

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 15, 2009

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

SUBJECT:

NORTH ANNA POWER STATION, UNIT NO. 1, REQUEST FOR ADDITIONAL

INFORMATION REGARDING THE FOURTH INTERVAL INSERVICE

INSPECTION PLAN AND ASSOCIATED PROPOSED ALTERNATIVES AND

RELIEF REQUESTS PERTAINING TO NDE-005 (TAC NO. ME0269)

Dear Mr. Christian:

By letter dated October 7, 2008, as supplemented January 30, 2009, Virginia Electric and Power Company, (the licensee) submitted the fourth interval inservice inspection plan and associated proposed alternatives and relief requests from requirements of Section XI of the American Society of Mechanical Engineers, *Boiler and Pressure Vessel Code*, for North Anna Power Station Unit No. 1. Specifically, request NDE-005 pertains to preemptive weld overlays. The Nuclear Regulatory Commission (NRC) staff is reviewing the submittal and has determined that additional information is required to complete its evaluation regarding NDE-005.

On April 2, 2009, the NRC staff transmitted a draft Request for Additional Information (RAI) and discussed the draft RAI with your staff on April 9, 2009. Your staff agreed to provide the response by May 13, 2009. Enclosed, please find the final RAI. Please contact me at (301) 415-1864 if you have any questions.

Sincerely,

Donna N. Wright, Project Manager

Plant Licensing Branch II-1

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 50-338

Enclosure: RAI

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION

REGARDING THE FOURTH INTERVAL INSERVICE INSPECTION PLAN

AND ASSOCIATED PROPOSED ALTERNATIVES AND RELIEF REQUESTS

PERTAINING TO NDE-005

VIRGINIA ELECTRIC AND POWER COMPANY

NORTH ANNA POWER STATION, UNIT NO. 1

DOCKET NO. 50-338

By application dated October 7, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession Number ML082880160), as supplemented by letter dated January 30, 2009 (ADAMS Accession No. ML090330392), Virginia Electric and Power Company (the licensee) submitted the fourth interval inservice inspection (ISI) plan and associated proposed alternatives and relief requests from requirements of Section XI of the American Society of Mechanical Engineers, *Boiler and Pressure Vessel Code* (ASME Code), for North Anna Power Station Unit No. 1. Specifically, request NDE-005 pertains to six weld overlays that were installed during the third ISI interval. The Nuclear Regulatory Commission (NRC) staff determined that additional information is required to complete the evaluation for the request.

Request NDE-005 is similar to applications the NRC staff has reviewed that requested use of Code Case N-504-2 as conditioned to Section XI, Appendix Q in Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1." In accordance with the guidance, the NRC staff identified missing information in your request and areas in need of clarification. Please address the following questions:

- 1. Request NDE-005 states in Part A of the alternative that the relief is to continue ISIs using procedures and personnel qualified to Appendix VIII, Supplement 11, as modified by Attachment 1 of the submittal. Supplement 11 is for the examination of wrought stainless steel piping and weld overlays. Provide a description of the base material, weld/butter material, and overlay material (wrought or cast stainless steel, Inconel, carbon steel, etc.)
- 2. The alternative's examination requirements are similar to the examination requirements of Section XI, Appendix Q, for ISIs. One of the requirements is for ultrasonic examination of overlays during the first or second refueling outage following installation. Discuss whether such examinations have been performed or plans to do so in the fourth ISI interval.
- 3. Part B, Paragraph (a)(3) of NDE-005 states that, "[t]he inservice examination acceptance standards of Table IWB-3514-2 shall be met for the weld overlay. If the acceptance criteria of Table IWB-3514-2 cannot be met, the acceptance criteria of IWB-3600 shall

be met for the weld overlay. Cracks in the outer 25% of the base metal shall meet the design analysis requirements of Attachment 2, Crack Growth and Design." According to MRP-139, "Primary System Piping Butt Weld Inspection and Evaluation Guide," the weld overlay material must be resistant to stress corrosion cracking. As such, similar applications have included the phrase, "Any indication characterized as stress corrosion cracking in the weld overlay material is unacceptable." Discuss the plans for addressing stress corrosion cracking.

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Sincerely,

/RA/

Donna N. Wright, Project Manager Plant Licensing Branch II-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 50-338

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NRR-106 *transmitted by memo dated

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