



March 1, 2007

U.S. Nuclear Regulatory Commission  
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Serial No.: 07-0035C  
NL&OS/PRW: R0  
Docket No.: 50-423  
License No.: NPF-49

**DOMINION NUCLEAR CONNECTICUT, INC.**  
**MILLSTONE POWER STATION UNIT 3**  
**REVISED ACTIONS FOR THE INSPECTION AND MITIGATION OF**  
**ALLOY 82/182 PRESSURIZER BUTT WELDS**

In a letter dated January 31, 2007 (Serial No. 07-0035), Dominion Nuclear Connecticut, Inc. (DNC) submitted plans for inspection and mitigation of Alloy 82/182 pressurizer butt welds at Millstone Power Station Unit 3 (MPS3). The letter also included compensatory actions until the welds were mitigated. In a February 22, 2007 phone call with DNC, the NRC discussed DNC's commitments and compensatory actions. The NRC staff requested that DNC implement specific reactor coolant system (RCS) leakage action levels and other actions until mitigation is complete. This letter provides the information requested by the NRC, as well as summarizes DNC's commitments associated with the inspection and mitigation of Alloy 82/182 pressurizer butt welds. The actions and commitments in this letter supercede the actions and commitments identified in DNC's January 31, 2007 letter.

As stated in the January 31, 2007 letter, DNC replaced the MPS2 pressurizer during the fall 2006 refueling outage with a component that uses materials (i.e., stainless steel nozzle safe ends and weld material) resistant to stress corrosion cracking. Future inspections of butt welds in pressurizer spray, surge, safety valve and relief valve nozzles at MPS2 will be performed in accordance with requirements outlined in 10 CFR 50.55a 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.

**Butt Weld Mitigation**

DNC will complete mitigation activities on the MPS3 pressurizer Alloy 82/182 butt welds during the spring 2007 refueling outage for MPS3.

### **Leakage Monitoring**

DNC will perform daily monitoring of RCS leakage in Modes 1, 2, and 3 for MPS3 until mitigation of the unmitigated pressurizer butt welds has been completed. The following RCS unidentified leakage rate action levels will be implemented:

- 0.25 gpm unidentified leakage rate above a baseline sustained for 72 hours with at least 0.25 gpm of the change not confirmed from sources other than the pressurizer nozzle welds.

The value assigned as the baseline RCS leakage rate will be established using RCS leak rate information collected during the first seven (7) days of steady state full power operation following the most recent bare metal visual examination of the MPS3 pressurizer Alloy 82/182 butt welds.

- 0.1 gpm unidentified leakage rate change from one day\* to the next sustained for 72 hours with at least 0.1 gpm of the change not confirmed from sources other than the pressurizer nozzle welds.

\*The daily leakage rate measurement may be compared to the previous 7 days steady state average to establish the magnitude of the change.

RCS leak rate measurements taken from stable plant conditions will be utilized to establish leak rate values described above. Measurements obtained during plant transient conditions will not be used to quantify RCS leak rate for comparison to action level criteria.

### **Required Actions**

DNC will take the following actions based on RCS leak rate monitoring. If the RCS leakage remains above the baseline or daily action levels for 72 hours, and the leakage is not confirmed to be from sources other than the pressurizer nozzle welds, MPS3 will be placed in Mode 3 within 6 hours and Mode 5 within the next 36 hours and a bare metal visual inspection will be performed on unmitigated pressurizer surge, spray, safety valve and relief valve nozzle butt welds and safe end butt welds containing Alloy 82/182 material.

### **Reporting Expectation**

If MPS3 is shutdown due to increased unidentified leakage, DNC will report any subsequent bare metal visual inspection results of the pressurizer nozzle butt welds and safe end butt welds containing Alloy 82/182 material within 60 days of unit restart. Further, DNC will report within 60 days of any unit restart any 1) inspection results of unmitigated weld examinations or 2) corrective or mitigative actions taken on pressurizer nozzle and safe end butt welds scheduled for mitigation in 2007.

Until mitigation is complete, DNC will notify the NRC in writing prior to any change made to the above commitments. These commitments will remain in effect until pressurizer surge, spray, safety valve and relief valve nozzle butt welds and safe end butt welds containing Alloy 82/182 material are mitigated.

If you have any questions or require additional information, please contact Mr. Paul R. Willoughby at (804) 273-3572.

Very truly yours,

A handwritten signature in black ink, appearing to read 'D. Christian', with a long horizontal flourish extending to the right.

David A. Christian  
Senior Vice President - Nuclear Operations and  
Chief Nuclear Officer

Attachment: Commitment Summary

cc: U.S. Nuclear Regulatory Commission  
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Mr. S. M. Schneider  
NRC Senior Resident Inspector  
Millstone Power Station

**ATTACHMENT**

**REVISED ACTIONS FOR THE INSPECTION AND MITIGATION OF  
ALLOY 82/182 PRESSURIZER BUTT WELDS**

**COMMITMENT SUMMARY**

**DOMINION NUCLEAR CONNECTICUT, INC.  
MILLSTONE POWER STATION UNIT 3**

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

Commitment	Type		Scheduled Completion Date (If Required)
	One-Time Action	Continuing* Compliance	
DNC will complete the mitigation activities of Alloy 82/182 pressurizer butt welds during the spring 2007 refueling outage for MPS3.	X		<b>M3-R-11 Spring 2007</b>
DNC will implement the unidentified RCS leakage action limits and required actions as described in this letter. The limits and actions will remain in effect until the unmitigated pressurizer surge, spray, safety valve and relief valve nozzle butt welds, and safe end butt welds containing Alloy 82/182 are mitigated.		X	
If MPS3 is shutdown due to increased unidentified RCS leakage above the specified action levels, DNC will report any subsequent bare metal visual inspection results of the pressurizer nozzle butt welds and safe end butt welds containing Alloy 82/182 material within 60 days of unit restart.		X	
DNC will report the results of corrective or mitigation actions of pressurizer Alloy 82/182 butt weld locations at MPS3 to the NRC within 60 days of startup from the outage during which they were performed.		X	
DNC will notify the NRC in writing prior to any changes made to the above commitments.		X	

\* The continuing commitments will remain in effect until pressurizer surge, spray, safety valve and relief valve nozzle butt welds and safe end butt welds containing Alloy 82/182 material are mitigated.