

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

October 4, 2007

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738

Serial No. 07-0656
NLOS /ETS
Docket No. 50-338
License No. NPF-4

VIRGINIA ELECTRIC AND POWER COMPANY (DOMINION)
NORTH ANNA POWER STATION UNIT 1
RESULTS OF THE COMPLETED ALLOY 600 PRESSURIZER NOZZLE
ALTERNATIVE WELD REPAIR CMP-022R1

In a letter, dated January 3, 2007 (Serial No. 06-1007), as supplemented on March 13, 2007 (Serial No. 06-1007A), June 15, 2007 (Serial No. 07-0421), July 25, 2007 (Serial No. 07-0421A) and October 1, 2007 (Serial No. 07-0652), Dominion requested approval to use a proposed alternative to apply dissimilar metal weld overlays for repair/replacement activities associated with Alloy 600 materials. That request contained alternative requirements for the North Anna Units 1 and 2 Inservice Inspection (ISI) programs to perform full structural preemptive weld overlays (PWOLs) to mitigate the potential for primary water stress corrosion cracking (PWSCC) susceptibility for those pressurizer nozzles containing Alloy 600.

This letter documents the submittal of the above information and provides the examination results of the mitigated pressurizer nozzles for Unit 1. As stated in our relief request, Dominion committed to provide: (1) the final stress analysis for five of the weld overlays and the preliminary engineering evaluation of insurge/outsurge transients for the surge line prior to entry into Mode 4; (2) the examination results of the weld overlays, a discussion of any repairs to the overlay material and/or base material, and the reason for the repair within 14 days after the completion of the ultrasonic examination of weld overlay installations.

The proprietary version of the stress analysis for the mitigated nozzles and the preliminary engineering evaluation of insurge/outsurge transients were provided directly to Mr. S. P. Lingam of your staff on April 11, 2007 for Units 1 and 2. The non-proprietary version of the stress analysis and the insurge/outsurge evaluation were submitted as docketed correspondence on May 16, 2007 (Serial No. 06-1007B). These stress analysis reports were applicable to both Units 1 and 2. Therefore, the stress reports will not be resubmitted at this time.

Six full structural mitigative PWOLs for the pressurizer safety, spray, relief, and surge nozzles were performed during the fall 2007 refueling outages for Unit 1, in accordance with relief request CMP-022R1. The surface and volumetric examinations of the weld

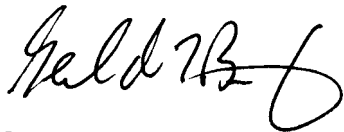
and base material were completed with no recordable indications. The acceptance examination of the PWOLs resulted in 100% coverage for all overlay weld volume. However, due to a previous weld repair during initial fabrication which changed the geometry of the nozzle on the 'A' pressurizer safety valve nozzle to safe end weld, only 99.8% of coverage for the preservice examination of the ISI examination volume was obtained. This coverage is consistent with the revision to CMP-022R1 provided to the NRC on October 1, 2007 (Serial No. 07-0652). The preservice examinations of the ISI examination volume resulted in 100% coverage for the remaining five PWOLs.

Other than the initial fabrication weld repair, no additional repairs were necessary to the weld overlay material or base metal during the installation of the PWOLs.

This letter also satisfies the 60-day notification commitments made in Dominion letter dated February 26, 2007 (Serial No. 07-0035B) and the NRC Confirmatory Action Letter dated March 29, 2007 for North Anna Unit 1.

If you have any questions regarding this submittal, please contact Mr. Thomas Shaub at (804) 273-2763.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Gerald T. Bischof', with a stylized flourish at the end.

Gerald T. Bischof
Vice President – Nuclear Engineering

Attachments: None

Commitments made in this letter: None

cc: U.S. Nuclear Regulatory Commission
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