

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

November 22, 2016

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

Serial No. 16-266A
NRA/DEA R0
Docket Nos.: 50-338/339
License Nos.: NPF-4/7

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNITS 1 & 2
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
PROPOSED INSERVICE INSPECTION ALTERNATIVE N1-I4-NDE-008
PROPOSED INSERVICE INSPECTION ALTERNATIVE N2-I4-NDE-003

In a July 27, 2016 letter (Serial No. 16-266), Virginia Electric and Power Company (Dominion) submitted a request for Nuclear Regulatory Commission (NRC) approval of inservice inspection (ISI) alternative N1-I4-NDE-008 and N2-I4-NDE-003. Specifically, Dominion requested to extend the interval for reactor vessel Examination Category B-A and B-D pressure retaining welds from 10 years to 20 years in accordance with WCAP-16168-NP, Risk-Informed Extension of Reactor Vessel In-Service Inspection Interval.

In an email dated November 2, 2016, the Nuclear Regulatory Commission (NRC) transmitted a request for additional information (RAI) related to inservice inspection (ISI) alternative N1-I4-NDE-008 and N2-I4-NDE-003. The response to the RAI is provided in Attachment 1.

Should you have any questions in regard to this submittal, please contact Ms. Diane E. Aitken at (804) 273-2694.

Sincerely,



Mark D. Sartain
Vice President – Nuclear Engineering

Commitments made in this letter: None

A047
NRR

Attachment:

1. Response to Request for Additional Information for Proposed Inservice Alternative N1-I4-NDE-008 and Proposed Inservice Alternative N2-I4-NDE-003

Commitments made in this letter: None.

cc: U.S. Nuclear Regulatory Commission
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North Anna Power Station

ATTACHMENT 1

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
PROPOSED INSERVICE INSPECTION ALTERNATIVE N1-I4-NDE-008
PROPOSED INSERVICE INSPECTION ALTERNATIVE N2-I4-NDE-003

Virginia Electric and Power Company (Dominion)
North Anna Power Station Units 1 and 2

Response to Request for Additional Information (RAI)
Proposed Inservice Alternative N1-I4-NDE-008
Proposed Inservice Alternative N2-I4-NDE-003

RAI:

Table 1 of both attachments state that North Anna Units 1 and 2 are bounded by 7 heatup/cooldown cycles per year. Please cite the plant design basis for heatup/cooldown cycles per year.

RAI RESPONSE:

Attachments 1 and 2 of the original Inservice Inspection Program proposed inspection alternative, dated July 27, 2016, each contained a Table 1 that listed the critical parameters investigated in WCAP-16168-NP-A and compared the results of the Westinghouse pilot plant to those of North Anna Power Station (NAPS) Units 1 and 2, respectively. The WCAP parameter, "Frequency and Severity of Design Basis Transients," in Table 1 of Attachments 1 and 2 was shown as, "Bounded by 7 heatup/cooldown cycles per year," for NAPS Units 1 and 2, respectively.

Seven heatup/cooldown cycles per year was the bounding criteria used in WCAP-16168-NP-A, and corresponds to the bounding criteria all Westinghouse plants must meet. Dominion does not have a plant specific design basis for heatup/cooldown cycles per year.

WCAP-16168-NP-A specifies a limit of 200 transient (heatup/cooldown) cycles as the design basis for the Westinghouse pilot plant. The NAPS design basis for plant heatup/cooldown cycles is identical to the Westinghouse pilot plant from WCAP-16168-NP-A; a limit of 200 heatup/cooldown cycles. As indicated in the WCAP, "it is unlikely that most plants will reach 200 design transients by end of life (80 years) based on operational histories".

Operational data as of November 3, 2016, indicates NAPS Unit 1 has had 58 heatups and 57 cooldowns of the reactor coolant system, and NAPS Unit 2 has had 54 heatups and 53 cooldowns of the reactor coolant system.