R1.20
C-F-1	C5.21	AFW-W148	3" Auxiliary Feedwater Circumferential Weld	50.0%	None	R1.20
C-F-1	C5.21	AFW-W151	3" Auxiliary Feedwater Circumferential Weld	50.0%	None	R1.20
C-F-1	C5.21	AFW-W152	3" Auxiliary Feedwater Circumferential Weld	50.0%	None	R1.20
C-F-1	C5.21	AFW-W155	3" Auxiliary Feedwater Circumferential Weld	50.0%	None	R1.20
C-F-2	C5.61	AFW-W156	3" Auxiliary Feedwater Circumferential Weld	68.0%	None	R1.20
C-F-2	C5.61	AFW-W171	3" Auxiliary Feedwater Circumferential Weld	85.0%	None	R1.20
C-F-2	C5.61	AFW-W172	3" Auxiliary Feedwater Circumferential Weld	63.0%	None	R1.20
C-F-2	C5.61	AFW-W178	3" Auxiliary Feedwater Circumferential Weld	83.0%	None	R1.20
C-F-2	C5.61	AFW-W189	3" Auxiliary Feedwater Circumferential Weld	87.0%	None	R1.20
C-F-2	C5.61	AFW-W190	3" Auxiliary Feedwater Circumferential Weld	87.0%	None	R1.20
C-F-2	C5.61	AFW-W191	3" Auxiliary Feedwater Circumferential Weld	85.0%	None	R1.20
C-F-2	C5.61	AFW-W192	3" Auxiliary Feedwater Circumferential Weld	83.0%	None	R1.20
C-F-2	C5.61	AFW-W194	3" Auxiliary Feedwater Circumferential Weld	67.0%	Withdrawn	
C-F-2	C5.61	AFW-W195	3" Auxiliary Feedwater Circumferential Weld	85.0%	None	R1.20
C-F-2	C5.61	AFW-W196	3" Auxiliary Feedwater Circumferential Weld	62.0%	Withdrawn	
C-F-2	C5.61	AFW-W197	3" Auxiliary Feedwater Circumferential Weld	67.0%	Withdrawn	
C-F-2	C5.61	AFW-W198	3" Auxiliary Feedwater Circumferential Weld	62.0%	Withdrawn	

**Reference:**

1. Email from Karl D. Feintuch (NRC) to Jack Gadzala (DEK) and Craig Sly (DEK), "ME7378 - Kewaunee - Relief Req RR-G-5-1 to -40 Request for Additional Information (RAI) - second round," dated June 17, 2012.