

Frederick W. Schneider  
Vice President  
Production

Public Service Electric and Gas Company 80 Park Place Newark, N.J. 07101 201/430-7373

December 5, 1977

Mr. Boyce H. Grier  
U. S. Nuclear Regulatory Commission  
Office of Inspection and Enforcement  
Region 1  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

Dear Mr. Grier:

ANSWERS TO QUESTIONS CONTAINED IN  
IE BULLETIN NO. 77-06  
UNIT NO. 1  
SALEM GENERATING STATION

We understand that the basic problem with GE penetrations was im-  
proper curing of epoxy, which is used as a sealant and electrical  
insulation. The epoxy cracked and short circuits resulted.

Since the Conax penetrations used at Salem have insulated con-  
ductors and the sealant is a resilient high temperature thermo-  
plastic material, the problem in question is not applicable.  
Therefore, the answer to Question 1.0 is "No", and as a result,  
we only need to reply to Question 1.1 regarding electrical failures,  
and Questions 3.0, 3.1 and 3.2, regarding LOCA operation and quali-  
fication. These answers are as follows:

- 1.1 - Salem has had no electrical failure of penetrations.
- 3.0 - It is not necessary to maintain nitrogen pressure  
during a LOCA to retain electrical integrity of the  
penetration.

AO /



- 3.1 - Penetrations were specified to meet LOCA conditions, and prototypes were successfully tested to those parameters.
- 3.2 - GDC-4, App. A Part 50 and QA Criteria App. B Part 50, are satisfied.

We were advised on November 25, 1977, that Addendum A to the subject bulletin would be forthcoming, with the following additional question:

"Do the transition connection pins embedded in the epoxy have an insulation jacket?"

The answer to this, is that the Salem penetrations are not of this design in that they have neither epoxy seals nor embedded connector pins.

The above replies were supplied, verbally, to your office on November 25, 1977.

Sincerely,



CC Dr. Ernest Volgenau  
Bethesda, Maryland 20014