PSE&G

Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, New Jersey 08038-0236

Nuclear Business Unit

MAY 0 9 1997

LR-N970307

Ms. Mary Drouin
Office of Nuclear Regulatory Research
Mail Stop T-10-E50
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

**SALEM GENERATING STATION UNITS 1 AND 2**
**HOPE CREEK GENERATING STATION**
**FACILITY OPERATING LICENSES DPR-70, DPR-75 AND NPF-57**
**DOCKET NOS. 50-272, 50-311 AND 50-354**
**COMMENTS REGARDING DRAFT NUREG-1560, "INDIVIDUAL PLANT EXAMINATION PROGRAM: PERSPECTIVES ON REACTOR SAFETY AND PLANT PERFORMANCE"**

Dear Ms. Drouin:

In a letter dated December 12, 1996, the Unites States Nuclear Regulatory Commission (NRC) requested comments on draft NUREG-1560. Public Service Electric & Gas Co. (PSE&G) appreciates the opportunity to provide comments on the draft document.

In addition to the detailed comments attached to this letter, PSE&G also endorses the comments submitted by the Nuclear Energy Institute, the Westinghouse Owner's Group, and the BWR Owner's Group.

If you have any questions or require additional information, please contact Michael Phillips at (609)-339-5271.

Sincerely,

D.R. Powell

D. R. Powell
Manager
Licensing & Regulation

Attachment

MAY 09 1997

C Mr. H. J. Miller, Administrator - Region I
U. S. Nuclear Regulatory Commissior
475 Allendale Road
King of Prussia, PA 19406

Mr. L. Olshan, Licensing Project Manager - Salem
U. S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Mail Stop 14E21
Rockville, MD 20852

Mr. D. Jaffe, Licensing Project Manager - Hope Creek
U. S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Mail Stop 14E21
Rockville, MD 20852

Mr. R. Summers
USNRC Senior Resident Inspector (X24)

Mr. C. Marschall
USNRC Senior Resident Inspector (X24)

Mr. K. Tosch, Manager IV
Bureau of Nuclear Engineering
33 Arctic Parkway
CN 415
Trenton, NJ 08625

**ATTACHMENT**

**COMMENTS ON DRAFT NUREG-1560**

General

NUREG-1560 represents a comprehensive compilation of the results and findings of the IPE submittals from the various plants.

The IPE results were submitted 4-8 years ago. They represent a historical snapshot of the plants at that time. Many plants have made significant changes to plant configuration, operating procedures, and training since the IPE submittal. Many improvements have also been made in the analysis tools and data used to support the plant Probabalistic Risk Assessment (PRA) models. These changes have impacted the results of the plant PRA analysis, in most cases indicating a reduction in plant risk. These improvements are not reflected in NUREG-1560. Improvements and changes made to the IPE submittals as a result of the NRC staff reviews of the original IPE submittals are also not included in the report. The language in the report stating that NUREG-1560 represents a "snapshot in time" needs to be strengthened and reinforced.

Similarly, the proposed NRC IPE database seems to serve little or no purpose. This database of the industry IPE results is to be made public through the Internet. This information is now out of date. The data does not reflect the current status of nuclear power plant risk and should not be made publicly available. The usefulness of this information is also questionable since the NRC staff indicated at the April 1997 workshop that the data will not be updated.

Section 2.2

This section discusses plant improvements and the implementation status of identified improvements. The section makes references to the percentage of improvements implemented, but no reference to the date when this status was determined. Since the IPE submittals occurred a number of years ago, specific mention should be given to the time frame associated with the statements made concerning implementation status.

Section 6.2.4.2

Section 6 specifically states that other utility personnel are excluded from the peer review team for a plant PRA. This needs to be clarified as to whether this represents personnel from the plant operating utility or any personnel from utilities other than the plant operator. Contractor/consultant personnel may be less independent than utility personnel since much PRA work is performed by contractors.

For some aspects of the review, personnel from the plant operating utility may be best for the review. Members of the plant operating staff are the best personnel to review the assumptions and modeling of system operation.

A peer review performed during an analysis significantly reduces the independence of the review. A review performed while the analysis is in progress requires significant interaction between the analysis and reviewer, reducing the independence and introducing bias from the input provided by the analysis. This type of review is specifically denied for many other activities performed at nuclear power plants.

The timing of review activities (during or after analysis) should not be specified in this document. This is a business decision to be made by the plant operating organization. It may actually be less costly to perform the reviews as a dedicated effort following completion of the analysis. This is especially true if the peer review must be performed by non-operating utility personnel.

Section 6.3

The report states that the IPEs do not in general adequately document the elimination of accident sequences due to application of human recovery actions. However, the report does not provide the basis for this statement.

There are many references to the detailed adequacy of the Level 2 calculated source term not being adequate for performance of a Level 3 (consequence) analysis. There was no requirement in the IPE program for this nor is one proposed for the future.

Section 8.2.4

This section states that the staff plans follow-up activities to determine if additional regulatory actions are warranted for plants with relatively high core damage frequency (CDF) or conditional containment failure probability (CCFP). NUREG-1560 does not consider revised CDF and CCFP values provided to the NRC as a result of the staff review of IPE submittals. In some cases, these revised submittals included substantial changes in these probabilities. Many plants have incorporated changes to the plants into their PRA models which have revised the plant CDF and CCFP values. The staff should evaluate these changes in the plant CDF and CCFP values before planning follow-up activities.

Section 9.2.1

This section states that no BWR common vulnerabilities are identified, yet concludes that some vulnerabilities can be considered generic. The conclusion is not consistent with the original statement. If no common vulnerabilities are identified, the conclusion should be that no generic concerns exist.

Section 10.2.1.6, 10.2.2.6

DC power is normally provided from the AC buses by the battery charges, not the inverters. Inverters are normally used to convert DC power to AC power.

Chapter 14, 15

Delete Chapters 14 and 15 on Quality of PRA. This information is being issued in draft form as regulatory guidance in NUREG-1602. Inclusion in NUREG-1560 serves no purpose and only causes confusion in the regulatory arena. NUREG-1560 was never meant to provide definition of quality, but rather a summary of the results of the IPE program.

Index Vol. 1

The Hope Creek reference listed for Page 3-17 should be Page 3-16. The reference listed for Page 3-21 should be Page 3-20.

The Salem reference listed for Page 3-69 should be Page 3-68.

Index Vol. 2

The index of Volume 2 lists references to Hope Creek on the following pages: 9-12, 9-13, 9-14, 9-27, 9-36, 13-19, 9-51, and 9-58. No such reference to Hope Creek exists on those pages. The index listing for Hope Creek to Page 9-33 should be 9-34.

The index of Volume 2 lists references to Salem on the following pages: 9-9, 9-24, 9-25, 9-30, 9-40, 9-44, 9-56, 9-63, 11-122. No such reference to Salem exists on those pages. The index listing for Salem to Page 11-120 should be 11-121.