

March 8, 1985



**VIRGINIA POWER**

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

Serial No. 549A  
NO/DWL:acm  
Docket No. 50-280  
License No. DPR-32

Gentlemen:

VIRGINIA POWER  
SURRY POWER STATION UNIT 1  
ENVIRONMENTAL QUALIFICATION OF ELECTRICAL EQUIPMENT

In our letter of November 15, 1984 (Serial No. 549) we requested an extension, based on procurement lead times, until March 31, 1985 for the completion of the environmental qualification of the Surry Unit 1 charging pump component cooling water pump motors. This request was approved by letter dated December 14, 1984.

In accordance with 10CFR50.49 paragraph (h) of the Equipment Qualification Rule, we are requesting an additional extension until November 30, 1985 for completion of the environmental qualification of these pump motors. Our plans are to make necessary modifications and install the new pumps and the qualified motors during the next scheduled maintenance outage which is currently set for mid-June 1985. In order to account for potential delays in the Unit 1 maintenance outage schedule, our commitment is to install the qualified motors no later than November 30, 1985.

Environmentally qualified charging pump component cooling water pump motors have been procured and are available for installation. Installation, however, will take longer than the 24 hour out-of-service period allowed by Surry Technical Specification 3.3.B.6. Accordingly, the requested extension will allow us to install the qualified motors during a scheduled outage of sufficient duration to complete installation without violating Technical Specifications. The NRC Project Manager for Surry has been informed of our concerns regarding this matter.

A Justification for Continued Operation (JCO) for the Surry Unit 1 charging pump component cooling water pump motors is attached. It is the same JCO which was provided in our November 15, 1984 letter.

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**VIRGINIA POWER**

Your consideration of this matter is appreciated. If you have any questions or concerns, please contact us.

Very truly yours,

W. L. Stewart

Attachment

cc: Dr. J. Nelson Grace  
Regional Administrator  
Region II  
USNRC

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

JUSTIFICATION FOR CONTINUED OPERATION  
1-CC-P-2A/2B  
SURRY POWER STATION UNIT 1

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 degrees F. For the purpose of environmental qualification, the accident of concern is the HELB. Virginia Power 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 degrees F. Since the pumped fluid is less than 115 degrees 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.