VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

W. L. STEWART
VICE PRESIDENT
NUCLEAR OPERATIONS

November 15, 1984

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
Attention: Mr. Steven A. Varga, Chief
Operating Reactors Branch No. 1
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Serial No. 549
E&C/MGD/jdm:2006N
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION - UNITS 1 AND 2
ENVIRONMENTAL QUALIFICATION OF ELECTRICAL EQUIPMENT

In accordance with 10CFR50.49 paragraph (h) of the Equipment Qualification Rule, we are requesting an extension to March 31, 1985 for completing the environmental qualification of the Surry Unit 1 charging pump component cooling water pump motors.

The existing motors are being replaced with new, environmentally qualified motors. Due to design differences between the new and existing motors, new pumps that are physically compatible with the new motors must also be procured. Purchase orders for the new pumps and motors have been issued with delivery presently scheduled for mid-February, 1985. We plan to install this equipment in Unit 1 during the first quarter of 1985. The Unit 2 equipment will be installed during the Refueling Outage presently scheduled to begin in mid-March, 1985.

A Justification for Continued Operation is attached.

Thank you for your consideration in this matter.

Very truly yours,

W. L. Stewart

Attachment

cc: Mr. James P. O'Reilly
Regional Administrator
Region II
USNRC

Mr. Don J. Burke
NRC Resident Inspector
Surry Power Station

A046
1/1

Attachment to Letter
Serial No. 549

JUSTIFICATION FOR CONTINUED OPERATION
1-CC-P-2A/2B, 2-CC-P-2A/2B
SURRY POWER STATION UNITS 1 AND 2

General Electric Charging Pump Component Cooling Water Pump Motors

The charging pump component cooling water pumps provide seal cooling water for the charging pumps. The flow from the component cooling water pumps cools the charging pumps while they are in their safety mode of safety injection.

In the event of a cooling water pump failure, the manufacturer has determined that the charging pumps can operate indefinitely in normal ambient conditions without seal water coolant as long as the pumped fluid is less than 115°F. For the purpose of environmental qualification, the accident of concern is the HELB. Vepco has evaluated the areas of the charging pumps and charging pump CCW pumps, and has determined that there is no single HELB that can simultaneously render both the charging pump and CCW pump environments harsh.

In the safety injection mode the suction of the charging pumps is diverted from the normal source, at the volume control tank, to the refueling water storage tank by the safety injection signal. The water in the refueling water storage tank is cooled by Tech Spec requirement to a temperature of slightly below 45°F. Since the pumped fluid is less than 115°F, we have concluded that the charging pumps can operate in the event of any HELB that might cause failure of the CCW pump motors.

It is concluded that the failure of the component cooling water pumps would not significantly degrade the safety function or provide misleading information to the operator under the accident environment resulting from a design basis event.