PSE&G

Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, New Jersey 08038

Nuclear Department

March 6, 1984

U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

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

Gentlemen:

SUPPLEMENTAL RESPONSE
NRC COMBINED INSPECTION 50-272/83-27 AND 50-311/83-30
SALEM GENERATING STATION
NO. 1 AND 2 UNITS
DOCKET NOS. 50-272 AND 50-311

During the subject inspection conducted on September 7 through October 4, 1983, a violation was identified related to failure to follow an Emergency Instruction. Public Service Electric and Gas Company (PSE&G) responded to this violation by letter dated November 23, 1983. As a result of subsequent discussions with the Salem Senior Resident Inspector, we are hereby submitting supplemental information. Changes to the November 28, 1983 response are noted by a vertical line on the right-hand margin.

ITEM OF VIOLATION

Technical Specification 6.8.1 requires that written procedures shall be established, implemented, and maintained covering applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978. Regulatory Guide 1.33, Appendix A requires procedures for combating emergencies and other significant events such as loss of core coolant flow.

Contrary to the above:

> Emergency Instruction I-4.20, Failure of a Reactor Coolant Pump (RCP), was not implemented or maintained from September 26, 1983 to October 3, 1983, in that the unit was not shut down due to excessive RCP shaft vibration nor were the vibration limits increased to reflect higher technically justifiable emergency action limits and continued operation.

Reply to Item of Violation

When the number 21 Reactor Coolant Pump (RCP) reached the alarm condition, the actions required by Emergency Instruction I-4.20, Failure of a Reactor Coolant Pump, were not taken since it was

apparent to the operators that no other RCP parameters supported the indication of the shaft monitor. Where redundant indications exist or where there are other parameters that can be monitored to confirm that a problem exists, our operators are instructed to confirm that the redundant indications or supporting parameter indications reflect that the problem is real and requires immediate corrective action. Problems had been encountered in the past with the reactor coolant pump vibration shaft monitors, and these have been identified by PSE&G for resolution. It was common knowledge to our operators that the RCP shaft vibration monitors were not the most accurate indications of RCP vibration. However, even with their associated problems, the monitors were still useful for indication of a potential or developing RCP malfunction and therefore were not declared inoperable. When the indication for 21 RCP shaft vibration monitor reached the alarm setpoint, the operators confirmed that other supporting instrumentation on 21 RCP did not reflect any problem. Included in the supporting instrumentation was the RCP motor flange vibration monitors which were considered to provide an accurate indication of pump vibration. Based upon the indications of supporting instrumentation and the fact that the shaft vibration monitors were known to have problems associated with them, a decision was made not to comply with the action requirements of the Emergency Instruction and not to shut down the unit based upon the single non-supported indication. Due to an oversight, PSE&G failed to change the action requirements of the Emergency Instruction to relect current operating conditions and policy.

PSE&G recognizes that deviating from established Emergency Instructions is contrary to prudent management philosophies and will not be practiced or condoned unless a specific emergency condition exists warranting such deviation and is properly documented. In this isolated case, a review of the problems associated with the RCP vibration monitors was in progress along with an evaluation of the information provided by redundant instrumentation. It is recognized that revised instructions should have been initiated in the Emergency Instructions prior to the event which ultimately warranted a deviation from the previously established instructions. Our corrective steps which will be taken to avoid further violations addresses this point. We shall continue to foster and enforce strict compliance to established Emergency Instructions.

a. Corrective steps which have been taken and results achieved

The Operating Engineer discussed the problem associated with the RCP shaft vibration monitors with other members of Station management and also members of Nuclear Engineering. The pump manufacturer was also contacted concerning the problem with he shaft vibration monitors. Based upon these discussions, an initial decision was made to increase the limits for vibration in the Emergency Instruction and this was done with an on-the-spot-change to the procedure.

Subsequently, due to additional evaluation of the problem with the monitors and based upon engineering and the manufacturer's recommendations, the requirements to take any action based on the shaft vibrations monitors was deemed inappropriate. The Emergency Instruction was revised to remove all action requirements based upon RCP shaft vibration indications.

The problem associated with the monitors is still under evaluation by PSE&G and the Emergency Instruction will be revised if appropriate.

b. Corrective steps which will be taken to avoid further violations

To prevent similar events from occurring if operating conditions or policies change, the appropriate Emergency Instruction action requirements will be revised to reflect the new conditions and policy changes. Additionally, as part of the Emergency Operating Procedure/Abnormal Operating Procedure project required the NUREG-0737, all current Emergency Instructions are being reviewed for possible problem areas such as the one that was identified in EI-I-4.20. Where conditions require an evaluation prior to taking action, the procedures will reflect the evaluation that is to be performed. This project has been in progress since December 15, 1982, and is presently scheduled to be completed in June of 1984.

c. Date when full compliance will be achieved

We are now in full compliance.

Sincerely,

E. A. Liden
Manager - Nuclear
Licensing and Regulation

cc: Director, Office of Inspection and Enforcement
Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. Donald C. Fischer
Licensing Project Manager

Mr. James Linville
Senior Resident Inspector