

February 12, 2007

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk

Washington, DC 20555

Serial No.:

07-0035A

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

MILLSTONE POWER STATION UNITS 2 AND 3

NORTH ANNA AND SURRY POWER STATIONS UNITS 1 AND 2

INSPECTION AND MITIGATION OF ALLOY 600/82/182 PRESSURIZER BUTT WELDS

REISSUANCE OF JANUARY 31, 2007 LETTER

In a January 31, 2007 letter (Serial No. 07-0035), DEK, DNC and Dominion submitted their plans for inspection and mitigation of Alloy 600/82/182 pressurizer butt welds. However, due to a pagination error, the electronic submittal is missing the first line of text on the second page of the cover letter. This letter provides a corrected cover letter and the original attachments. No additional commitments are made in this letter.

We are sorry for this inconvenience. If you have any questions or require additional information, please contact Mr. Thomas Shaub at (804) 273-2763.

Very truly yours,

C. L. Funderburk

Director - Nuclear Licensing and Operations Support

Dominion Resource Services, Inc. for

Dominion Energy Kewaunee, Inc.

Dominion Nuclear Connecticut, Inc.

Virginia Electric and Power Company

Attachment

Corrected January 31, 2007 letter with attachments.

cc: U. S. Nuclear Regulatory Commission

Region I
Regional Administrator
475 Allendale Road
King of Prussia, PA 19406-1415

U. S. Nuclear Regulatory Commission Region II Regional Administrator Sam Nunn Atlanta Federal Center 61 Forsyth Street, SW Suite 231-85 Atlanta, Georgia 30303

U. S. Nuclear Regulatory Commission Region III Regional Administrator 2443 Warrenville Road Suite 210 Lisle, Illinois 60532-4352

Mr. R. F. Kuntz Project Manager Kewaunee U. S. Nuclear Regulatory Commission, Mail Stop 7D1A One White Flint North 11555 Rockville Pike Rockville, MD 20852-2738

Mr. V. Nerses NRC Senior Project Manager Millstone Units 2 and 3 U. S. Nuclear Regulatory Commission, Mail Stop 8 B1 One White Flint North 11555 Rockville Pike Rockville, MD 20852-2738

Mr. S. P. Lingam NRC Project Manager North Anna and Surry U. S. Nuclear Regulatory Commission, Mail Stop 8 G9A One White Flint North 11555 Rockville Pike Rockville, MD 20852-2738 Serial No. 07-0035A Docket Nos. 50-305, 50-336/423, 50-338/339, 50-280/281 Page 3 of 3

Mr. S. C. Burton NRC Senior Resident Inspector Kewaunee Power Station

Mr. S. M. Schneider NRC Senior Resident Inspector Millstone Power Station

Mr. J. T. Reece NRC Senior Resident Inspector North Anna Power Station

Mr. N. P. Garrett NRC Senior Resident Inspector Surry Power Station

ATTACHMENT

CORRECTED JANUARY 31, 2007 LETTER WITH ATTACHMENTS INSPECTION AND MITIGATION OF ALLOY 600/82/182 PRESSURIZER BUTT WELDS

(SERIAL NO. 07-0035A)

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



January 31, 2007

U.S. Nuclear Regulatory Commission

ATTN: Document Control Desk

Washington, DC 20555

Serial No.:

07-0035

NL&OS/ETS:

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Docket Nos.:

50-305

50-336/423 50-338/339

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DPR-43

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DOMINION ENERGY KEWAUNEE INC. (DEK)

DOMINION NUCLEAR CONNECTICUT, INC. (DNC)

VIRGINIA ELECTRIC AND POWER COMPANY (DOMINION)

KEWAUNEE POWER STATION

MILLSTONE POWER STATION UNITS 2 AND 3

NORTH ANNA POWER STATION UNITS 1 AND 2

SURRY POWER STATION UNITS 1 AND 2

INSPECTION AND MITIGATION OF ALLOY 600/82/182 PRESSURIZER BUTT

WELDS

In October of 2006, while performing inspections of its pressurizer Alloy 82/182 butt welds in accordance with MRP-139, a PWR licensee discovered several circumferential indications in its pressurizer surge, safety and relief nozzles. Because of the potential importance of this issue, DEK, DNC, and Dominion are committing to the following actions taken or planned for inspecting or mitigating Alloy 600/82/182 butt welds on pressurizer spray, surge, safety and relief lines.

The pressurizer spray, surge, safety and relief nozzles at Surry Power Station Units 1 and 2 and Kewaunee Power Station do not have Alloy 600/82/182 butt welds. Future inspections of butt welds in pressurizer spray, surge, safety and relief nozzles at Surry and Kewaunee will be performed in accordance with the requirements outlined in 10CFR50.55a implemented through the NRC reviewed and approved inservice inspection plans. The inservice inspection plans are based upon the requirements in the 1998 Edition through 2000 Addenda of Section XI of the ASME Boiler and Pressure Vessel Code.

The pressurizer at Millstone Power Station Unit 2 (MPS 2) has been replaced with a component that uses materials (i.e., stainless steel nozzle safe ends and weld material) resistant to stress corrosion cracking. This replacement occurred during the Millstone

Unit 2 refueling outage (M2-RF-17) in the fall of 2006. Future inspections of butt welds in pressurizer spray, surge, safety and relief nozzles at MPS 2 will be performed in accordance with requirements outlined in 10CFR50.55a implemented through the NRC reviewed and approved inservice inspection plans. The inservice inspection plans are based upon requirements in the 1989 Edition of Section XI of the ASME Boiler and Pressure Vessel Code.

Pressurizer Alloy 600/82/182 butt welds at Millstone Power Station Unit 3 (MPS 3) and North Anna Power Station Units 1 and 2 (NAPS 1 and 2) have been inspected. A weld overlay of one spray nozzle at MPS3 was completed during the last refueling outage. Details concerning the locations inspected and results are provided in the attachments to this letter. DNC and Dominion intend to complete mitigation activities on these locations during the spring 2007 refueling outages for MPS 3 and NAPS 2 and the fall 2007 refueling outage for NAPS 1. Future inspections of pressurizer butt welds at MPS 3 and NAPS 1 and 2 will be performed as described in the following relief requests: IR-2-47 for MPS 3 (Serial No. 06-731 dated October 17, 2006) and CMP-022 for NAPS 1 and CMP-023 for NAPS 2 (Serial No. 06-1007, dated January 3, 2007), and subsequent NRC approved revisions to these relief requests. The results of these future inspections or mitigation of pressurizer Alloy 600/82/182 butt weld locations will be reported to the NRC within 60 days of startup from the outage during which they were performed.

In addition to the inspection and mitigation actions described above, MPS 3 and NAPS 1 and 2 will continue to maintain a heightened sensitivity to primary system leakage until all Alloy 600/82/182 butt weld locations on the pressurizer have been inspected or mitigated on each unit. The procedures/methods used for leak detection are identified in the attachments to this letter.

Prior to the scheduled mitigation activities, if MPS 3 and NAPS 1 and 2 should shut down due to excessive unidentified primary system leakage and if the leakage cannot be confirmed to originate from a source other than the pressurizer, a bare metal visual examination of Alloy 600/82/182 butt weld locations on the pressurizer will be performed to determine whether the leakage originated at those locations.

In light of the planned mitigation schedule, the existing guidance and heightened sensitivity to primary system leakage provide adequate assurance that structural integrity will be maintained and that primary system pressure boundary leakage will be discovered in a timely manner.

Consistent with our Commitment Management Program, the NRC will be informed prior to revising the commitment related information contained in this letter regarding inspection and mitigation activities for MPS 3 or NAPS 1 and 2.

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

Very truly yours,

David A. Christian
Senior Vice President - Nuclear Operations and
Chief Nuclear Officer
Dominion Energy Kewaunee, Inc.
Dominion Nuclear Connecticut, Inc.
Virginia Electric and Power Company

Attachments

- 1. DNC Millstone Power Station Unit 3 Alloy 82/182 Pressurizer Butt Welds
- 2. Dominion North Anna Units 1 and 2 Alloy 82/182 Pressurizer Butt Welds
- 3. Commitment Summary
- cc: U. S. Nuclear Regulatory Commission Region 1 Regional Administrator 475 Allendale Road King of Prussia, PA 19406-1415

U. S. Nuclear Regulatory Commission Region II Regional Administrator Sam Nunn Atlanta Federal Center 61 Forsyth Street, SW Suite 231-85 Atlanta, Georgia 30303

U. S. Nuclear Regulatory Commission Region III Regional Administrator 2443 Warrenville Road Suite 210 Lisle, Illinois 60532-4352 Mr. R. F. Kuntz Project Manager Kewaunee U. S. Nuclear Regulatory Commission, Mail Stop 7D1A One White Flint North 11555 Rockville Pike Rockville, MD 20852-2738

Mr. V. Nerses
NRC Senior Project Manager Millstone Units 2 and 3
U. S. Nuclear Regulatory Commission, Mail Stop 8 B1
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738

Mr. S. P. Lingam NRC Project Manager North Anna and Surry U. S. Nuclear Regulatory Commission, Mail Stop 8 G9A One White Flint North 11555 Rockville Pike Rockville, MD 20852-2738

Mr. S. C. Burton NRC Senior Resident Inspector Kewaunee Power Station

Mr. S. M. Schneider NRC Senior Resident Inspector Millstone Power Station

Mr. J. T. Reece NRC Senior Resident Inspector North Anna Power Station

Mr. N. P. Garrett NRC Senior Resident Inspector Surry Power Station

ATTACHMENT 1 DOCKET NO. 50-423

INSPECTION AND MITIGATION OF ALLOY 82/182 PRESSURIZER BUTT WELDS

(SERIAL NO. 07-0035)

DOMINION CONNECTICUT NUCLEAR, INC. MILLSTONE POWER STATION UNIT 3

MILLSTONE UNIT 3

Inspection and Mitigation Summary for Alloy 600/82/182 Pressurizer Butt Welds
No credit was taken for MRP-139 inspection requirements. The examinations performed in M3-R-10 were done to meet the
Licensee's commitment to NRC Bulletin 2004-01.

Nozzle		MRP-139 Volumetric Inspection Requirement Met ⁽¹⁾		Mitigation to be Completed	Comments	
Function / Susceptible Material Designation Description		Outage Completion Designation Date		Outage Designation		
Weld No. 03-X- 5551-X-T:14-inch RCS Safe End-To- Surge Nozzle and adjacent Safe End- To-Pipe (Weld No. RCS-SL-FW-4)	Alloy 82/182Full PenetrationNo stress reliefButter weld	M3-R-10	Fall 2005	M3-R-11 Spring 2007	Profile data was taken on the safe end- to-nozzle weld to determine inspectability.	
Weld No. 03-X- 5644-A-T: 6-inch Safety Nozzle-To- Safe End Weld at 81º Azimuth and adjacent Safe End- To- Pipe (Weld No. RCS-516-FW-1)	Alloy 82/182Full PenetrationNo stress reliefButter weld	M3-R-10	Fall 2005	M3-R-11 Spring 2007	Essentially 100% coverage for axial indications was performed with a PDI UT and RT performed to ensure coverage for circumferential indications due to the as-found field condition weld crown. The adjacent weld was not examined.	

Nozzle		MRP-139 Volumetric Inspection Requirement Met ⁽¹⁾		Mitigation to be Completed	Comments	
Function / Designation	Susceptible Material Description	Outage Designation	Completion Date	Outage Designation	Comments	
Weld No. 03-X- 5648-B-T: 6-inch Safety Nozzle-To- Safe End Weld at 147º Azimuth and adjacent Safe End- To-Pipe (Weld No. RCS-516-FW-3)	 Alloy 82/182 Full Penetration No stress relief Butter weld 	M3-R-10	Fall 2005	M3-R-11 Spring 2007	Essentially 100% coverage for axial indications was performed with a PDI UT and RT performed to ensure coverage for circumferential indications due to the as-found field condition weld crown. The adjacent weld was not examined.	
Weld No. 03-X- 5649-C-T: 6-inch Safety Nozzle-To- Safe End Weld at 212º Azimuth and adjacent Safe End- To-Pipe (Weld No. RCS-516-FW-5)	 Alloy 82/182 Full Penetration No stress relief Butter weld 	M3-R-10	Fall 2005	M3-R-11 Spring 2007	Essentially 100% coverage for axial indications was performed with a PDI UT and RT performed to ensure coverage for circumferential indications due to the as-found field condition weld crown. The adjacent weld was not examined.	
Weld No. 03-X- 5650-D-T: 6-inch Relief Nozzle-To- Safe End Weld at 278º Azimuth and adjacent Safe End- To-Pipe (Weld No. RCS-513-FW-1)	 Alloy 82/182 Full Penetration No stress relief Butter weld 	M3-R-10	Fall 2005	M3-R-11 Spring 2007	Essentially 100% coverage for axial indications was performed with a PDI UT and RT performed to ensure coverage for circumferential indications due to the as-found field condition weld crown. The adjacent weld was not examined.	

Nozzle		MRP-139 Volumetric Inspection Requirement Met ⁽¹⁾		Mitigation to be Completed	Comments
Function / Designation	Susceptible Material Description	Outage Designation	Completion Date	Outage Designation	Comments
Weld No. 03-X-5641-E-T: 6-inch Relief Nozzle-To-Safe End Weld and adjacent Safe End-To-Pipe (Weld No. RCS-517-FW-12)	 Alloy 82/182 Full Penetration No stress relief Butter weld 	M3-R-10	Fall 2005	Completed M3-R-10	Examination of the nozzle to safe end weld had no reportable indications with a PDI UT. The UT examination was performed for axial indications only. RT was performed to ensure coverage for circumferential indications due to the as-found field condition weld crown. This examination revealed circumferential indications which led to machining the weld flat and performing an automated UT which achieved 100% coverage for indications in both directions. Indications, which were evaluated as fabrication flaws (not connected to the ID), were detected and these flaws ran essentially 360 degrees around in the circumferential direction. The weld and the adjacent weld were weld overlay repaired and a manual PDI baseline UT of the weld overlay was performed with no reportable indications.

⁽¹⁾ No credit was taken for MRP-139 inspection requirements. The examinations performed in M3-R-10 were done to meet the Licensee's commitment to NRC Bulletin 2004-01.

RCS Leakage Monitoring

The Millstone Power Station Reactor Coolant System (RCS) Leakage Management Program monitors RCS leakage at a very low threshold. While the Millstone Unit 3 Technical Specifications establish allowable leakage limits, the Millstone Power Station monitoring thresholds are established to ensure that the Technical Specification requirements are not challenged.

RCS leakage monitoring procedure (SP 3601F.6) is currently performed daily (TS SR 4.4.6.2.1.d requirement is once per 72 hours during steady state operation). The leakage rate procedure utilizes an RCS water inventory balance to determine identified and unidentified RCS leakage rate values. This leakage is trended using a database program in accordance with C OP 200.15, RCS Leakage Trending and Investigation. Action levels in C OP 200.15 are established to identify 1) 9 consecutive leakage rates above the 90 day running average, 2) 2 out of 3 consecutive unidentified leakage rates above the 90 day running average plus two standard deviation value, 3) any single unidentified leakage rate greater than the 90 day running average plus three standard deviations. The trending program provides three-month graphs identifying each action level and the daily RCS leakage values. The requirements for exceeding these action levels include checking various independent indications to confirm a leak, writing a Condition Report (CR), and walkdowns outside/inside containment.

In addition to a primary system leakage calculation, the containment sump level monitoring and containment gaseous/particulate radiation monitoring instrumentation are also available for detection of RCS leakage (TS 3.4.6.1). The containment sump inleakage rate and the radiation monitor readings are logged regularly by Operations and included in the trending database program. This program provides 90 day graphs for containment sump leakage and containment gaseous/particulate radiation monitoring readings. Operations plots and evaluates the daily TS value against the containment inleakage 90 day running average and the 7 day average monitor reading. The STA also monitors RCS leakage and sump in-leakage as part of normal daily functions. In addition, real time sump level, sump in-leakage rate, and radiation monitor instrumentation readings are available on the plant computer system for historical/trending purposes.

ATTACHMENT 2 DOCKET NOS.: 50-338/339

INSPECTION AND MITIGATION OF ALLOY 82/182 PRESSURIZER BUTT WELDS

(SERIAL NO. 07-0035)

VIRGINIA ELECTRIC AND POWER COMPANY NORTH ANNA POWER STATION UNITS 1 AND 2

NORTH ANNA UNITS 1 AND 2

Inspection-Summary for Alloy 600/82/182 Pressurizer Butt Welds North Anna Unit 1

Inspection Scope	Outage/ Date Examined*	Method Used	PDI Qualification	Coverage Obtained	Limitations Encountered	Findings
Surge SW-51	N1-R-17/Fall 2004	UT	No	65%	Limitation due to proximity of nozzle taper to weld for nozzle side access and transition between the nozzle and safeend which limits search unit contact from the safe-end side of the weld.	No Recordable Indications
Safety SW-30	N1-R-17/Fall 2004	UT	No	65%	Limitation due to proximity of nozzle taper to weld for nozzle side access and transition between the nozzle and safeend which limits search unit contact from the safe-end side of the weld.	No Recordable Indications
Safety SW-31	N1-R-17/Fall 2004	UT	No	64%	Limitation due to proximity of nozzle taper to weld for nozzle side access and transition between the nozzle and safeend which limits search unit contact from the safe-end side of the weld.	No Recordable Indications
Safety SW-38	N1-R-17/Fall 2004	UT	No	63%	Limitation due to proximity of nozzle taper to weld for nozzle side access and transition between the nozzle and safeend which limits search unit contact from the safe-end side of the weld.	No Recordable Indications
Relief SW-64	N1-R-17/Fall 2004	UT	No	63%	Limitation due to proximity of nozzle taper to weld for nozzle side access and transition between the nozzle and safeend which limits search unit contact from the safe-end side of the weld.	No Recordable Indications
Spray SW-71	N1-R-17/Fall 2004	UT	No	73%	Limitation due to proximity of nozzle taper to weld for nozzle side access and transition between the nozzle and safeend which limits search unit contact from the safe-end side of the weld.	No Recordable Indications

^{*} MRP-139 Volumetric Inspection Requirement Not Met.

Mitigation Summary for Alloy 600/82/182 Pressurizer Butt Welds North Anna Unit 1

		Mitigation to be Completed				
Function / Designation	Material		Comments			
Surge SW-51	Nozzle-to-safe end weld	N1-R-19 Fall 2007	14-inch RCS Safe End Reducer-To-Surge Nozzle Weld and adjacent Pipe-to-Safe End Reducer Weld No. 39 (Pipe Identifier 14-RC-10-2501R-Q1)			
Safety SW-30	Nozzle-to-safe end weld	N1-R-19 Fall 2007	6-inch Safe End-to-Safety Nozzle-Weld and adjacent Elbow-to-Safe End Weld No. 21 (Pipe Identifier 6-RC-38-1502-Q1) • Alloy 82/182 • Full Penetration, Butter weld • Butter heat treated with nozzle			
Safety SW-31	Nozzle-to-safe end weld	N1-R-19 Fall 2007	6-inch Safe End-to-Safety Nozzle-Weld and adjacent Elbow-to-Safe End Weld No.17 (Pipe Identifier 6-RC-39-1502-Q1) • Alloy 82/182 • Full Penetration, Butter weld • Butter heat treated with nozzle			
Safety SW-38	Nozzle-to-safe end weld	N1-R-19 Fall 2007	6-inch Safe End-to-Safety Nozzle-Weld and adjacent Elbow-to-Safe End Weld No.25 (Pipe Identifier 6-RC-37-1502-Q1) • Alloy 82/182 • Full Penetration, Butter weld • Butter heat treated with nozzle			
Relief SW-64	Nozzle-to-safe end weld	N1-R-19 Fall 2007	6-inch Safe End-to-Relief Nozzle-Weld and adjacent 6X4 Concentric Reducer-to-Safe End Weld No. 30 (Pipe Identifier 4-RC-34-1502-Q1) • Alloy 82/182 • Full Penetration, Butter weld • Butter heat treated with nozzle			
Spray SW-71	Nozzle-to-safe end weld	N1-R-19 Fall 2007	 4-inch Safe End-to-Spray Nozzle-Weld and adjacent Pipe-to-Safe End Weld No. 11 (Pipe Identifier 4-RC-15-1502-Q1) Alloy 82/182 Full Penetration, Butter weld Butter heat treated with nozzle 			

Inspection-Summary for Alloy 600/82/182 Pressurizer Butt Welds North Anna Unit 2

Inspection Scope	Outage/ Date Examined*	Metho d Used	PDI Qualification	Coverage Obtained	Limitations Encountered	Findings
Surge SW-5	N2-R-17/Fall 2005	UT	Yes Supplement 10	75%	Limitation due to proximity of nozzle taper to weld for nozzle side access and transition between the nozzle and safeend which limits search unit contact from the safe-end side of the weld.	No Recordable Indications
Safety SW-6	N2-R-17/Fall 2005	UT	Yes Supplement 10	51%	Limitation due to proximity of nozzle taper to weld for nozzle side access and transition between the nozzle and safeend which limits search unit contact from the safe-end side of the weld.	No Recordable Indications
Safety SW-9	N2-R-17/Fall 2005	UT	Yes Supplement 10	63.5%	Limitation due to proximity of nozzle taper to weld for nozzle side access and transition between the nozzle and safeend which limits search unit contact from the safe-end side of the weld.	No Recordable Indications
Safety SW-17	N2-R-17/Fall 2005	UT	Yes Supplement 10	53%	Limitation due to proximity of nozzle taper to weld for nozzle side access and transition between the nozzle and safeend which limits search unit contact from the safe-end side of the weld.	No Recordable Indications
Relief SW-40	N2-R-17/Fall 2005	UT	Yes Supplement 10	45.5%	Limitation due to proximity of nozzle taper to weld for nozzle side access and transition between the nozzle and safeend which limits search unit contact from the safe-end side of the weld.	No Recordable Indications
Spray SW-62	N2-R-17/Fall 2005	UT	Yes Supplement 10	86.5%	Limitation due to proximity of nozzle taper to weld for nozzle side access and transition between the nozzle and safeend which limits search unit contact from the safe-end side of the weld.	No Recordable Indications

^{*} MRP-139 Volumetric Inspection Requirement Not Met.

Mitigation Summary for Alloy 600/82/182 Pressurizer Butt Welds North Anna Unit 2

Nozzle		Mitigation to be Completed	Comments		
Function / Designation	Matarial				
Surge SW-5	Nozzle-to-safe end weld	N2-R-18 Spring 2007	14-inch RCS Safe End Reducer-To-Surge Nozzle Weld and adjacent Pipe-to-Safe End Reducer Weld No. 1 (Pipe Identifier 14-RC-410-2501R-Q1)		
Safety SW-6	Nozzle-to-safe end weld	N2-R-18 Spring 2007	6-inch Safe End-to-Safety Nozzle-Weld and adjacent Elbow-to-Safe End Weld No. 1 (Pipe Identifier 6-RC-437-1502-Q1) • Alloy 82/182 • Full Penetration, Butter weld • Butter heat treated with nozzle		
Safety SW-9	Nozzle-to-safe end weld	N2-R-18 Spring 2007	6-inch Safe End-to-Safety Nozzle-Weld and adjacent Elbow-to-Safe End Weld No. 1 (Pipe Identifier 6-RC-438-1502-Q1) • Alloy 82/182 • Full Penetration, Butter weld • Butter heat treated with nozzle		
Safety SW-17	Nozzle-to-safe end weld	N2-R-18 Spring 2007	6-inch Safe End-to-Safety Nozzle-Weld and adjacent Elbow-to-Safe End Weld No. 1 (Pipe Identifier 6-RC-439-1502-Q1) • Alloy 82/182 • Full Penetration, Butter weld • Butter heat treated with nozzle		
Relief SW-40	Nozzle-to-safe end weld	N2-R-18 Spring 2007	6-inch Safe End-to-Relief Nozzle-Weld and adjacent 6X4 Concentric Reducer-to-Safe End Weld No. 1 (Pipe Identifier 4-RC-434-1502-Q1) • Alloy 82/182 • Full Penetration, Butter weld • Butter heat treated with nozzle		
Spray SW-62	Nozzle-to-safe end weld	N2-R-18 Spring 2007	 4-inch Safe End-to-Spray Nozzle-Weld and adjacent Pipe-to-Safe End Weld No. 42 (Pipe Identifier 4-RC-415-1502-Q1) Alloy 82/182 Full Penetration, Butter weld Butter heat treated with nozzle 		

RCS Leakage Monitoring Activities

The North Anna Reactor Coolant System (RCS) Leakage Management Program monitors RCS leakage at a very low threshold. While the North Anna Technical Specifications specifies that NO pressure boundary leakage is acceptable and that up to 1 gpm is allowed as unidentified leakage, the North Anna monitoring thresholds are established to ensure that the Technical Specification requirements are not challenged.

RCS leakage monitoring procedures (1/2-PT-52.2/52.2A) are currently performed daily (TS SR 3.4.13.1 requirement is once per 72 hours). The leakrate procedures utilize an RCS water inventory balance to determine total, identified, and unidentified RCS leakrate values. Action levels within the leakrate procedures are set to identify 1) a slight change to the leakrate baseline or an adverse trend in RCS leakrate, 2) a doubling of the unidentified leakrate above the baseline coincident with a value greater than 0.05 gpm, 3) an increase of 0.20 gpm above the baseline, and 4) any unidentified leakrate above 0.20 gpm. Follow-on actions for exceeding these action levels include walkdowns outside/inside containment, operations manager on call (OMOC) notification, and/or evaluate implementing the Operational Decision Making process.

In addition, NAPS System Engineering has established monitoring thresholds for unidentified RCS leakage to identify 1) 9 consecutive unidentified leakrates above the 3 month average, 2) 2 out of 3 consecutive unidentified leakrates above the 3 month average plus two standard deviations, and 3) any single unidentified leakrate greater than the 3 month average plus three standard deviations. A Condition Report (CR) is submitted when any monitoring threshold has been crossed.

In addition to primary system leakage calculation, the containment sump level monitoring and containment gaseous/particulate radiation monitoring instrumentation are also available for detection of RCS leakage (TS 3.4.15). The containment sump inleakage rate and the radiation monitor readings are 1) logged regularly by the Operations and 2) included in a narrative log entry that documents the results of the RCS leakage determination procedure. The STA is required to monitor the containment sump inleakage rate each shift for changes. Sump level, sump inleakage rate, and radiation monitor instrumentation readings are available on the plant computer system, for historical/trending purposes.

Serial No. 07-0035 Docket Nos. 50-338/339 Attachment 3

ATTACHMENT 3

DOCKET NOS. 50-423, 50-338/339

COMMITMENT SUMMARY

INSPECTION AND MITIGATION OF ALLOY 82/182 PRESSURIZER BUTT WELDS

(SERIAL NO. 07-0035)

DOMINON NUCLEAR CONNECTICUT, INC. VIRGINIA ELECTIC AND POWER COMPLANY MILLSTONE UNIT 3 NORTH ANNA UNITS 1 AND 2

COMMITMENT SUMMARY INSPECTION AND MITIGATION OF ALLOY 82/182 PRESSURIZER BUTT WELDS

	Т	уре	Scheduled
Commitment	One-Time Action	Continuing Compliance	Completion Date (If Required)
DNC will complete the mitigation activities described by this letter on the Alloy 600/82/182 Pressurizer Butt Welds during the spring 2007 refueling outage for MPS 3.	X		M3-R-11 Spring 2007
Dominion will complete the mitigation activities described by this letter on the Alloy 600/82/182 Pressurizer Butt Welds during the spring 2007 refueling outage for NAPS 2.	X		N2-R-18 Spring 2007
Dominion will complete the mitigation activities described by this letter on the Alloy 600/82/182 Pressurizer Butt Welds during the fall 2007 refueling outage for NAPS 1.	X		N1-R-19 Fall 2007
In addition to the inspection and mitigation actions described above, MPS-3 and NAPS 1 and 2 will continue to have a heightened sensitivity to primary system leakage until all Alloy 600/82/182 butt weld locations on the pressurizer have been inspected or mitigated on each unit.		x	
Prior to the scheduled mitigation activities, if MPS 3 and NAPS 1 and 2 shut down due to excessive unidentified primary system leakage and if the leakage cannot be confirmed to originate from a source other than the pressurizer, a bare metal visual examination of Alloy 600/82/182 butt weld locations on the pressurizer will be performed to determine if the leakage originated at those locations.		X	
Future inspections of pressurizer butt welds at MPS 3 and NAPS 1 and 2 will be performed as described in relief requests: IR-2-47 for MPS 3 (Serial No. 06-731 dated October 17, 2006) and CMP-022 for NAPS 1 and CMP-023 for NAPS 2 (Serial No. 06-1007, dated January 3, 2007) and subsequent approved revisions by the NRC.		X	
The results of future inspections or mitigation of pressurizer Alloy 600/82/182 butt weld locations at MPS 3 and NAPS 1 and 2 will be reported to the NRC within 60 days of startup from the outage during which they were performed.		x	