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July 24, 1984

Dr. Thomas E. Murley, Administrator
U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Dr. Murley:

SIGNIFICANT CONSTRUCTION DEFICIENCY
ECONOMIZING RESISTORS - EDG EXCITERS
HOPE CREEK GENERATING STATION

On June 27, 1984, a verbal report was made to Region I, Office of Inspection and Enforcement representative, Mr. E. C. McCabe, advising of a significant construction deficiency concerning economizing resistors supplied by Basler Electric that were installed in our Emergency Diesel Generators. The following final report is provided in accordance with 10CFR50.55(e).

Description of the Deficiency

Basler Electric informed Bechtel, our Architect/Engineer and Constructor, through Colt Industries that the economizing resistor on control panels for the Emergency Diesel Generator may need to be changed if the mounting bracket and/or the resistor wattage and resistance value is not correct. On June 26, 1984, representatives from Basler Electric and Bechtel inspected the resistors. As a result of this inspection the following deficiencies were noted with the economizing resistors for the K-1 relay on the SERV Power Chassis located in the LA/BPS Generator Potential Transformer and Exciter Control Panels (1AC420, 1BC420, 1CC420 and 1DC420).

- 1AC420 - 1) Resistor not properly mounted.
- 1BC420 - 1) Broken resistor mounting bracket.
- 2) 63 ohm resistor installed in lieu of a 315 ohm resistor.

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1CC420 - 1) 63 ohm resistor installed in lieu of
315 ohm resistor.

1DC420 - 1) Resistor not properly mounted.

Safety Analysis

The Emergency Diesel Generators are safety related and supply power to engineered safeguard equipment and other safety related equipment required for safe shutdown of the plant if offsite power is not available. Had the above noted conditions gone undetected and uncorrected, there was the potential for loss of one or more of the four standby EDG's as follows:

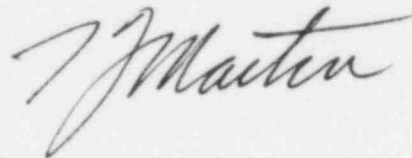
- As a result of the broken mounting bracket or of being improperly mounted, the resistor itself could become loose and fall across a variety of electronic parts, resulting in numerous other failures of the exciter.
- As a result of the resistor having too low a resistance value, the coil of the contactor could overheat and cause the contactor to open again, removing field voltage.

We, therefore, consider this condition to be reportable in accordance with 10CFR50.55(e).

Corrective Action

On June 26, 1984, the Basler Electric representative corrected the deficiencies noted on the Diesel Generator sets. This activity was documented on Nonconformance Report No. 4040.

Very truly yours,



C Office of Inspection and Enforcement
Division of Reactor Construction Inspection
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Dr. T. E. Murley

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