VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

May 14, 1992

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

Serial No. 92-323
NAPS/JRP/TAH: R3
Docket No.: 50-339
License No.: NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNIT 2
SPECIAL REPORT:
INADVERTENT ACTUATION OF THE OVERPRESSURE PROTECTION SYSTEM DURING SOLID WATER OPERATIONS

On April 14, 1992, North Anna Power Station Unit 2 experienced an actuation of the Overpressure Protection System when a Pressurizer Power Operated Relief Valve opened due to an unplanned increase in Reactor Coolant System Pressure. This event is reportable as a Special Report pursuant to Technical Specification 3.4.9.3 Limiting Condition for Operation (Action "c"), and Technical Specification 6.9.2.

At the time of the event, Unit 2 was in Mode 5, solid water conditions, with the Reactor Coolant Pumps secured and the unit being prepared for a return to power operations following a scheduled refueling outage. The Reactor Coolant System temperature was being maintained at approximately 130°F and the operators were stabilizing system pressure at 335 psig, after securing a Reactor Coolant Pump during the filling and venting activities of the Reactor Coolant System.

At 11:19 am, the Reactor Coolant System pressure drifted upward and one Pressurizer Power Operated Relief Valve, 2-RC-PCV-2455C, actuated to reduce the Reactor Coolant System pressure. The operators took immediate corrective actions to lower and stabilize the Reactor Coolant System Pressurizer pressure below the Pressurizer Power Operated Relief Valve lift setpoint.

A subsequent investigation revealed a sharp Reactor Coolant System pressure drop of approximately 20 psig when the Pressurizer Power Operated Relief Valve opened. The Safety Parameter Display System indicated that 2-RC-PCV-2455C had opened for less than four seconds. Operator inattention and failure to stabilize Reactor Coolant System pressure in accordance with procedures was determined to be the root cause.

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Additional corrective actions to preclude a similar event include coaching the operations personnel responsible for maintaining Reactor Coolant System pressure on the importance of properly controlling plant parameters. Also, additional emphasis on Reactor Coolant System pressure control during solid water operations will be included in the Licensed Operator Requalification Program.

During the event, the Overpressure Protection System was operable in accordance with Technical Specification 3.4.9.3 and Pressurizer Power Operated Relief Valve responded as designed, thus providing overpressure protection for the Reactor Coolant System at the low system temperatures. Therefore, the health and safety of the general public was not affected.

If you have any further questions, please contact us.

Very truly yours,

W. L. Stewart
Senior Vice President - Nuclear

Attachment

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Mr. M. S. Lesser
NRC Senior Resident Inspector
North Anna Power Station