

REPRINT

Westinghouse Electric Corporation  
Water Reactor Division  
Nuclear Service Division  
Box 2728  
Pittsburgh, Pennsylvania 15230

August 30, 1979  
PSE-79-21

Mr. F. P. Librizzi, General Manager  
Electric Production  
Public Service Electric and Gas Company  
80 Park Place  
Newark, New Jersey 07101

Dear Mr. Librizzi:

Public Service Electric and Gas Co.  
Salem Unit No. 1  
QUALIFICATION OF CONTROL SYSTEMS

As part of a continuing review of the environmental qualifications of Westinghouse supplied NSSS equipment, Westinghouse has also found it necessary to consider the interaction with non-safety grade systems. This investigation has been conducted to determine if the performance of non-safety grade systems which may not be protected from an adverse environment could impact the protective functions performed by NSSS safety grade equipment. The NSSS control and protection systems were included in this review to assess the adequacy of the present environmental qualification requirements.

As a result of this review, several systems were identified which, if subjected to an adverse environment, could potentially lead to control system operation which may impact protective functions. These systems are:

- Steam generator power operated relief valve control system
- Pressurizer power operated relief valve control system
- Main feedwater control system
- Automatic rod control system

**POOR ORIGINAL**

1268 280

7911050

066  
4

Each of the above mentioned systems could potentially malfunction if impacted by adverse environments due to a high energy line break inside or outside containment. In each case, a limited set of breaks, coupled with possible consequential control malfunction in an adverse direction, of the above events could yield results which are more limiting than those presented in the plant Safety Analysis Reports. In all cases, however, the severity of the results can be limited by operator actions together with operating characteristics of the safety systems.

We believe these systems identified do not constitute a substantial safety hazard. However, Westinghouse recommends you review them to determine if any unreviewed safety questions or significant deficiencies exist in your plant(s).

To assist you in understanding these concerns, Westinghouse will hold a seminar in Pittsburgh on Thursday, September 6 at Westinghouse R&D Center, Building 701, with all our operating plant customers. The seminar will address the potential impact of these concerns for various plant designs and various licensing bases.

Please contact your WNSD Regional Service office to confirm your attendance at the seminar. We will provide additional details concerning the agenda and other meeting arrangements as they become available.

Very truly yours,

ORIGINAL SIGNED BY

F. Noon, Manager  
Eastern Regional & WNI Support

SR4/CC13&14

cc: H. J. Midura  
H. J. Heller  
R. D. Rippe  
T. W. Taylor  
R. A. Uderitz  
C. F. Barclay W

**POOR ORIGINAL**

1268 281