

August 27, 2002

MEMORANDUM TO: File

FROM: Omid Tabatabai, Project Manager **/RA/**  
License Renewal Section  
License Renewal and Environmental Impacts Program  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation

SUBJECT: DOMINION'S ADDITIONAL INFORMATION ON DISSIMILAR METAL  
WELD CRACKING (V.C. SUMMER EVENT)

On August 20, 2002, Tom Snow of Virginia Electric and Power Company (VEPCo) transmitted an electronic mail (e-mail) to Omid Tabatabai and provided additional information related to dissimilar metal weld cracking (V.C. Summer event). VEPCo's e-mail is attached to this memo.

Attachment: As Stated

cc: PUBLIC  
Docket Nos. 50-338, 50-339, 50-280, and 50-281

**Accession No.: ML022390432**

**From:** <Tom\_Snow@dom.com>  
**To:** <OTY@nrc.gov>  
**Date:** 8/20/02 1:43PM  
**Subject:** Additional Information Related to Dissimilar Metal Weld Cracking (V.C. Summer event)

Omid,

One of the issues that we discussed at our meeting with you on August 8, as a result of the ACRS questions, was Dominion's evaluation of dissimilar metal weld cracking at the V.C. Summer plant. The following text provides some additional information on that topic.

The weld area cracking that was observed in the reactor coolant system (RCS) hot leg piping at the V.C. Summer plant in 2000 was summarized in NRC Information Notice 2000-17. Dominion used the information notice and other operating experience reports provided by INPO to evaluate the potential impact for Surry and North Anna. No response to the NRC was required for the Information Notice.

The event at the V.C. Summer plant resulted from the use of dissimilar metal welds. While dissimilar metal welds are not used on the hot leg or cold leg piping at Surry and North Anna, there are other locations within the boundary of the RCS in which dissimilar metal welds are present. In order to ensure that possible leakage at the dissimilar metal piping weld locations is detected, particularly if insulation is present, the ACRS asked during the review of License Renewal for Surry and North Anna how such leakage would be detected.

Dominion remains committed to the requirements of ASME Section XI, Subsection IWA-5000, which specifies hold times during hydrostatic testing. For insulated components, a hold time of four hours is required after attaining system temperature and pressure. If the component is uninsulated, the hold time is 10 minutes. Dominion will maintain compliance with the requirements of IWA -5000.

Similarly, Dominion plans to achieve compliance with ASME Section XI, Appendix VIII, Supplement 10 which identifies new requirements to be implemented by November 22, 2002. These requirements describe updated qualification blocks and personnel qualification for examining dissimilar metal welds.

Dominion also continues its involvement with the Materials Reliability Project, and will evaluate any new recommendations that may be developed with respect to dissimilar metal piping welds.

Tom Snow  
Dominion

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