

August 23, 2005

Mr. David A. Christian  
Sr. Vice President and Chief Nuclear Officer  
Virginia Electric and Power Company  
Innsbrook Technical Center  
5000 Dominion Blvd.  
Glen Allen, Virginia 23060-6711

SUBJECT: CORRECTION TO AMENDMENT NOS. 242 AND 223, FOR NORTH ANNA  
POWER STATION (TAC NOS. MC3705 AND MC3706)

Dear Mr. Christian:

On July 8, 2005, the U.S. Nuclear Regulatory Commission (NRC) issued Amendment Nos. 242 and 223 to Renewed Facility Operating License Nos. NPF-4 and NPF-7 for the North Anna Power Station, Units 1 and 2. These amendments were in response to your application dated July 1, 2004, as supplemented by letters dated October 28, 2004, and November 16, 2004.

The amendments revised the Technical Specifications to provide new reactor coolant system pressure-temperature limit curves, low-temperature overpressure protection system (LTOPS) setpoints, and LTOPS enable temperatures that are valid for 50.3 effective full-power years (EFPY) and 52.3 EFPY of operation for North Anna, Units 1 and 2, respectively. Virginia Electric and Power Company informed the NRC staff of editorial corrections to the safety evaluation (SE) supporting the amendment. The NRC staff has resolved this by revising the appropriate section in the SE. The corrected SE page is included as an enclosure to this letter. Revisions are identified by lines in the margin.

The NRC regrets any inconvenience this may have caused. If you have any questions, please contact me at (301) 415-1157.

Sincerely,

*/RA/*

John Honcharik, Project Manager, Section 1  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-338 and 50-339

Enclosures: Page 4 of SE

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limiting ART that bounds the RPVs of both units is from the North Anna, Unit 2 lower shell forging as stated in the licensee's license renewal application dated May 29, 2001 [ADAMS Accession No. ML011500496], and supplemental information for the license renewal application dated October 15, 2002 [ADAMS Accession No. ML022960411]. These submittals documented that the limiting 1/4T RT<sub>NDT</sub> value of 218.5EF for the North Anna, Unit 2 lower shell forging heat number 990533/297355 is the bounding material for the extended period of operation for both units. The licensee also stated in its July 1, 2004, letter that reviews of the North Anna, Units 1 and 2 RPV integrity data continue to confirm the limiting material properties. The critical parameters for the licensee's ART determination for each of these locations are shown in the table below.

Material	Location	Initial RT <sub>NDT</sub> (EF)	Fluence at Inside Surface (n/cm <sup>2</sup> )	Fluence at Location (n/cm <sup>2</sup> )	Chemistry Factor <sup>(1)</sup> (EF)	ΔRT <sub>NDT</sub> (EF)	Margin <sup>(2)</sup> (EF)	ART (EF)
Lower Shell Forging 990533/297355	1/4T	56	5.91 x 10 <sup>19</sup>	3.687 x 10 <sup>19</sup>	96	128.5	34 (σ <sub>i</sub> = 0, σ <sub>Δ</sub> = 17)	218.5
Lower Shell Forging 990533/297355	3/4T	56	5.91 x 10 <sup>19</sup>	1.435 x 10 <sup>19</sup>	96	105.6	34 (σ <sub>i</sub> = 0, σ <sub>Δ</sub> = 17)	195.6

<sup>(1)</sup> No credible surveillance specimen test data is available for lower shell forging from the licensee's RPV surveillance program. Therefore, the chemistry factor for this forging was determined using RG 1.99, Rev. 2, Position 1.1.

<sup>(2)</sup> The margin term for each ART calculation was based on the establishment of initial material property uncertainty (σ<sub>i</sub>) and shift in material property uncertainty (σ<sub>Δ</sub>) consistent with the guidance in RG 1.99, Rev. 2.

The TS changes submitted by the July 1, 2004 letter, as supplemented by letters dated October 28, 2004, and November 16, 2004, include:

- A. Modified RCS P-T limit curves to include pressure and temperature measurement uncertainty, as well as pressure differences between the point of measurement (RCS hot leg) and point of interest (RPV beltline).
- B. P-T limit curves extended to 50.3 EFPY for North Anna, Unit 1 and 52.3 EFPY for North Anna, Unit 2.
- C. LTOPS setpoints and LTOPS T<sub>enable</sub> values to reflect the extended period using methodologies identical to those used for the approved current license.
- D. Common TS P-T limit curves, LTOPS setpoint allowable values, and T<sub>enable</sub> values for both units to provide consistent operational requirements.
- E. Increase in the administrative cooldown rate limit from 50EF/hr to 75EF/hr.

Enclosure

North Anna Power Station, Units 1 & 2

cc:

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