



State of New Jersey
Department of Environmental Protection and Energy
Division of Environmental Safety, Health and Analytical Programs
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Jeanne M. Fox
Acting Commissioner

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Director

September 20, 1993

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Ladies & Gentlemen:

Subject: Hope Creek Generating Station (HCGS)
Docket No.50-354
License Change Request LCR 92-06, and
Safety Relief Valve (SRV) Testing Requirements
In-Service Testing Requirements Relief Request

By letter dated May 21, 1993, Public Service Electric and Gas Company (PSE&G) submitted the subject license change request (LCR) to the NRC. The submittal proposes:

- (a) To revise HCGS Technical Specification 4.4.2.2, Reactor Coolant System Surveillance Requirements, to apply only to the pilot stage assembly portions of the Target Rock Two-Stage Safety/Relief Valves. Specification 4.4.2.2 currently requires set point pressure testing for the entire SRVs at least once every 40 months.
- (b) To add a new Specification 4.4.2.3, to require the main (mechanical) portion of the SRVs to be set pressure tested at least once per 5 years.
- (c) An editorial change to include a correct reference to existing Specification 3.4.2.2.

By letter dated June 4, 1993 (follow-up to LCR 92-06 cited above), PSE&G submitted a request for an exemption to the In-Service Testing Program's ASME Boiler & Pressure Vessel Code requirements, for the subject two-stage SRVs.

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PSE&G based their justification for seeking the LCR:

(A) On the improved performance and reliability of the entire Target Rock Two-Stage SRVs (and specifically the pilot portion of the valves), as compared to the earlier three-stage SRVs in use when the ASME Code requirements were formulated.

(B) On a study sponsored by the Boiling Water Reactor Owner's Group (BWROG), concluding that malfunction of the valves is likely to be caused by potential malfunctions of the pilot stage of the SRVs.

(C) On Recommendation #2, in SIL 196, Supplement 14 (April 14, 1984), entitled "Target Rock 2-stage SRV Set-Point Drift" published by General Electric (GE), and quoted as stating in part that:

"Refurbishment of the pilot disk and seat should be performed at least once every other outage or every three years, whichever comes first, or if as-received (laboratory-tested prior to any valve maintenance) testing indicates that a sticking pilot disk-to-seat condition exists..."

(D) On the desirability (per ALARA) to reduce maintenance worker exposure. Based on site-specific maintenance history, PSE&G estimates that disassembling and testing only the pilot portion of the valve would reduce the time and dose requirements by half.

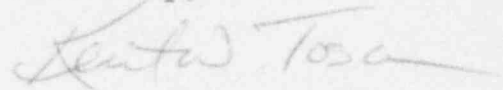
The New Jersey Department of Environmental Protection and Energy's Bureau of Nuclear Engineering (BNE) reviewed the above amendment in accordance with the requirements of 10 CFR 50.91(b). Based on this review, the BNE has the following comments:

- (1) Justification is needed for the selection of the 5-year (60-month) overall testing interval for the "mechanical" portion of the valve, as compared to the current 40-month interval for the entire valve. There are no conclusions stemming from the BWROG or the GE study excerpts quoted, suggesting that the integrity of the "mechanical" portion of the valve, or its reliable operation, can be ascertained without inspection and set point pressure testing for a period beyond the 40 months. The statement on Page 4, Attachment 1 of the May 21, 1993 submittal, that "... PSE&G believes that the mechanical stage of the SRVs has proven to be highly reliable and need not be subject to these requirements..." provides the rationale for PSE&G's LCR, but no data was provided to substantiate the above statement. The licensee will need to provide site-specific or other pertinent actual data in support of the "at least once per 5 years" selection.

- (2) Referring to PSE&G's analysis of "significant hazards consideration evaluation", on Page 4, Attachment 1 of the May 21, 1993 submittal, the licensee concludes that the proposed changes will not impact safety considerations. The licensee did not address or describe the assumptions and methodology used in their analysis leading to the above conclusions.

If you have any questions, please contact Suren Singh at (609) 987-2039 or Rich Pinney at (609) 987-2086.

Sincerely,



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