PSE&G

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

Nuclear Department

November 5, 1984

Mr. Thomas T. Martin, Director
Division of Engineering and Technical Programs
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Martin:

RESPONSE TO NOTICE OF DEVIATION
NRC INSPECTION NO. 50-272/84-26
SALEM GENERATING STATION
UNIT NO. 1

Public Service Electric and Gas Company has reviewed the Notice of Deviation as described in Appendix A of your letter dated October 4, 1984. Our response to the notice is provided below:

NOTICE OF DEVIATION

Final Safety Analysis Report (FSAR) Section 15.4.2.6 and 15.4.4.5 state that no steam generator blowdown is assumed in the calculation of offsite doses resulting from the Main Steam Line Break (MSLB) and Steam Generator Tube Rupture (SGTR) accidents.

Contrary to this:

The steam generator blowdown isolation valves have historically exhibited excessive measured leakage. The leakage from these valves and possible increases in offsite dose due to their leakage in the event of a MSLB or SGTR accident have not been considered in the FSAR.

The licensee has presently removed these valves from the Type B & C Local Leak Rate Test program as they are on the secondary side of the steam generator tube boundary and isolation is not considered necessary in the event of a

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Large Break LOCA. Maintenance of a continuing leakage monitoring program for these valves as well as reevaluation of FSAR offsite dose assumptions for the MSLB and SGTR accidents have not been considered by the licensee.

RESPONSE TO NOTICE OF DEVIATION:

The Salem FSAR Section 15.4.2.6 - Main Steam Line Break (MSLB) and Section 15.4.4.5 - Steam Generator Tube Rupture (SGTR), assume no steam generator blowdown after the accident. In conformance with the assumptions stated in the FSAR, in the event these accident conditions do occur, emergency instructions require the blowdown system be secured by verification of the automatic closure of steam generator blowdown isolation valves 11, 12, 13 and 14GB4.

Currently, the steam generator blowdown isolation valves 11, 12, 13 and 14GB4 are listed in the Salem Technical Specifications Table 3.6-1, "Containment Isolation Valves", as containment isolation valves requiring a Local Leak Rate Test (LLRT). Contrary to the statement in the Notice of Deviation, these valves have not been removed from the Type B and C LLRT program.

PSE&G intends to remove these valves from the LLRT by applying for a change in our Technical Specifications Table 3.6-1. This change will keep these valves on the list of containment isolation valves, but remove the requirement for Type C testing. This conforms to the NRC staff's position that these valves need not be subject to Type C testing requirements of Appendix J as indicated in Section 3.4 of the Inspection Report.

In support of this Technical Specification change, PSE&G's safety evaluation of the leakage and isolation criteria for the GB4 and SS94 valves concluded that the GB4's need not be Type C leakage tested and that the valves should be subject to leakage testing in line with the radiological concerns of the SGTR accident identified in the FSAR. Until a suitable test program is developed that identifies a more appropriate test medium and acceptance criteria, these valves will continue to be included in the Type C test program. The service history of these valves is under review and we are evaluating ways of improving their performance, including the possibility of replacing them with valves of a different type.

PSE&G is preparing a formal evaluation on the effects that leakage from the steam generator blowdown isolation (GB4) valves have on the assumptions made in the FSAR. We expect to finalize this evaluation by December 15, 1984.

Based on a preliminary analysis, using an assumed GB4 water leakage of 5 gpm per valve (extrapolated from previously measured air leakages), the most impacted analysis is the 0-2 hour thyroid dose at the Minimum Exclusion Area (MEA) for a SGTR. The analysis for the whole body dose at the MEA and the analysis of doses at the low population zone are less affected. With the assumed leakage, the 0-2 hour thyroid dose at the MEA may be expected to increase from 7 rem to 7.55 rem. This increase is approximately two percent of the 10CFR100 guideline "small fraction" (30 rem thyroid) not to be exceeded per Standard Review Plan 15.6.3.

The conclusion of the SGTR accident analyzed in the FSAR remains unchanged, since the general public would not receive doses from this accident that would exceed a "small fraction" of the 10CFR100 guidelines.

Upon completion of the final evaluation, adjustments to assumptions stated in the FSAR will be made if necessary.

Sincerely,

E. A. Liden
Manager - Nuclear
Licensing and Regulation

C Mr. Donald C. Fischer
Licensing Project Manager

Mr. James Linville
Senior Resident Inspector