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January 19, 1990

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

Attention: Mr. John J. Hayes, Jr.

Subject: Virgil C. Summer Nuclear Station Docket No. 50/395 Operating License No. NPF-12 Update of Long Term Corrective Action for July 11, 1989, Loss of Offsite Power

Gentlemen:

In the November 9, 1989, letter from Mr. O. S. Bradham to the NRC Document Control Desk, it was stated (answer to question # 1) that voltage regulators for both the 230/7.2 KV Emergency Auxiliary Transformer and the 115/7.2 KV Engineered Safety Features Transformer were to be installed. After further review and analysis it has been determined that the installation of a voltage regulator on the 230/7.2 KV Emergency Auxiliary Transformer is neither required nor is there any appreciable benefit derived from the installation of the voltage regulator on the 230/7.2 KV line.

The 230KV system design requirement is that it be able to withstand the loss of the largest plant or load on the 115 KV system and not result in the loss of the 230 KV system. The 230 KV system is capable of doing this without voltage regulators with the existing voltage limits.

Also, installing the voltage regulators on the 230 KV system would not provide enough advantage to be economically justified. This is based on the fact that the 230 KV system is tied directly to the Main Generator during normal operation. This ensures that the voltage will be at or near 100% of nominal. Since there is a minimum 10 second delay in the ability of the voltage regulators to adjust, it would not react fast enough to regulate voltage during a plant trip.

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Also, in the November 9, 1989, letter it was stated (answer to question # 2) that the load flow study indicated that the resultant voltages for buses XSW-1DA and XSW-1DB would be 93.85% of nominal and 94.95% of nominal respectively. After discovering that an input error to the load flow study was made it has been determined that the resultant voltage for buses XSW-1DA and XSW-1DB would be 94.05% of nominal and 96.05% of nominal respectively.

Very truly yours,

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O. S. Bradham

WRH/OSB:1bs

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