

**Request for Additional Information (RAI)**

**Dominion Energy Kewanee, Inc.**

**Keweenne Power Station**

**Relief Request No. RR-2-2**

**Steam Generator Large-bore Snubber Inspection and Testing for Fourth 10-Year Interval**

**Docket No. 50-305**

**(TAC No. ME4722)**

Reference: (1) Dominion Energy Kewanee, Inc., letter to NRC, "Keweenne Power Station, Inservice Inspection Program Fourth 10-Year Interval, 10 CFR 50.55a Request No. RR-2-2", for Keweenne Power Station (KPS), Docket No 50-305, dated September 7, 2010.

The NRC staff needs the following additional information to complete its review of Relief Request RR-2-2. These RAIs are applicable to steam generator large-bore snubber inservice inspection (ISI) and testing at KPS.

**RAI 1:** In Section 4, "Reason for Request, Background," the first paragraph states, in part, that "The KPS ISI Fourth 10-Year Inspection Interval, Appendix F, "Augmented Examination Programs," Section 2.f, requires all safety related hydraulic shock suppressors be visually examined and tested in accordance with KPS Technical Specification (TS) Section 4.14, "Testing and Surveillance of Shock Suppressors (Snubbers).""

The applicable American Society of Mechanical Engineers (ASME) Section XI Code for KPS is the 1998 Edition with the 2000 Addenda. ASME Section XI, Article IWF-5000 specifies the requirements for inservice examination and testing of snubbers.

- (a) Did the NRC ever authorize KPS to use the TS Section 4.14 in lieu of the ASME Section XI Code requirements of IWF-5000 for ISI and testing of safety related hydraulic shock suppressors? If so, please provide information regarding this authorization from the NRC.
- (b) During a teleconference regarding the Keweenne Improved TS conversion, on April 1, 2010, Dominion Energy Keweenne (DEK) informed the NRC staff that KPS was converting its snubbers program from the TS to the ASME OM Code Subsection ISTD. However, in this relief request, DEK states that applicable Code requirements for the snubber ISI and testing program are as specified in IWF-5000 of the ASME Code Section XI. Please provide details regarding which ASME Code is being used for ISI and testing of snubbers at KPS.

**RAI 2:** In Section 4, the last paragraph on Page 2 of 6, states, in part, that "Under the currently applicable versions of the ASME/OM codes, the steam generator (SG) large-bore hydraulic snubbers are considered to be within the same grouping (or population) as other plant hydraulic snubbers." Please confirm that there are no mechanical snubbers installed at KPS.

**RAI 3:** In Section 5, "Proposed Alternative and Basis for Use," Subsection 5.b states, in part

that “functional testing be performed once for SG 1A Large-Bore 900 KIP Hydraulic Snubber (RC-H86) and once for SG 1 B Large-Bore 900 KIP Hydraulic Snubber (RC-H87) during the Fourth Ten-Year Interval.” Please explain how testing large-bore snubbers, RC-H86 or RC-H87, only once per the Fourth Ten-Year Interval will meet the current snubber testing requirements at KPS or explain the basis for only testing once per Ten-Year Interval.

**RAI 4:** In Section 5, under the “Bases for Use” subsection, DEK provides a history of functional testing of SG large-bore hydraulic snubbers at Kewanee. Please provide the results of the functional testing performed during all the refueling outages from 1996 through 2009.

**RAI 5:** The TS Section 4.14 does not address the requirements of OM-4, Section 2.3.2 and Section 3.2.4 related to inservice examination and functional testing of snubbers, specifically Section 2.3.4.3, “Examination Failure Mode Groups,” and Section 3.2.4.2, “Test Failure Mode Groups.” Please explain how the KPS snubber program meets the requirements of ASME OM-4, Sections 2.3.4.3 and 3.2.4.2.