



SEP 13 2007

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

Serial No. 07-0559  
KPS/LIC/GR: RO  
Docket No. 50-305  
License No. DPR-43

**DOMINION ENERGY KEWAUNEE, INC.**  
**KEWAUNEE POWER STATION**  
**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING THE**  
**KEWAUNEE 2006 STEAM GENERATOR TUBE INSPECTION REPORT**

As required by Kewaunee Power Station (KPS) Technical Specifications (TS), Dominion Energy Kewaunee, Inc. submitted the steam generator tube inspection report on March 29, 2007 (reference 1).

During the Nuclear Regulatory Commission (NRC) staff's review of the information provided in this report, the NRC staff determined that additional information is required to complete their review. The specific information requested is detailed in the enclosure to a letter dated August 9, 2007 (reference 2). During a discussion between NRC and DEK staff on August 7, 2007, it was agreed that DEK would provide a response within 45 days of the date of the letter.

Attached is DEK's response to the NRC request for information.

If you have questions or require additional information, please feel free to contact Mr. Gerald Riste at 920-388-8424.

Very truly yours,

Leslie N. Hartz  
Site Vice President, Kewaunee Power Station

Attachment – Dominion Energy Kewaunee, Inc. Response

Commitments made by this letter: NONE

A001

NRR

References:

1. Letter from Leslie N. Hartz (DEK) to Document Control Desk (NRC), "Kewaunee Power Station - 2006 Steam Generator Tube Inspection Report," dated March 29, 2007 (ADAMS Accession No. ML071020161).
2. Letter from Patrick D. Milano (NRC) to David A. Christian (DEK), "Kewaunee Power Station - Request For Additional Information Steam Generator Tube Inspection (TAC NO. MD5226)," dated August 9, 2007 (ADAMS Accession No. ML072190202).

cc: Regional Administrator  
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**ATTACHMENT 1**

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING THE  
KEWAUNEE 2006 STEAM GENERATOR TUBE INSPECTION REPORT**

**DOMINION ENERGY KEWAUNEE, INC. RESPONSES**

**KEWAUNEE POWER STATION  
DOMINION ENERGY KEWAUNEE, INC.**

## ATTACHMENT 1

### RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING THE KEWAUNEE 2006 STEAM GENERATOR TUBE INSPECTION REPORT

By letters dated January 10 and March 29, 2007 ((Agencywide Documents Access and Management System (ADAMS) Accession No. ML070100524 and ML071020161, respectively), Dominion Energy Kewaunee, Inc (the licensee) submitted information regarding the steam generator tube inspection results from the 2006 refueling outage inspection at Kewaunee Power Station. In reviewing the information, the Nuclear Regulatory Commission staff has determined that the following information is needed in order to complete its review:

1. Regarding the inspections performed on each steam generator, discuss the scope and results of any secondary side inspections performed during the 2006 outage. In addition, discuss whether the two loose parts, which were assessed and not removed from the steam generator during the 2003 outage, were observed in the 2006 eddy current data. Discuss whether these loose parts were removed during the 2006 outage (e.g., during a foreign object search and retrieval inspection).

#### DEK Response

Secondary side steam generator inspections performed at KPS during the 2006 refueling outage are summarized below:

1. Post Sludge Lance Manual Tubesheet Foreign Object Search (FOS) inspection on Steam Generator 1A and 1B.

Scope - The entire hot leg and cold leg annulus region was inspected on each steam generator. The entire tubelane region of each steam generator was also inspected.

Results - The annulus regions were free of loose sludge, hard sludge and foreign objects. One anomalous condition was noted on one tube in the 1A steam generator hot leg (Column 57 – Row 47). The tube contained several dents and scratches approximately one inch above the tubesheet. A loose part was observed and retrieved during the 2003 refueling outage prior to conducting eddy current exams. A post eddy current exam of the area found no degradation. Trace amounts of soft sludge were observed in the tubelane region of both steam generators. No hard sludge or foreign objects were observed in the tubelane regions of either steam generator.

2. Post Sludge Lance Manual In-bundle FOS inspection were performed on Steam Generator 1A and 1B.

Scope - Fourteen in-bundle visual inspection passes on 1A SG and thirteen in-bundle inspection passes were performed on 1B SG.

Results – Loose soft and hard sludge deposits were observed in the hot leg and cold leg in-bundle region in both steam generators. Five small foreign objects were located in the in-bundle region of 1A SG. Ten small foreign objects were located in the in-bundle region of 1B SG. The foreign objects were machining remnants, wire, and a small piece of rod. All objects were removed and no tube damage was visible at these locations.

3. Steam Drum inspection on Steam Generator 1A and 1B.

Scope - Upper internal and mid-deck regions were inspected in both steam generators.

Results – No foreign objects were observed in either steam generator. Several disruptions in the magnetite layer were observed on the primary moisture separator riser barrel in the area of the J-nozzles. The disruptions were darker in appearance but not reflective, as would be observed if the surface was completely stripped of magnetite.

4. Potential Loose Part (PLP) Visual Verification

Scope – Top-of-Tubesheet (TTS) In-Bundle FOS inspection of four locations identified as PLP indications during the 2006 eddy current examination:

- PLP 1: Row 45 – Column 40 Hot Leg – at the top of tubesheet.
- PLP 2: Row 34 – Column 80 Hot Leg – 17 inches off the tubesheet
- PLP 3: Row 33 – Column 81 Hot Leg – 17.81 inches off the tubesheet
- PLP 4: Row 34 – Column 81 Hot Leg – 17.3 inches off the tubesheet

Results – The annulus inspection footage was viewed for PLP 1, no foreign objects were observed in this area or adjacent columns. Accumulations of loose soft and hard sludge pieces were observed in the area.

A TTS in-bundle FOS was performed in columns 79-80, 80-81, and 81-82. The probe was positioned to look upward for PLP indications 2, 3, and 4. The flow distribution baffle was visible during the upward inspection. No anomalous conditions or foreign objects were observed in the area of interest.

The machining remnant identified in 2003 in the 1B SG hot leg at row 46 column 56 was removed during the 2006 outage prior to eddy current examinations. The machining remnant identified in 2003 in the 1B SG at row 26 column 86 was not

present during 2006 visual inspections nor was there any loose part response from the eddy current examination.

- 2. In Paragraph d. on page 2 of Attachment 1 to the March 29, 2007, letter, several indications in steam generator 1A were identified as “not called during the pre-service inspection.” Clarify whether these indications were present in the pre-service inspection but were not identified (i.e., reported) or whether the indications were not present in the pre-service inspection data. If the indications were present in the pre-service data, discuss whether the indications have changed since the pre-service inspection. If the indications have changed or the indications are new (i.e., not present in the pre-service inspection), discuss any insights on the nature of these indications.**

### **DEK Response**

Indications called DSI (distorted support signal with indications) with bobbin coil responses need further diagnostic testing to confirm any “I” codes. A rotating coil exam was completed and the final determination was ‘no defects found’ (NDF) as stated under the rotating coil determination for that inspection, Paragraph D on page 2 of attachment 1. These indications were not present during pre-service inspection or the 2003 inspection and are believed to be secondary side deposits.