

August 30, 2010

United States Nuclear Regulatory Commission Attention: Document Control Desk Washington, DC 20555-0001 Serial No.: 10-450 LR/DEA R0 Docket No.: 50-305 License No.: DPR-43

# DOMINION ENERGY KEWAUNEE, INC. KEWAUNEE POWER STATION LICENSE RENEWAL – COMMENTS ON SER WITH OPEN ITEMS

By letter dated July 15, 2010 (Reference 1), the NRC provided Dominion Energy Kewaunee (DEK) a Safety Evaluation Report (SER) with Open Items related to the license renewal of Kewaunee Power Station (KPS).

In the letter transmitting the SER with Open Items, the NRC staff described their plans to review the format of the SER to further improve the content, while incorporating comments and responses. To that end, DEK has reviewed the SER with Open Items for consistency with the KPS License Renewal Application (LRA), LRA supplements, and subsequent information provided in response to NRC requests for additional information. DEK's comments are limited to items that, if not resolved for consistency with the License Renewal Application, are considered to have implications on the bases of the conclusions presented in the SER. DEK's comments are provided in Attachment 1.

Separately, Section 1.5 of the SER lists four open items and identifies the information required to satisfactorily resolve each open item. Attachment 2 summarizes the information that has been provided to the NRC to resolve each of the four open items.

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Should you have any questions regarding this submittal, please contact Mr. Paul C. Aitken at (804) 273-2818.

Very truly yours,

Leslie N. Hartz // Vice President – Nuclear Support Services

COMMONWEALTH OF VIRGINIA



COUNTY OF HENRICO

The foregoing document was acknowledged before me, in and for the County and State aforesaid, today by Leslie N. Hartz, who is Vice President – Nuclear Support Services of Dominion Energy Kewaunee, Inc. She has affirmed before me that she is duly authorized to execute and file the foregoing document in behalf of that Company, and that the statements in the document are true to the best of her knowledge and belief.

Acknowledged before me this <u>30<sup>TH</sup></u> day of <u>Huaust</u>, 2010. J. Hule My Commission Expires: JAU 31, 2014

Attachments:

- 1. Comments on SER with Open Items Related to License Renewal of Kewaunee Power Station
- 2. Status of Open Items

## Reference:

 Letter from NRC to D. A. Heacock (DEK), "Safety Evaluation Report with Open Items related to the License Renewal of Kewaunee Power Station," dated July 15, 2010. [ADAMS Accession No. ML101190345]

Commitments made in this letter:

None.

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# **ATTACHMENT 1**

# COMMENTS ON SER WITH OPEN ITEMS RELATED TO LICENSE RENEWAL OF KEWAUNEE POWER STATION

# KEWAUNEE POWER STATION DOMINION ENERGY KEWAUNEE, INC.

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# <u>Comments on SER with Open Items</u> <u>Related to the License Renewal</u> <u>of Kewaunee Power Station</u>

# Comment # 1

Section 2.4.2.11.1 Page 2-129 1<sup>st</sup> paragraph:

Add "(areas housing service water facilities, equipment, and piping)" following "Class I structure" in the last sentence. With this change, the SER will be consistent with, the KPS LRA, Section 2.4.2.11 and KPS USAR Table B.2-1.

## Comment # 2

Section 2.1.4.4.2 Page 2-22 2<sup>nd</sup> paragraph:

Delete the phrase "a listing of functions performed by the system or structure" in the second sentence. With this change, the sentence will accurately describe the Kewaunee License Renewal Technical Reports, which only identified the intended functions performed by systems or structures, and did not list those functions that failed to meet the scoping criteria of 10 CFR 54.4(a).

### Comment # 3

Section 2.4.4.2 Page 2-133

DEK recommends that this section be supplemented to indicate the waterproofing membrane is within the scope of license renewal, as discussed in the response to NRC RAI B2.1.31-3a provided in DEK letter to the NRC dated December 28, 2009 (Serial No. 09-760).

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# Comment # 4

Section 3.0.3.2.19 Pages 3-136 through 3-152

Remove the statements regarding an enhancement to the Work Control Program (WCP) from this section and elsewhere within the SER. With these changes, the SER will be consistent with the response to Request 4 provided in DEK letter to the NRC dated May 13, 2010 (Serial No. 10-286), which clarified that there are no enhancements to the WCP.

## Comment # 5

Section 3.0.3.2.19 Page 3-140 4<sup>th</sup> paragraph (single sentence)

Replace "four" with "one". With this change, the SER will be consistent with the one exception taken to GALL AMP XI.M38, as described in DEK letter to the NRC dated September 25, 2009 (Serial No. 09-597). The exceptions described in the SER are the program elements affected by the one exception.

## Comment # 6

Section 3.0.3.2.19 Page 3-144 1<sup>st</sup> bullet

Delete "linear discontinuities" from this bullet. With this change, the description of cracking in stainless steel diesel exhaust components will be consistent with DEK letter to the NRC dated September 25, 2009 (Serial No. 09-597).

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#### Comment # 7

Section 3.1.2.2.2 Page 3-203 2<sup>nd</sup> paragraph

Delete "the applicant's stress calculations indicated that" from the sixth sentence. With this change, the SER will be consistent with the DEK response to NRC RAI 3.1.2.2.2.4-2 provided in DEK letter to the NRC dated December 28, 2009 (Serial No. 09-760).

# Comment # 8

Section 3.0.3.1.5 Page 3-22 4<sup>th</sup> paragraph

Change "130 °F" to "139 °F" in the second sentence. With this change, the SER will be consistent with the response to NRC RAI B2.1.19-1 in DEK letter to the NRC dated August 17, 2009 (Serial No. 09-469).

#### Comment # 9

Section 3.0.3.1.5 Page 3-22 4<sup>th</sup> paragraph

Revise "between 1E4 rads" to "between <1E4 rads" in the fifth line and "between 1.5E4 rads" to "between <1.5E4 rads" in the ninth line. This change will make the SER consistent with the response to NRC RAI B2.1.19-1 in DEK letter to the NRC dated August 17, 2009 (Serial No. 09-469).

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<u>Comment # 10</u>

Section 3.0.3.1.7 Page 3-28, 1st paragraph Page 3-29, 4<sup>th</sup> paragraph

DEK suggests that the sentence, "The staff noted that the revision to LRA Section A2.1.21, as amended by DEK letter to the NRC dated December 28, 2009, is identified as Commitment No. 4.", be deleted. Commitment No. 4 in this statement actually refers to the fourth commitment cited in the list of Commitments identified in DEK letter to the NRC dated December 28, 2009 (Serial No. 09-760). The Commitment No. 4 indicated here should not be confused with License Renewal Commitment No. 4 on SER page A-2.

#### Comment # 11

Section 3.0.3.1.11 Page 3-36 Last sentence

Include the "ASME Section XI Inservice Inspection, Subsections IWB, IWC, and IWD program" and the "Steam Generator Tube Integrity program" as programs that verify the effectiveness of the Secondary Water Chemistry Program. With the addition of these programs, the SER will be consistent with the KPS LRA, Section B2.1.28, 'Secondary Water Chemistry program'.

#### Comment # 12

Section 3.0.3.1.12 Page 3-37 7<sup>th</sup> paragraph

DEK recommends that the discussion, "Summary of Technical Information in the Application," be modified to indicate that the Selective Leaching of Materials program will define a one-time examination methodology and acceptance criteria, and will inspect a representative sample of selected components that may be susceptible to selective leaching. This clarification will make the SER consistent with the KPS LRA, Section B2.1.29.

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#### Comment # 13

Table 3.3-1 Page 3-261 Item 3.3.1-15

Delete "Fire Protection Program" from the fifth column and delete "Consistent with the GALL Report" from the Staff Evaluation column. With these changes, the SER will be consistent with the KPS LRA, Table 3.3.1, Item 15.

## **Comment # 14**

Table 3.3-1 Page 3-262 Item 3.3.1-16

Delete "WCP Program" from the fifth column and delete "Consistent with the GALL Report" from the Staff Evaluation column. With these changes the SER will be consistent with the KPS LRA, Table 3.3.1, Item 16.

#### Comment # 15

Table 3.3-1 Pages 3-267 through 270 Items 3.3.1-53, 3.3.1-54, 3.3.1-58, and 3.3.1-68

Delete "WCP Program" from the fifth column. With this change, the SER will be consistent with the changes identified for these items in the KPS LRA, Table 3.3.1 in DEK letter to the NRC dated September 25, 2009 (Serial No. 09-597).

#### Comment # 16

Section 3.3.2.2.12, Item 1 Page 3-310 2<sup>nd</sup> paragraph

Delete "Fuel Oil Tanks Inspection Program" in the last sentence. With this change, the SER will be consistent with SER Table 3.3-1, Item 3.3.1-32 and LRA Table 3.3.1, Item 32.

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## **Comment # 17**

Table 3.4-1 Page 3-358 Item 3.4.1-16

Add "Primary Water Chemistry Program" to the fifth column of Table 3.4-1, Item 3.4.1-16. With this change, the SER will be consistent with LRA Table 3.4.1, Item 16.

#### Comment #18

Table 3.4-1 Page 3-359 Items 3.4.1-24, 3.4.1-25, 3.4.1-26, 3.4.1-31, and 3.4.1-32

Delete "WCP Program" from the fifth column, "AMP in LRA, Supplements, or Amendments". Change "Consistent with the GALL Report" to "Not applicable to KPS" in the Staff Evaluation column. With these changes, the SER will be consistent with the changes identified for these Items in the KPS LRA, Table 3.4.1 in DEK letter to the NRC dated September 25, 2009 (Serial No. 09-597).

# **Comment # 19**

Section 3.5.1 Page 3-393 Bulleted list

> Add "ASME Section XI, Subsection IWF program" to the list of programs credited for managing the aging effects for the structures and component supports. With this change the SER will be consistent with the KPS LRA.

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#### Comment # 20

Table 3.5-1 Page 3-397 Item 3.5.1-10

Change "ASME Section XI, Subsection IWE Program and 10 CFR Part 50, Appendix J Program" to "Not Applicable" in the fifth column. Change "Consistent with the GALL Report" to "Not applicable to KPS" in the Staff Evaluation column. With these changes the SER will be consistent with the KPS LRA, Table 3.5,1, Item 10.

## Comment # 21

Table 3.5-1 Page 3-399 Item 3.5.1-25

Add "Fire Protection Program" and "External Surfaces Monitoring Program" to the fifth column, "AMP in LRA, Supplements, or Amendments". With these changes the SER will be consistent with the KPS LRA, Table 3.5-1, Item 25.

## **Comment # 22**

Section 3.0.3.2.1 Page 3-44 5<sup>th</sup> paragraph

Change the second sentence from "The applicant clarified....., a total of 24 welds will be examined prior to the period of extended operation." to "The applicant clarified....., a total of 24 welds will be examined prior to the <u>end</u> of the period of extended operation." With this change the SER will be consistent with the DEK response to NRC RAI B2.1.2-1 provided in DEK letter dated February 2, 2010 (Serial No. 10-033).

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#### <u>Comment # 23</u>

Section 3.0.3.2.1 Page 3-48 Operating Experience

Replace the 1<sup>st</sup> and 2<sup>nd</sup> paragraphs with a discussion of Operating Experience for the ASME Section XI Inservice Inspection, Subsections IWB, IWC, and IWD Program intended for this section. The current paragraphs discuss Operating Experience for the Alloy 600 Program. With this change the SER will be consistent with the operating experience discussion for the ASME Section XI Inservice Inspection, Subsections IWB, IWC, and IWD program in the KPS LRA, Section B2.1.2.

#### Comment # 24

Section 3.0.3.2.1 Pages 3-48 and 3-49 USAR Supplement and Conclusion

DEK recommends that a discussion and/or reference to license renewal Commitment No. 42, provided in DEK letter to the NRC dated February 2, 2010 (Serial No. 10-033), be included in these sections. With this change the SER will include all the license renewal commitments related to the ASME Section XI Inservice Inspection, Subsections IWB, IWC, and IWD Program that will be in the KPS USAR Supplement.

#### <u>Comment # 25</u>

Section 3.0.3.2.5 Page 3-64 Last paragraph

DEK suggests that the discussion of the DEK response to NRC RAI B2.1.8-2 in the first sentence, provided in letter dated August 17, 2009, be clarified. DEK suggests that the paragraph be modified to indicate that the heat exchangers included in the component cooling system cooling loop '*that are part of other systems*' are the heat exchangers that are in continuous operation.

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# Comment # 26

Section 3.0.3.2.10 Page 3-90 1<sup>st</sup> paragraph (continued from previous page)

Delete the word "cleaning" from the third sentence. With this change, the SER will be consistent with the discussion of Exception 2 provided in the KPS LRA, Section B2.1.14.

# **Comment # 27**

Section 3.0.3.2.11 Page 3-97 Next to last paragraph

Change "Fuel Oil Tanks Inspection Program" to "Work Control Process Program" in the third sentence. With this change the SER will be consistent with the response to NRC RAI B2.1.15-1 and the associated Commitment No. 31 provided in DEK letter to the NRC dated August 17, 2009 (Serial No. 09-469).

#### **Comment # 28**

Appendix A Page A-2 Commitment No. 4

DEK letter to the NRC dated July 22, 2010 (Serial No. 10-366) has extensively revised this commitment. As such, DEK recommends that Commitment No. 4 in the SER be updated to reflect that revision.

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#### **Comment # 29**

Appendix A Page A-6 Commitment No. 36

Change the implementation schedule from "Prior to the Period of Extended operation" to "Prior to the end of the first 10 years of extended Operation." With this change, the SER will be consistent with the response to NRC RAI B2.1.31-5a provided in DEK letter to the NRC dated December 28, 2009 (Serial No. 09-760).

#### Comment # 30

Appendix A Page A-6 Commitment No. 41

DEK letter to the NRC dated June 1, 2010 (Serial No. 10-324) notified the NRC that this commitment has been completed.

# **Comment # 31**

Appendix A Page A-7

A new commitment, License Renewal Commitment No. 47, has been added by DEK letter to the NRC dated May 13, 2010 (Serial No. 10-286). Therefore, this new commitment should be added to Appendix A of the SER with Open Items.

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# **ATTACHMENT 2**

# STATUS OF OPEN ITEMS

KEWAUNEE POWER STATION DOMINION ENERGY KEWAUNEE, INC.

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Section 1.5 of the NRC SER lists four open items and identifies the information required to satisfactorily resolve each open item. Each of the open item numbers below directly correlates to the NRC Request for Information (RAI) number. Provided below is a summary of the information that has been provided to the NRC to resolve each of the four open items.

**Open Item 3.0.3.2.20-1** (SER Sections 3.0.3.2.20 and 4.3, Use of the Non-Conforming Software FatiguePro)

The response to NRC RAI B3.2-2 was submitted by DEK letter to the NRC dated June 1, 2010 (Serial No. 10-324).

**Open Item B2.1.32-1** (SER Section 3.0.3.19 – Work Control Process Program)

### Parts 1 through 5

The responses to NRC RAI B2.1.32-5, Parts 1 through 5, were submitted by DEK letter to the NRC dated May 13, 2010 (Serial No. 10-286).

**<u>Open Item 3.1.2.1.7-1</u>** (Nickel-Alloy Steam Generator Divider Plate Cracking due to PWSCC)

The response to NRC RAI 3.1.2.2.13-1 was submitted by DEK letter to the NRC dated July 22, 2010 (Serial No. 10-366).

<u>Open Item 3.0.3.2.4-1</u> (RAI concerning recent operating experience for buried and underground piping and tanks)

The response to NRC RAI B2.1.7-3 was submitted by DEK letter to the NRC dated July 22, 2010 (Serial No. 10-366).