

**VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261**

June 29, 2004

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

Serial No.	04-337
NL&OS/GDM	R0
Docket Nos.	50-280
	50-281
License Nos.	DPR-32
	DPR-37

VIRGINIA ELECTRIC AND POWER COMPANY (DOMINION)
REVISION TO SURRY POWER STATION UNIT 2 THIRD INTERVAL RELIEF
REQUEST NO. SR-004 REV. 2
WITHDRAWAL OF SURRY UNIT 1 FOURTH INTERVAL RELIEF REQUEST NO.
CMP-002

Surry Power Station Units 1 and 2 are presently in the fourth ten-year inservice inspection (ISI) interval and use the 1998-2000 Edition of ASME Section XI as the basis for the ISI Program for each unit. The Surry Unit 1 and Unit 2 Fourth Interval ISI Program Plans were submitted to the NRC in letters dated December 12, 2002 (Serial No. 02-642) and August 25, 2003 (Serial No. 03-428), respectively, and included Relief Request CMP-002 for each unit. These relief requests were for the ASME Section XI Code Category C-G pump casing weld examination requirement on the Outside Recirculation Spray (ORS) pumps and the Low Head Safety Injection (LHSI) pumps. Subsequent to these submittals, Dominion has discovered that the welds identified by the relief requests are not the actual pump casing welds, rather they are welds on the pump suction can in which the pump casing is contained and supported. However, upon further review of the exemption defined in paragraph IWC-1223 of the ASME Section XI 2000 Code Edition, Dominion has determined that the relief requested in CMP-002 is not required for the fourth interval. Therefore, the Surry Unit 1 Relief Request CMP-002 submitted in our December 12, 2002 letter is hereby withdrawn. Dominion previously withdrew the Surry Unit 2 Relief Request CMP-002 in a letter dated May 5, 2004 (Serial No. 03-428A).

Similar relief requests that included the incorrect welds for the ORS and LHSI pump casing welds were also submitted for Surry Units 1 and 2 in the second and third ISI intervals. (The first interval ISI Program did not require such relief since the class 2 pump casing welds in question were exempt per ASME Section XI paragraph IWC-1220 of the 1974 Edition with 1975 Addenda due to temperature and pressure maximums.) Surry Units 1 and 2 used the 1989 Edition of ASME Section XI for the third interval and the 1980 Edition with the 1980 Winter Addenda for the second interval. These Code editions did not include an exemption similar to those noted above for the first and fourth ISI intervals. The second interval relief requests were approved by the NRC in a letter dated April 14, 1994, for both units. Similar third interval relief requests were

A047

originally approved for Unit 1 in an NRC letter dated July 19, 1995, and for Unit 2 in an NRC letter dated August 30, 1995. The NRC subsequently approved later revisions for both units in a letter dated August 21, 2001.

A review of Surry maintenance records indicates that certain ORS and LHSI pumps were disassembled for maintenance within the second interval on the following dates:

01-RS-P-2A	06/07/88
01-RS-P-2B	10/07/87
01-SI-P-1A	07/04/89
02-RS-P-2A	01/19/89
02-RS-P-2B	01/19/89
02-SI-P-1B	05/02/93

During the third inspection interval only one pump was disassembled for maintenance:

02-SI-P-1B	03/16/95
------------	----------

The available records reviewed indicate that pump suction can weld examinations were performed in accordance with the relief requests; however, the examinations were on the incorrectly specified welds. This discovery constituted a non-conforming condition in accordance with Generic Letter 91-18 for the second interval. An evaluation and operability determination of the non-conforming condition were completed, and it was determined that the pumps were operable. By invoking the code allowable one-year interval extension for Surry Unit 2, the third inspection interval will end on May 9, 2005. Therefore, Dominion plans to disassemble 2-SI-P-1B during the Spring 2005 refueling outage and perform an inspection on the correct pump casing welds to appropriately close out the third interval.

Therefore, a revised third interval Unit 2 relief request (SR-004 Rev. 2) is attached which identifies the correct pressure-retaining pump casing welds. The relief request includes as an alternative the use of the 1995-1996 Edition of the ASME Section XI Code, which defines these welds as "inaccessible". In the 1995 Addenda of the code, IWC-1223 was written to define "Inaccessible Welds" as "Welds or portions of welds that are inaccessible due to being encased in concrete, buried underground, located inside a penetration, or encapsulated by guard pipe." Dominion interprets this definition as applying to the pump casing welds on the ORS and LHSI pumps. Furthermore, Dominion's interpretation of the 1995 code requirement is that a 100% surface examination of the accessible pump casing welds on one pump of a similar group is required each interval only if a pump is disassembled for maintenance rendering the welds accessible for examination.

In accordance with 10 CFR 50.55a(g)(4)(iv), Dominion requests to use a later edition of the ASME Section XI Code for inspection of the ORS and LHSI pumps Category C-G pump casing welds. The Surry Unit 2 third interval Relief Request SR-004, Rev. 2, is

attached for NRC review and approval. In addition, Dominion is withdrawing Surry Unit 1 Relief Request CMP-002 that was submitted in our December 12, 2002 letter for the fourth interval for the reasons cited above.

If you have any questions or require additional information, please contact Mr. Gary D. Miller at (804) 273-2771.

Very truly yours,



Leslie N. Hartz
Vice President – Nuclear Engineering

Attachment

Commitments made by this letter: None

cc: U.S. Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23 T85
Atlanta, GA 30303-3415

Mr. S. R. Monarque
U. S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Mail Stop 8H12
Rockville, MD 20852

Mr. G. J. McCoy
NRC Senior Resident Inspector
Surry Power Station

Mr. R. A. Smith
Authorized Nuclear Inspector
Surry Power Station

Attachment

Revised Third Interval Relief Request
Outside Recirculation Spray and Low Head Safety Injection Pumps Casing Welds
SR-004, Rev. 2

Surry Power Station Unit 2
Virginia Electric and Power Company
(Dominion)

Virginia Electric and Power Company
Surry Power Station Unit 2
Third Ten Year Interval

RELIEF REQUEST SR-004, Rev. 2

I. Identification of Components:

Systems: Recirculation Spray (RS) and Safety Injection (SI)

Components: Pump casing welds

<u>Component</u>	<u>Drawing</u>	<u>Weld No.</u>
2-RS-P-2A	11548-WMKS-RS-P-2A	Pump casing welds*
2-RS-P-2B	11548-WMKS-RS-P-2B	Pump casing welds*
2-SI-P-1A	11548-WMKS-SI-P-1A	Pump casing welds*
2-SI-P-1B	11548-WMKS-SI-P-1B	Pump casing welds*

* Welds will be visually identified and assigned weld numbers upon inspection. Drawings will be changed accordingly.

II. Code Requirements:

Section XI of the ASME Boiler and Pressure Vessel Code, 1989 Edition, Category C-G, Item Number C6.10, requires that a surface examination be performed on 100% of the welds each inspection interval. For a ten-year interval the examination can be limited to one pump in the case of multiple pumps of similar design, size, function and service in a system. The examination may be performed from either the inside or outside surface of the component.

III. Basis for Relief:

In the 1995 Edition of the ASME Section XI Code, paragraph IWC-1223 in section IWC-1220, "Components Exempt From Examination," was changed to read "Welds or portions of welds that are inaccessible due to being encased in concrete, buried underground, located inside a penetration, or encapsulated by guard pipe" in the definition of "Inaccessible Welds".

These pumps are vertical, two-stage, centrifugal pumps with an extended shaft and casing that allows suction from the containment sump. This pump casing extends subgrade for more than 40 feet. The pump column consists of bolted flange sections of pipe. Circumferential welds exist at the pipe to flange locations. The pump is suspended in a suction can container, which renders the welds inaccessible while the pump is in operational standby. Only when the pump is disassembled for maintenance do the pressure retaining casing welds become accessible.

The 1995-96, and subsequent 1998-2000, edition of the ASME Section XI Code require that a surface examination be performed on the pump casing welds only when the pump is removed from the suction can for maintenance; thus, allowing accessibility to the welds. The later edition of the code does not require disassembly of the pump for the sole purpose of performing the code specified surface examination. To remove the pumps only to perform the Section XI examination is inconsistent with the requirements of the later code edition and is considered an unnecessary burden.

IV. Proposed Alternate Examination

In accordance with 10 CFR 50.55a(g)(4)(iv), Dominion requests approval to use paragraph IWC-1223 of the 1995-96 edition of the ASME Section XI Code to perform the inspections of Category C-G pump casing welds on the Outside Recirculation Spray and Low Head Safety Injection pumps. When a pump is removed for maintenance activities, the code required surface examination of 100% of the accessible welds will be performed in accordance with Table IWC 2500-1 Category C-G, Item C6.10. Related requirements of the 1995-96 code edition regarding the Category C-G, Item C6.10 will be met.

As detailed in Note (1) of Table IWC-2500-1, examination of only one pump in a group is required per interval. Thus, when one recirculation spray pump and one safety injection pump receive examination, the ten-year interval code requirement will be met. Only one examination per pump group is required, regardless of the number of times the pumps are disassembled.

As accepted in the more recent 1995-1996, and the 1998-2000, Code editions, the proposed alternative will not compromise the overall level of plant quality and safety.