

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

January 23, 2003

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

Serial No. 03-041
NL&OS/ETS R0
Docket Nos. 50-338/339
50-280/281
License Nos. NPF-4/7
DPR-32/37

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNITS 1 AND 2
SURRY POWER STATION UNITS 1 AND 2
RESPONSE TO NRC REQUEST FOR ADDITIONAL INFORMATION
BULLETIN 2002-02 REACTOR PRESSURE VESSEL HEAD AND VESSEL HEAD
PENETRATION NOZZLE INSPECTION PROGRAM

On August 9, 2002 the NRC issued Bulletin 2002-02, "Reactor Pressure Vessel Head And Vessel Head Penetration Nozzle Inspection Program," requesting information from all PWR addressees concerning their reactor pressure vessel (RPV) head and vessel head penetration (VHP) nozzle inspection programs to ensure compliance with applicable regulatory requirements. By letter dated September 15, 2002, Virginia Electric And Power Company (Dominion) provided a response to the Bulletin delineating the RPV head and VHP nozzle inspection plan for North Anna Unit 2 during the Fall 2002 refueling outage and committed to similar inspection plans for North Anna 1 and Surry Units 1 and 2 during their 2003 refueling outages.

By letters dated January 3, 2003, the NRC requested additional information regarding Dominion's RPV head and VHP nozzles inspection plans for North Anna Unit 1 and Surry Units 1 and 2. Specifically, the NRC requested specific information regarding 1) the RPV head and VHP nozzle inspection plans for North Anna Unit 1 and Surry Units 1 and 2 during their 2003 refueling outages and, 2) RPV head and VHP nozzle inspection plans for future refueling outages.

During the current refueling outage for North Anna Unit 2, Dominion performed inspections of the RPV head and VHP nozzles consistent with our response to NRC Bulletin 2002-02. Based on the results of those inspections and the expected dose and difficulty in reconstruction and repair of the VHP nozzles, Dominion decided to replace the Unit 2 RPV head during the current refueling outage. Based on the similarity in design, materials of construction, and operating history of North Anna Unit 2 to North Anna Unit 1 and the Surry Units 1 and 2 RPV heads, as well as the availability of replacement RPV heads, Dominion has decided to accelerate the schedule for the replacement of the RPV heads for these units. The North Anna Unit 1 and the Surry Units 1 and 2 RPV heads will be replaced during the 2003 refueling outages for each unit. Therefore, our previous response for North Anna Unit 1 and the Surry Units 1 and

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2 is hereby amended. No additional inspections will be performed on the existing North Anna Unit 1 and the Surry Units 1 and 2 RPV heads and VHP nozzles during the 2003 refueling outages.

The VHP nozzles and the attachment welds in the replacement RPV heads are constructed of materials (Alloy 690 CRDM tubes and PWSCC resistant Alloys 52/152 J groove welds) that are inherently much more resistant to primary water stress corrosion cracking (PWSCC) than Alloy 600 and Alloys 82/182. With the replacement of the RPV heads, North Anna Units 1 and 2 and Surry Units 1 and 2 will be in the least susceptible category for PWSCC [<8 effective degradation years (EDY)]. Based on this recategorization, we intend to perform a "best effort" inspection of the RPV heads and VHP nozzles consistent with the recommendations in NRC Bulletin 2002-02 for plants with less than eight EDY unless formal industry guidance supports alternate inspection scope and schedules for PWSCC resistant materials. Should additional industry information become available to justify an alternative inspection scope or frequency, we intend to reconsider the proposed future inspection plans for North Anna Units 1 and 2 and Surry Units 1 and 2 RPV heads and VHP nozzles. Any change to the North Anna or Surry RPV heads and VHP nozzles inspection scope or schedule will be communicated to the NRC.

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

Very truly yours,



Leslie N. Hartz
Vice President – Nuclear Engineering

Commitments made in this letter:

1. Perform a "best effort" inspection of the RPV head and VHP nozzles for North Anna Units 1 and 2 Surry Units 1 and 2 consistent with the recommendations in NRC Bulletin 2002-02 for plants with less than eight EDY (every 60 full power month of operation).
2. Communicate any changes to the North Anna or Surry RPV heads and VHP nozzle inspection scope or schedule to the NRC staff.

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

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SN: 03-041

Docket Nos.: 50-338/339

50-280/281

Subject: RAI - Response to NRC Bulletin 2002-02

COMMONWEALTH OF VIRGINIA)
)
COUNTY OF HENRICO)

The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by Leslie N. Hartz, who is Vice President - Nuclear Engineering, of Virginia Electric and Power Company. She has affirmed before me that she is duly authorized to execute and file the foregoing document in behalf of that Company, and that the statements in the document are true to the best of her knowledge and belief.

Acknowledged before me this 23rd day of January, 2003.

My Commission Expires: March 31, 2004.

Maggie McClure
Notary Public

