

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

Nuclear Business Unit

AUG 3 0 1996

LR-N96273

United States Nuclear Regulatory Commission Document Control Desk Washington, DC 20555

Gentlemen:

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
GENERIC LETTER 95-07 - "PRESSURE LOCKING AND THERMAL BINDING OF
SAFETY RELATED POWER OPERATED GATE VALVES"
SALEM GENERATING STATION UNITS 1 AND 2
FACILITY OPERATING LICENSES DPR-70 AND DPR-75
DOCKET NOS. 50-272 AND 50-311

By letter dated August 7, 1996 (reference LR-N96245), PSE&G submitted a response to an NRC request for additional information concerning its response to Generic Letter 95-07. Attachment 1 to this letter provides supplemental information to support that response.

Should you have any questions or comments on this transmittal, please contact us.

Sincerely,

D. R. Powell

Manager -

Licensing and Regulation

Attachment

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C Mr. Hubert J. Miller, Administrator - Region I U. S. Nuclear Regulatory Commission 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. C. Marschall (X24) USNRC Senior Resident Inspector

Mr. K. Tosch, Manager IV Bureau of Nuclear Engineering 33 Arctic Parkway CN 415 Trenton, NJ 08625 LR-N96273

ATTACHMENT

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
GENERIC LETTER 95-07
SALEM GENERATING STATION
UNITS 1 AND 2
DOCKET NOS. 50-272 AND 50-311
FACILITY OPERATING LICENSES DPR-70 AND DPR-75

I. INTRODUCTION

On February 13, 1996, Public Service Electric and Gas Company (PSE&G) submitted its response to Generic Letter (GL) 95-07 in letter LR-96035. The NRC subsequently requested additional information (RAI) regarding PSE&G's response in a letter dated July 1, 1996. By letter dated August 7, 1996, PSE&G provided its response to the RAI. PSE&G committed to provide supplemental information concerning question 2 of the RAI. This attachment provides PSE&G's supplemental response.

II. RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

QUESTION 2

Regarding valve PR-6, -7, Power Operated Relief Valve Block Valves, Attachment 2, of the licensee's submittal states that these valves are not susceptible to pressure locking due to a screening which identified no heatup or pressure-trapping scenarios. However, the NRC staff believes that these valves may be potentially susceptible to pressure locking during certain design basis depressurization scenarios, such as a steam generator tube rupture. Please address the potential susceptibility of these valves to depressurization induced pressure locking.

RESPONSE 2

An evaluation of the Salem Power Operated Relief Valve Block Valves PR6 and PR7 under conditions associated with a Steam Generator Tube Ruptue has been completed. The result is that there is a negligible effect on the required unwedging thrust for the PORV Block Valves PR6 and PR7 as a result of a Steam Generator Tube Rupture.

The analyses performed indicate the following:

- 1. The valve is inherently insensitive to pressure locking because competing effects of bonnet pressure (increased disc-to-seat loading and increased steam ejection force) effectively offset one another. Accordingly, there is no increase in required thrust associated with the pressure locking scenario.
- 2. There are thermal binding effects which occur simultaneously with the postulated pressure locking scenario and there is an unwedging thrust increase associated with the thermal binding effects. However, this thermal binding scenario is less severe than the thermal binding scenario previously reported in the original submittal. Therefore, the previous thermal binding analysis results are bounding.