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Writer's Direct Dial Number:

October 18, 1982

Mr. Dennis M. Crutchfield, Chief
Operating Reactor Branch #5
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Sir:

SUBJECT: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Reactor Protection System Power Supply

REFERENCES: 1. Letter D. M. Crutchfield to I. R. Finrock,
August 3, 1981
2. Letter P. B. Fiedler to D. M. Crutchfield,
March 24, 1982
3. Letter P. B. Fiedler to D. M. Crutchfield,
April 29, 1982

In response to your letter of July 2, 1982, please find attached the requested information. If additional information is required, please contact Mr. J. Knubel at (201) 299-2264.

Very truly yours,

Peter B. Fiedler
Vice President and
Director - Oyster Creek

blf

Attachments

cc: Ronald C. Haynes, Administrator
Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

NRC Resident Inspector
Oyster Creek Nuclear Generating Station
Forked River, NJ 08731

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ATTACHMENT

REACTOR PROTECTION SYSTEM POWER SUPPLY

- 1) The undervoltage, overvoltage and underfrequency setpoints for the Electrical Protection Assemblies (EPA's) shall be +10% (tolerance +0, -2.5%), -10% (tolerance -0, +2.5%) and 57 HZ (tolerance -0, +2.0%) respectively; with a maximum time delay of 100 ms. The setpoints are based on the voltage drop between the EPA's and the RPS components whose nominal voltage is 115 +2 VAC. The EPA setpoints shall be measured values rather than calculated values.

Nominal voltage is the value of voltage at the input of the EPA while delivering sufficient current to maintain an RPS component voltage of 115 +2 VAC. Nominal frequency shall be 60 HZ.

- 2) The EPA's have been qualified for the Oyster Creek site specific seismic response spectra and will be located in the cable spread room. This location should preclude loss of component function due to natural phenomena.

Two (2) IEEE Class IE qualified EPA units are installed, in-series, in each of the two (2) RPS power buses and in the alternate bus. Redundancy is provided such that if any one EPA unit in a power bus fails, the second EPA unit is totally capable of protecting the RPS and associated downstream components from overvoltage, undervoltage and underfrequency conditions.

Periodic functional testing shall be performed on the EPA's by removing the motor-generator set from the RPS distribution bus and sourcing power from the alternate feed. The alternate feed EPA's are tested while the distribution bus is sourced from the motor-generator set. Independent periodic testing may be accomplished while the reactor is in operation without affecting redundancy.

- 3) As stated in response 1 above, the setpoints are based on the voltage drop between the EPA's and the RPS components whose nominal voltage is 115 +2 VAC. The following voltage and frequency measurements will be made at the RPS components listed:
 - a) Voltage and frequency at MG sets
 - b) Voltage at two RPS sensor relay coils
 - c) Voltage at two Scram relay units
 - d) Voltage at two Scram contactor coils
 - e) Voltage at two relay or contactor coils in other systems sourced by RPS MG sets