

Pt 21 85441  
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EN-TRONIC CONTROLS

October 10, 1985

Houston Light & Power  
c/o Bechtel Energy Corporation  
P. O. Box 2166  
Houston, Texas 77056-5357

Attention: Mr. R. L. Rogers

Re: South Texas Project  
Houston Light & Power

Speed monitor sensitivity in standby  
diesel generator control systems supplied  
by En-Tronic Controls/Cooper Industries

Dear Mr. Rogers:

The speed monitor (Airpax Series 300) used in these control systems is a DC powered device. We have had three reports of speed being indicated while the D.G. set was in a stopped condition. In case #1, the cause was determined to be caused by a battery charger imposing 30V AC on the 125V DC system. Case #2 was found to be caused by a faulty power supply in the annunciator in the D.G. control panel imposing AC on the 125V DC system. In case #3, the cause is thought to have been caused by testing being done on the DC power system. At this writing, this has not been confirmed.

AirPax states in their specification that if DC isolation is required, an external DC-DC converter must be used. It is my understanding AirPax manufactures such a DC-DC converter.

The user must realize that high levels of AC on a DC system will eventually cause other components to fail or mal-function, which may not be as noticable as the speed indication was in this instance. It would be my recommendation if the user elects to install this device (DC-DC converter) that they also consider the installation of a device to detect when an AC signal is imposed on the DC system. In my opinion this device should be looking at the main 125V DC buss and should be frequency as well as voltage sensitive.

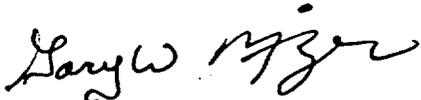
North Sandusky Street  
Mount Vernon, Ohio 43050  
(614) 393-8200 Telex: 24-5388

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If we at En-Tronics can be of any assistance with regard to this subject, please do not hesitate to contact me at (614) 393-8439.



Gary W. Mizer  
Manager, Quality Assurance  
and Technical Services

GWM/jam

cc Mr. Edward L. Jordan, Director  
Division of Emergency Preparedness & Engineering Response  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555



EN-TRONIC CONTROLS

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