June 9, 1987

Docket No. 50-354

Mr. Corbin A. McNeill, Jr.
Senior Vice President - Nuclear
Public Service Electric and Gas
Company
Post Office Box 236
Hancocks Bridge, New Jersey 08038

SUBJECT: APPENDIX J EXEMPTION

Re: Hope Creek Generating Station

In response to your letter dated April 3, 1987, as supplemented May 8, 1987, the Commission has issued the enclosed Exemption for the Hope Creek Generating Station from the requirements of Paragraph III.D.3 of Appendix J to 10 CFR Part 50. It exempts 27 valves from the requirement that they be leak tested at intervals no greater than 24 months for the period from the current date until the first refueling outage which is scheduled to begin on February 1, 1988. A copy of the Safety Evaluation supporting this exemption is also enclosed.

An associated amendment revising the Technical Specifications to permit a similar one-time extension of the surveillance intervals for these valves and an associated relief from the test interval requirements of Section XI to the ASME Boiler and Pressure Vessel Code are being issued under separate cover.

Sincerely,

/s/
George W. Rivenbark, Project Manager
Project Directorate I-2
Division of Reactor Projects I/II

Enclosures:
As stated

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
PUBLIC SERVICE ELECTRIC AND GAS COMPANY	)	Docket No. 50-354
	)	
	)	
(HOPE CREEK GENERATING STATION)	)	
	)	

EXEMPTION

I.

The Public Service Electric & Gas Company (the licensee) is the holder of Facility Operating License No. NPF-57 which authorizes operation of the Hope Creek Generating Station, at a power level not in excess of 3293 megawatts thermal. The facility is a boiling water reactor located at the licensee's site in Salem County, New Jersey. The license provides, among other things, that the facility is subject to all rules, regulations and orders of the Commission now or hereafter in effect.

II.

Paragraphs III.C.3 and III.D.3 of Appendix J to 10 CFR Part 50, require that containment isolation valves, which may provide a pathway for leakage of containment atmosphere, be leak tested on at least a 24-month frequency for comparison with the limiting value of 0.6 L_a for Type B and Type C tests.

The Public Service Electric & Gas Company proposed a one-time extension to this 24-month surveillance interval for conducting Type C tests on 27 containment isolation valves. The current testing interval is to be extended until the first refueling outage, which is scheduled to begin on February 1, 1988.

The deadline dates for leak testing these 27 valves occur at different times with the earliest deadline date being June 11, 1987 and the latest being October 18, 1987. The staff has found that approval of the proposed extension is warranted and that the proposed extension should be authorized by the granting of this one-time exemption so that Hope Creek may continue to operate until shutdown for the first refueling outage.

Our associated Amendment revising the Technical Specifications to permit a similar one-time surveillance interval extension and an associated relief from the requirements of Section XI of the ASME Boiler and Pressure Vessel Code are being issued under separate cover.

III.

The NRC staff has evaluated the licensee's basis for requesting the extension in the surveillance interval and finds that not granting this exemption would require the licensee to shut down the plant on June 11, 1987, for a period of about three weeks to conduct the testing. The granting of this exemption is likely to result in a negligible reduction in containment integrity during the approximately 15 to 34-week extension period. In evaluating the changes to the Technical Specifications and the associated exemption, the staff reviewed the licensee's technical justifications for the requested extension. The staff reviewed the licensee's position that these tests cannot be conducted during power operations and that, therefore, a shutdown would be required to perform the tests. The staff reviewed the types of valves involved to ascertain that these are not the types of valves used in boiling water reactors which have a propensity to require intensive maintenance

to maintain their leaktight integrity. The staff considered the uses of these valves to ascertain that they are not used during normal plant operations in the relatively more demanding applications such as modulating valves to continuously control flow rates or pressure. The staff reviewed available data as provided by the licensee on similar valves used elsewhere in the industry which support the licensee's position that these valves have demonstrated good maintenance histories. The staff also reviewed previous leakage test results on the specific valves subject to the request for exemption and has found that there is substantial margin between the leak rate values previously measured and the limiting values in Appendix J to accommodate any additional degradation likely to occur during the period of the extension. The details of the above described review are discussed in the attached Safety Evaluation. Based on the above information provided by the licensee and the staff's evaluation of the licensee's submittals, the NRC staff concludes that the licensee has provided an adequate basis for the conclusion that postponing the subject local leak rate tests until the first refueling outage is likely to have little effect on containment integrity.

The Commission has amended its regulations, effective on January 13, 1986, in 10 CFR 50.12 (50 FR 50764-50778) to modify the criteria for granting exemptions from its regulations. The amended regulations in 10 CFR 50.12 state that the Commission will not consider granting an exemption unless special circumstances are present. In its letter of April 3, 1987, the licensee addressed two of those special circumstances, which are applicable to this request for exemption.

The licensee states that the special circumstances of 10 CFR 50.12 (a)(2)(ii) are present in that application of the regulation in 10 CFR 50, Appendix J for the Type C leakage testing of 27 containment isolation valves within 24 months, of their initial tests i.e., by various dates from June 11 to October 18, 1987, versus the requested one-time extension until the first refueling outage is not necessary to achieve the underlying purpose of the rule. Appendix J states that a purpose of the tests is to assure that leakage through the primary reactor containment and systems and components penetrating primary containment shall not exceed allowable leakage rate values as specified in the Technical Specifications or associated bases.

The licensee states that the special circumstances of 10 CFR 50.12(a)(2)(iii) are present in that a requirement for shutdown to comply with the two year testing requirement in Appendix J would impose a hardship and costs not contemplated by the rule when written since Appendix J clearly indicates an intent that required testing be performed during normal refueling outages except in unusual situations when the two year limit would apply. The licensee states further that to require a plant shutdown to comply with the two-year limit for testing even though the plant has not accumulated two full years of power operation would result in an unnecessary loss of power to the grid at a time when the distribution system's need for power is high as well as the extra costs attendant to having two successive outages.

The licensee also states that the special circumstances of 10 CFR 50.12(a)(2)(v) are present in that the exemption would provide only temporary relief from the applicable regulation and became necessary as a result of

delays in attaining full power operations, which are attributable to initial startup activities.

The licensee has provided various bases for its conclusion that the requested delay of approximately 15 to 34 weeks in testing is not likely to result in a significant increase in leakage from these valves. These bases, which are discussed in more detail in the enclosed Safety Evaluation and the licensee's submittals, include the licensee's characterization of these valves as having good maintenance histories and which have shown in their initial leakage tests that they do not contribute an undue proportion of either the total measured containment leakage or the allowable leakage values. On these bases, the staff agrees that it is unlikely that the delay in the testing of the subject 27 valves would result in measured leakage that would cause the allowable containment leakage values to be exceeded.

The exemption is temporary since it provides relief from the requirement to conduct the subject tests by various dates commencing June 11, 1987 until the first refueling outage which is scheduled to begin on February 1, 1988. The licensee has tested or will test all but 27 valves out of a total population of over 200 valves subject to such testing by the date initially required by Appendix J and the Technical Specifications. The licensee has also indicated its intention to test most of these 27 valves during a planned September 1987 outage and has made a commitment to test all except two valves (head spray supply valves that can only be tested during a refueling outage) if an unplanned outage greater than 30 days is encountered. The licensee stated that for each outage greater than five days, as many valves as possible will be tested.

Based on the staff's findings as discussed above and assumption that all other valves will be tested in accordance with Appendix J requirements, the staff has determined that postponing the local leak rate tests for these 27 valves from the various deadline dates for leak rate testing, the earliest of which is June 11, 1987, and the latest of which is October 18, 1987, until the first refueling outage which is scheduled to begin on February 1, 1988, would not result in a situation wherein the measured leakage from these valves would cause the 0.6 L_a limit to be exceeded. Thus, the staff has also determined that the underlying purpose of Appendix J, in this regard, i.e., to provide assurance that leakage shall not exceed the allowable values, will be met with this one-time extension of the test schedule. Therefore, the staff concluded that special circumstances of 10 CFR 50.12(a)(2)(ii) associated with this request for an exemption, have been demonstrated by the licensee. Accordingly, the NRC staff finds that operation of Hope Creek during the proposed extension period is acceptable. Therefore, the staff finds that the proposed temporary exemption from 10 CFR 50, Appendix J, Paragraph III.D.3 is acceptable.

IV.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12, the proposed exemption is authorized by law, will not endanger life or property or the common defense and security and is otherwise in the public interest. Therefore, the Commission hereby grants the exemption as follows:

"An exemption is granted from the requirement to conduct Type C testing on containment isolation valves at an interval no greater than 24 months as stated in 10 CFR 50, Appendix J, Paragraph III.D.3. This exemption is granted for the period specified in the licensee's April 3, 1987 request for exemption (from current test deadline dates which begin June 11, 1987 until the first refueling outage which is scheduled to begin on February 1, 1988) and is only applicable to 27 valves in Hope Creek as indicated in the Safety Evaluation Report issued in support of this exemption."

Pursuant to 10 CFR 51.32, the Commission has determined that the issuance of the exemption will have no significant impact on the environment (52 FR 21635).

A copy of the Commission's Safety Evaluation dated June 9, 1987 related to this action is available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, DC, and the Pennsville Public Library, 190 South Broadway, Pennsville, New Jersey 08070.

This Exemption is effective on June 11, 1987 and is to expire at the start of the first refueling outage or except for the Head Spray Valves BC-V020 and BC-V021 at the start of an unplanned outage greater than 30 days between the current date and the first refueling outage, whichever first occurs.

Dated at Bethesda, Maryland, this ninth day of June 1987.

FOR THE NUCLEAR REGULATORY COMMISSION

Steven A. Varga, Director
Division of Reactor Projects I/II