

May 16, 1984  
SBN- 656  
T.F. Q2.2.2

United States Nuclear Regulatory Commission  
Region I  
631 Park Avenue  
King of Prussia, PA 19406

Attention: Mr. Richard W. Starostecki, Director  
Division of Project and Resident Programs

References: (a) Construction Permits CPPR-135 and CPPR-136, Docket  
Nos. 50-443 and 50-444  
(b) Telecon of April 18, 1984, G. Tsouderos (YAEC) to  
W. R. Borchardt (NRC, Region I)

Subject: 10CFR50.55(e) Report; Westinghouse Type SA-1 Differential Relays

Dear Sir:

On April 18, 1984, we reported a 10CFR50.55(e) deficiency [Reference(b)] regarding Westinghouse Type SA-1 differential relays. The following is our interim report concerning this subject.

Description of Deficiency

IE Information Notices 83-63 and 83-63 Supplement 1 described the following deficiencies, identified in Westinghouse Type SA-1 differential relays:

- o Defective silicon-controlled rectifiers (SCR), manufactured by S. T. Semicon for Westinghouse. These defective SCRs could cause random trip-out.
- o Defective tantalum capacitors. These capacitors, which are part of a printed circuit module, could leak electrolyte, thus affecting integrity of other components in the module.
- o Insufficient Surge Withstand Capability (SWC). This insufficiency could make the relays susceptible to electrical noise with insipient incorrect trip signals.

Safety Implications

This type of relay is used in the Seabrook Design and is part of the protection for the emergency diesel generators. The problems identified above could lead to either inadvertent operation of the relay, or malfunction of the relay if it is called to operate; the result could be degradation of the on-site emergency power supply.

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Corrective Action

The relays used at Seabrook could potentially contain the defective tantalum capacitors, and could be susceptible to electric noise because of insufficient surge withstand capability.

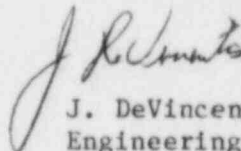
The relays used at Seabrook do not have SCRs manufactured by S. T. Semicon, therefore, no corrective action is required for this deficiency.

We plan to correct the applicable deficiencies based on manufacturers' recommendations. Necessary replacement parts have been ordered, and preliminary information indicates long deliveries. Completion of the corrective action is estimated to be September of 1984.

This letter is being filed pursuant to the interim reporting provisions of 10CFR50.55(e)(3).

Very truly yours,

YANKEE ATOMIC ELECTRIC COMPANY



J. DeVincentis  
Engineering Manager

GTs/kg

cc: Atomic Safety and Licensing Board Service List

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