

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

May 3, 1993

Mr. Stewart D. Ebner
Regional Administrator
United States Nuclear Regulatory Commission
Region II
101 Marietta Street, N. W.
Suite 2900
Atlanta, Georgia 30323

Serial No. 93-281
NL&P/ETS R1
Docket No. 50-281
License No. DPR-37

Dear Mr. Ebner:

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNIT 2
REACTOR COOLANT SAFETY VALVES
REQUEST FOR ENFORCEMENT DISCRETION

During hydrostatic testing of the Surry Unit 2 Reactor Coolant System on April 29, 1993, acoustical monitoring alarms were received on two of the three pressurizer safety valves. At this point, the hydrostatic test was stopped and Reactor Coolant System pressure reduced to prevent any further challenge of the safety valves. Further evaluation of the condition has indicated that the 'A' and 'C' pressurizer safety valves started to simmer at the elevated hydrostatic pressure and have not fully reseated at the reduced pressure (2050 psig). This hydrostatic testing was being performed in accordance with ASME Section XI after modifications were performed on the Reactor Coolant System.

In order to complete the ASME Section XI required hydrostatic test of the Reactor Coolant System and not challenge the safety valves, we intend to mechanically secure the 'A' and 'C' safety valves. Mechanical securing of the safety valves will allow for completion of the hydrostatic test and aid in reseating the safety valves. Compensatory measures will be put in place to reduce the potential for a challenge of the safety valves during the time the safety valves are secured. However, Technical Specification 3.1.A.3.a requires that all three safety valves be operable when the head is on the reactor and the Reactor Coolant System temperature is above 350°F.

In an April 30, 1993 telephone call between Virginia Power and the NRC, we requested and received verbal approval for enforcement discretion from the requirements of Technical Specification 3.1.A.3.a to have three pressurizer safety valves operable with the Reactor Coolant System temperature above 350°F. This enforcement discretion will permit the Reactor Coolant System temperature to be greater than 350°F for one 36 hour period with only one operable pressurizer safety valve to complete the required hydrostatic testing of the Reactor Coolant System and attempt to reseat the safety

valves. We plan to enter the 36 hour period with one operable pressurizer safety valve at 2100 hours on April 30, 1993, and exit by 0900, Sunday May 2, 1993.

The 36 hour period will allow the necessary time for securing the valves, establishing hydrostatic test conditions, performing the test, restoring normal operating conditions, and stabilizing the valves to allow them to reseal.

SAFETY IMPACT AND POTENTIAL CONSEQUENCES

Administrative controls will be established to reduce the possible challenge of the operable safety valve when the 'A' and 'C' safety valves are mechanically secured for hydrostatic testing or when attempting to reseal the valves. The following administrative controls will be used: 1) the reactor will remain subcritical with all rods fully inserted and Reactor Coolant System boron concentration maintained at greater than 2100 ppm, 2) one power operated relief valve will be operable with the associated block valve open and at a minimum the second power operated relief valve will be available for manual operation with the associated block valve open, 3) one or more reactor coolant pumps will be in operation with the loop stop valves open, and 4) high head safety injection pump surveillance testing will not be performed when the safety valves are mechanically secured. Guidance has been provided to the plant operations staff to address Reactor Coolant System pressure and temperature control during this evolution.

The events that could potentially challenge the Reactor Coolant System pressure boundary are a heat addition transient and a mass addition transient. The controls noted above will preclude any significant heat addition to the Reactor Coolant System. The hydrostatic testing is performed with a bubble in the pressurizer and with Reactor Coolant System pressure controlled by means of pressurizer heaters and spray. The high head safety injection/charging pumps will be operable but the shutoff head of these pumps is below the design pressure of the Reactor Coolant System. Thus, the two possible transients that could potentially challenge the operable pressurizer safety valve are precluded by the administrative controls and the system design.

SIGNIFICANT HAZARDS CONSIDERATION

The proposed enforcement discretion for Technical Specification 3.1.A.3.a, which requires three operable pressurizer safety valves above 350°F, does not result in a significant hazards consideration as defined in 10 CFR 50.92. Specifically, the proposed enforcement discretion does not:

- Involve a significant increase in the probability or consequences of an accident previously evaluated. The probability of any accident previously analyzed is not increased because operational conditions for the hydrostatic test have not changed. Although the Reactor Coolant System pressure is being raised above normal operating pressure to perform the required hydrostatic testing, the administrative controls noted above are adequate to prevent any challenge to the operable pressurizer safety valve. Mechanically securing two safety valves for a 36 hour period with the administrative controls in place does not increase the consequences of any pressure transient.

- Create the possibility of a new or different kind of accident from any previously evaluated. There are no new failure modes or mechanisms associated with mechanically securing two of the three pressurizer safety valves for a 36 hour period to complete hydrostatic testing of the Reactor Coolant System and to reseal the safety valves. The administrative controls will preclude any significant heat addition transients, and mass addition transients are of no significant consequence since the shutoff head of the high head safety injection pumps is less than system design pressure.
- Involve a significant reduction in the margin of safety. The administrative controls noted above are adequate to prevent any challenge to the operable pressurizer safety valve. Therefore, the existing margin of safety is not reduced with two safety valves mechanically secured.

ENVIRONMENTAL CONSEQUENCES

This enforcement discretion will not change the types of any effluents that may be released offsite, nor create a significant increase in individual or cumulative occupational radiation exposure. One operable pressurizer safety valve and the administrative controls are adequate to preclude any significant heat addition transients. Mass addition transients are of no significant consequence since the shutoff head of the high head safety injection pumps is less than system design pressure. Therefore, the environmental consequences of any accident associated with heat or mass addition transients will remain unaffected.

The enforcement discretion was reviewed by the Station Nuclear Safety and Operating Committee. It has been determined that no unreviewed safety question or significant hazards consideration exists.

Very truly yours,

W. L. Stewart

W. L. Stewart
Senior Vice President - Nuclear

cc: United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555

Mr. M. W. Branch
NRC Senior Resident Inspector
Surry Power Station