



November 9, 2007

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Serial No. 07-0416A
NL&OS/ETS R0
Docket Nos. 50-305
50-336/423
50-338/339
50-280/281
License Nos. DPR-43
DPR-65/NPF-49
NPF-4/7
DPR-32/37

DOMINION ENERGY KEWAUNEE, INC. (DEK)
DOMINION NUCLEAR CONNECTICUT, INC. (DNC)
VIRGINIA ELECTRIC AND POWER COMPANY (DOMINION)
KEWAUNEE POWER STATION UNIT 1
MILLSTONE POWER STATION UNITS 2 AND 3
NORTH ANNA POWER STATION UNITS 1 AND 2
SURRY POWER STATION UNITS 1 AND 2
ALTERNATIVE REQUESTS FOR USE OF ASME CODE CASES N-756 AND N-757
REQUEST FOR ADDITIONAL INFORMATION

By letter dated July 25, 2007 (Serial No. 07-0416), DEK, DNC, and Dominion requested approval to use the alternative rules of ASME Code Cases N-756 and N-757. These Code Cases contain alternative rules for the design of non-welded Class 1, 2, and 3 valves, 1-inch nominal pipe size (NPS) and smaller.

On September 7, 2007, the NRC requested additional information to complete their review. The NRC request and our response is provided in Attachment 1. The valve vendor, Swagelok, considers a portion of the provided information associated with valve design specifications to be proprietary. To conform to the requirements of 10 CFR 2.390 concerning the protection of proprietary information, the proprietary information provided in Attachment 1, Enclosure 1 is contained within brackets. Attachment 1, Enclosure 2 has been redacted to provide a non-proprietary version of the requested valve information. Where the proprietary information has been deleted in the non-proprietary version only the brackets remain (i.e., the information that was contained within the brackets in the proprietary version has been redacted). The basis for redacting certain information as proprietary is provided in the application for withholding and affidavit provided in Attachment 2, pursuant to 10 CFR 2.390(b)(1).

A047

NRK

If you have questions or require additional information, please contact Mr. Thomas Shaub at (804) 273-2763.

Sincerely,



Gerald Bischof
Vice President – Nuclear Engineering
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Dominion Nuclear Connecticut, Inc.
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Attachments

1. Response to Request for Additional Information
Enclosure 1 - Proprietary
Enclosure 2 - Non-Proprietary
2. Affidavit

Commitments made in this letter:

1. Prior to use of nonwelded valves with end connections other than flanges at KPS, procedures will be developed for installation of nonwelded valves with end connections other than flanges that address operating experience of NRC Information Notices 92-15, 84-55 and 84-55, Supplement 1. The specific provisions include: a) not mixing the parts from one manufacturer to another, b) following manufacturer's recommended instructions for installing compression fittings, and c) the training or familiarity with the procedure(s) for personnel doing this work.

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Attachment 1

RESPONSE TO NRC REQUEST FOR ADDITIONAL INFORMATION
USE OF ASME CODE CASES N-756 AND N-757 SECTION III DIVISION 1

DOMINION ENERGY KEWAUNEE, INC. (DEK)
DOMINION NUCLEAR CONNECTICUT, INC. (DNC)
VIRGINIA ELECTRIC AND POWER COMPANY (DOMINION)

KEWAUNEE POWER STATION UNIT 1
MILLSTONE POWER STATION UNITS 2 AND 3
NORTH ANNA POWER STATION UNITS 1 AND 2
SURRY POWER STATION UNITS 1 AND 2

Response to NRC Request for Additional Information
Use of ASME Code Cases N-756 and N-757 Section III Division 1

Kewaunee Power Station (KPS) Unit 1,
Millstone Power Station (MPS) Units 2 and 3,
North Anna Power Station (NAPS) Units 1 and 2, and
Surry Power Station (SPS) Units 1 and 2

NRC Question 1

Dominion's July 25, 2007, letter indicated that approval of Code Cases N-756 and N-757 by February 1, 2008, is necessary to support the Millstone Unit 2 Spring 2008 outage. ASME Code Case N-756 provides alternative rules for the design of small ASME Code Class 1 valves with nonwelded end connections other than flanges. The code case requires that the valve be designed in accordance with the alternate provisions of NB-3512.2(d) that are provided in the Code for the evaluation of weld end valves. A valve designed using this provision of the Code must meet the requirements of NB-3200. Provide the ASME Code Class 1 certified design report for a typical valve designed to the requirements of Code Case N-756 that may [be] used during the Millstone Unit 2 outage. Include a detailed drawing of the valve design that shows all internal radii specified for the valve manufacture.

Response

The design report for a Class 3 component and the design report template for a Class 1 component are provided in the enclosures to this attachment.

- Enclosure 1 provides the proprietary version of two design reports.
- Enclosure 2 provides the non-proprietary, redacted version of the two design reports.

Please note that in the attached SWAGELOK design reports the ASME Section III, 2004 Edition is referenced and used with these Code Cases. This 2004 Edition of Section III is currently not approved for use by NRC in 10 CFR 50.55a, but has been included in the current proposed rulemaking for 10 CFR 50.55a to be approved sometime in January or February 2008. The "Duration of Applicability" for this proposal to use valves manufactured to these Code Cases will begin only after the 2004 Edition of Section III becomes approved in the regulation. Consequently, valves manufactured to these Code Cases will not be used until such time that the 2004 Edition of Section III is approved in the regulation.

NRC Question 2

NRC Information Notices (INs) 92-15 and 84-55 discuss past failures of compression fittings at nuclear power plants due to improper installations. Describe the procedures that will be used by Dominion for the installation of these nonwelded valves that will provide assurance that failures similar to those described in INs 92-15 and 84-55 will not occur.

Response

The NRC Information Notices (INs) 92-15, "Failure of Primary System Compression Fitting," and 84-55, 84-55 Supplement 1, "Seal Table Leaks At PWRs," have a common theme that explains the causes for these events to be related to a) mixing of parts from one manufacturer to another, b) not following manufacturer's recommended instructions for installing compression fittings, and c) not using personnel that are familiar with doing this type of work. The procedures that are used at SPS, NAPS and MPS for doing this type of work have specific provisions to not mix parts, contain specific directions related to following manufacturer's instructions, and training or familiarity with the procedure is addressed for personnel doing this work.

KPS currently does not have a specific procedure, but has addressed these issues through classroom training, hands-on training, and by an engineering specification that requires installation of compression fittings in accordance with the manufacturers recommendations. The training uses the manufacturers fitting and installation manual. DEK has determined additional procedural guidance will provide assurance that industry operating experience is programmatically captured.

Therefore, prior to use of nonwelded valves with end connections other than flanges at KPS, procedures will be developed for installation of nonwelded valves with end connections other than flanges that address operating experience of NRC Information Notices 92-15, 84-55 and 84-55, Supplement 1. The specific provisions include: a) not mixing the parts from one manufacturer to another, b) following manufacturer's recommended instructions for installing compression fittings, and c) the training or familiarity with the procedure(s) for personnel doing this work prior to use.