



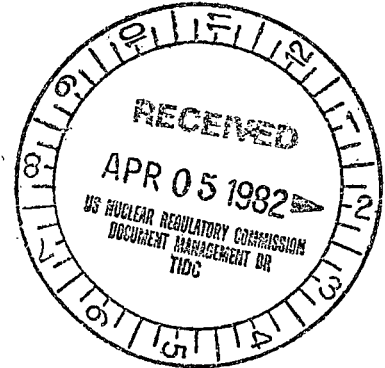
PSEG Public Service
Electric and Gas
Company

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March 31, 1982

Director of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
7920 Norfolk Avenue
Bethesda, MD 20014

Attention: Mr. Steven A. Varga, Chief
Operating Reactors Branch 1
Division of Licensing



Gentlemen:

NUREG 0737 - ITEM II.D.1
PWR SAFETY AND RELIEF VALVE TEST PROGRAM
UNITS 1 AND 2
SALEM NUCLEAR GENERATING STATION
DOCKET NO. 50-272 AND 50-311

This letter transmits to you, in its enclosure, our response to NUREG 0737 item II.D.1, "PWR Safety and Relief Valve Test Program".

Should you have any questions in this regard, do not hesitate to contact us.

Very truly yours,

E. A. Liden
E. A. Liden, Manager
Nuclear Licensing and Regulation

FM:mw

CC: Mr. Leif Norrholm
NRC Senior Resident Inspector
Mr. William J. Ross
NRC Licensing Project Manager

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SALEM GENERATING STATION UNITS 1 & 2
PWR SAFETY AND RELIEF VALVE TEST PROGRAM

In accordance with the initial recommendations of NUREG 0578 Section 2.1.2 as later clarified by NUREG 0737, Item II.D.1 and the USNRC letter dated September 29, 1981, each Pressurized Water Reactor (PWR) Utility on or before April 1, 1982 was to submit a preliminary evaluation supported by test results which demonstrates the capability of relief and safety valves to operate under expected operating and accident conditions.

This letter is the PSE&G response to the April 1, 1982 USNRC submittal request and is applicable to the Salem Units 1 & 2.

PSE&G is a participant in the Generic PWR Safety and Relief Valve Test Program implemented by the Electric Power Research Institute at the request of participating PWR Utilities in response to the USNRC recommendations for safety and relief valve testing.

The primary objective of the Test Program was to provide full scale test data confirming the functionability of primary system power operated relief valves and safety valves for expected operating and accident conditions. The second objective of the program was to obtain sufficient piping thermal hydraulic load data to permit confirmation of models which may be utilized for plant unique analysis of safety and relief valve discharge piping systems. Relief valve tests were completed in August, 1981 and safety valve tests were completed in December, 1981. The reports prepared by EPRI documenting the Test Program results are as follows:

* "Valve Selection/Justification Report"

This report documents that the selected test valves represent all participating PWR plant safety and relief valves.

* "Test Condition Justification Report" and the "Westinghouse Plant Condition Justification Report"

These reports document the basis and justification of the valve test conditions for all participating PWR plants. Cold overpressurization conditions were reviewed by PSE&G and indications are that they are enveloped by EPRI test conditions.

* "Safety and Relief Valve Test Report"

This report provides evidence demonstrating the functionability of the selected test valves under the selected test conditions for all participating PWR plants. Salem has Copes Vulcan 2" NPS PORV and Crosby 6M6 Safety Valves. Tests conducted on the relief valves have confirmed that the valves opened and closed on demand and that the valves suffered no damage that would preclude future operations. The safety valves have been shown to open and close. Certain areas of system performance are still undergoing review.

* "Application of Relap 5/MOD 1 for Calculations of Safety & Relief Valves Discharge Piping Hydrodynamic Loads"

This report presents an analytical model benchmarked against test data that may be used for plant unique analysis of safety and relief valve discharge piping systems.

All of the documents have been received by PSE&G and transmitted to you by David Hoffman of Consumers Power Company on behalf of the participating PWR Utilities as part of our response meeting the April 1, 1982 preliminary submittal requirement.

In addition to providing the referenced reports, PSE&G has performed a preliminary review of the Test Program results. Based on the review, we have concluded that valves tested represent the safety and relief valve designs and that the conditions tested envelop the range of expected operating and accident conditions for Salem Units 1 & 2. Also, the above mentioned Reports do provide the evidence required by NUREG 0737, Item II.D.1.A which will be used to perform the final plant specific evaluations.

The September 29, 1981 USNRC letter requested that plant specific final evaluations be submitted by July 1, 1982. In order to meet that date, evaluations have been initiated and are continuing.