

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

June 13, 2022

10 CFR 50.90

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

Serial No.: 22-191
NRA/GDM: R0
Docket Nos.: 50-280/281
License Nos.: DPR-32/37

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
PROPOSED LICENSE AMENDMENT REQUEST
REMOVAL OF REFUELING WATER CHEMICAL ADDITION TANK AND
REPLACEMENT OF CONTAINMENT SUMP BUFFER
RESPONSE TO REQUEST FOR CONFIRMATION

By letter dated September 30, 2021 (ADAMS Accession No. ML21277A065), Virginia Electric and Power Company (Dominion Energy Virginia) submitted a license amendment request (LAR) for Surry Power Station (SPS) Units 1 and 2 to eliminate the Refueling Water Chemical Addition Tank (CAT) and to allow the use of sodium tetraborate decahydrate (NaTB) to replace sodium hydroxide (NaOH) as a chemical additive (buffer) for containment sump pH control following a loss-of-coolant accident (LOCA). By letter dated November 29, 2021 (ADAMS Accession No. ML21334A169), Dominion Energy Virginia submitted supplemental information in support of the LAR. By email dated May 27, 2022, the NRC requested confirmation that the proposed LAR does not involve a change to the containment analysis that would necessitate a change to the environmental qualification (EQ) temperature envelope against which equipment qualification is performed. Dominion Energy Virginia's response to the email request is provided below.

Dominion Energy Virginia Response

The current containment EQ temperature and pressure profiles are formally evaluated against the applicable analysis of record and documented in an engineering calculation. Both the EQ temperature and pressure profiles fully bound the most limiting containment temperature and pressure results of the large break loss of coolant accident (LBLOCA), small break LOCA (SBLOCA), and main steam line break (MSLB) containment analyses.

No updates to the containment analyses were necessary as a result of the LAR because:

- The containment analyses do not credit the volume of the CAT, and
- The increase in passive heat sink due to the addition of the NaTB baskets is bounded by current inventory design input and assumptions for the containment analyses.

In summary, since no changes to the containment analyses were required as a result of this activity, there are no changes to the existing EQ envelopes for pressure and temperature.

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