



# Pennsylvania Power & Light Company

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August 18, 1983

Mr. Thomas Murley  
Regional Administrator, Region I  
U.S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, PA 19406

SUSQUEHANNA STEAM ELECTRIC STATION  
INTERIM REPORT OF A DEFICIENCY INVOLVING  
GENERAL ELECTRIC 7700 LINE 250 VOLT DC CONTROL CENTERS  
ER 100508 FILE 821-10  
PLA-1799

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Dear Mr. Murley:

This letter serves to provide the Commission with an interim report on a deficiency involving the final design of GE 250V DC control centers. This deficiency was originally reported by telephone to Mr. E. C. McCabe of NRC Region I on 7/21/83 by Mr. J. Saranga of PP&L as reportable under the requirements of 10CFR50.55(e) for SSES Unit 2.

The attachment to this letter contains a description of the deficiency and its safety impact. PP&L anticipates providing the Commission with a final report by the end of November, 1983, detailing the cause and the required corrective action.

Since the details of this report provide information relevant to the reporting requirements of 10CFR21 for Unit 2, this correspondence is considered to also discharge any formal responsibility PP&L may have in compliance thereto.

We trust the Commission will find this report to be satisfactory.

Very truly yours,

N. W. Curtis  
Vice President-Engineering & Construction-Nuclear

WLB:mp

Attachment

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FILE 821-10

Copy to:

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INTERIM REPORT

SUBJECT

250 Volt DC Distribution System

DESCRIPTION OF PROBLEM

The General Electric 7700 line control centers are designed with electrical drawout contacts between the removable starter unit and the starter cubicle. The male members of the drawout contacts are mounted on the starter unit. The female contacts are located on the back wall of the cubicle. These female clips are not spring loaded and can be permanently distorted using finger pressure. Because of this the GE installation instructions for these units states that the starter unit must not be tilted forward or backward during insertion. This is to prevent bending of the female contacts. The 7700 line control centers at Susquehanna Unit 2 are such that on certain starters, clearance does not exist between the breaker on the starter unit and the lip of the horizontal shelf assembly. When inserting or removing these units, the breaker hits the lip on the shelf and must be tipped to clear the lip. As a result of the tipping, the female members of the drawout contacts can be bent such that the contacts will not make up when the starter is fully inserted.

This problem was discovered when a Unit 1 RCIC valve failed to stroke during surveillance tests. There are five 7700 line control centers on Unit 2; three of these are Class 1E.

ANALYSIS OF SAFETY IMPACT

The 7700 line control centers provide 250V DC Class 1E power to the HPCI and RCIC pumps and valves. The HPCI System is safety related and is required for shutdown for small breaks. The RCIC System is not safety related but should be available to augment HPCI.

The deficiency cited makes the operability of these systems indeterminate after a starter is inserted. PP&L has concluded that this condition is reportable under the provisions of 10CFR50.55(e).

FINAL REPORT

A final report will be issued after GE switchgear plant representatives at Mebane, North Carolina, inspect the control centers. This report will be issued by the end of October and will address the cause of the deficiency and the required corrective action.