Mr. Steven E. Miltenberger Vice President and Chief Nuclear Public Service Electric & Gas Company Post Office Box 236 Hancocks Bridge, New Jersey 08038

Dear Mr. Miltenberger

TAKE TRITIUM SAMPLES DIRECTLY FROM THE SPENT FUEL POOL AREA SUBJECT:

(TAC NO. 73064)

Re:

HOPE CREEK GENERATING STATION

The Commission has issued the enclosed Amendment No. 28 to Facility Operating License No. NPF-57 for the Hope Creek Generating Station. This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated April 12, 1989.

This amendment clarifies that sampling for tritium will be taken directly from the spent fuel pool area rather than from the ventilation exhaust from that area.

A copy of our safety evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely.

Clyde Shiraki, Project Manager

Project Directorate I-2

Division of Reactor Projects I/II Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 28 to License No. NPF-57

Safety Evaluation

cc w/enclosures: See next page

DISTRIBUTION w/enclosures:

Docket File NRC PDR Local PDR PDI-2 Reading WButler

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CShiraki:tr



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

July 10, 1989

Docket No. 50-354

Mr. Steven E. Miltenberger Vice President and Chief Nuclear Officer Public Service Electric & Gas Company Post Office Box 236 Hancocks Bridge, New Jersey 08038

Dear Mr. Miltenberger:

SUBJECT: TAKE TRITIUM SAMPLES DIRECTLY FROM THE SPENT FUEL POOL AREA

(TAC NO. 73064)

Re: HOPE CREEK GENERATING STATION

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Clyde Shiraki, Project Manager

Project Directorate I-2

Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 28 to License No. NPF-57

2. Safety Evaluation

cc w/enclosures:
See next page

Hope Creek Generating Station

cc:

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Resident Inspector U.S. Nuclear Regulatory Commission P.O. Box 241 Hancocks Bridge, New Jersey 08038

Mr. S. LaBruna Vice President - Nuclear Operations Nuclear Department P.O. Box 236 Hancocks Bridge, New Jersey 08038

Mr. J. J. Hagan General Manager - Hope Creek Operations Hope Creek Generating Station P.O. Box 236 Hancocks Bridge, New Jersey 08038

Mr. B. A. Preston, Manager Licensing and Regulation Nuclear Department P.O. Box 236 Hancocks Bridge, New Jersey 08038

Regional Administrator, Region I U.S. Nuclear Regulatory Commission 475 Allendale Road King of Prussia, Pennsylvania 19406

Mr. Suren Singh, Nuclear Engineer Bureau of Nuclear Engineering Radiation Protection Program Department of Environmental Protection State of New Jersey CN 415 Trenton, New Jersey 08625



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

PUBLIC SERVICE ELECTRIC & GAS COMPANY

ATLANTIC CITY ELECTRIC COMPANY

DOCKET NO. 50-354

HOPE CREEK GENERATING STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 28 License No. NPF-57

- The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
 - A. The application for amendment filed by the Public Service Electric & Gas Company (PSE&G) dated April 12, 1989 complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
- 2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-57 is hereby amended to read as follows:
 - (2) <u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 28, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. PSE&G shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/S/

Walter R. Butler, Director Project Directorate I-2 Division of Reactor Projects I/II Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: July 10, 1989

PDI-2/PM CShiraki:tr

PDI-2/D WButler //89

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Walter R. Butler, Director Project Directorate I-2 Division of Reactor Projects I/II Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: July 10, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 28

FACILITY OPERATING LICENSE NO. NPF-57

DOCKET NO. 50-354

Replace the following page of the Appendix "A" Technical Specifications with the attached page. The revised page is identified by Amendment number and contains vertical lines indicating the area of change. Overleaf page is provided to maintain document completeness.*

Remove	Insert
3/4 11-11	3/4 11-11
3/4 11-12*	3/4 11-12*

TABLE 4.11.2.1.2-1 (Continued)

TABLE NOTATIONS

- (b)The principal gamma emitters for which the LLD specification applies exclusively are the following radionuclides: Kr-87, Kr-88, Xe-133, Xe-133m, Xe-135, and Xe-138 in noble gas releases and Mn-54, Fe-59, Co-58, Co-60, Zn-65, Mo-99, I-131, Cs-134, Cs-137, Ce-141 and Ce-144 in iodine and particulate releases. This list does not mean that only these nuclides are to be considered. Other gamma peaks that are identifiable, together with those of the above nuclides, shall also be analyzed and reported in the Semiannual Radioactive Effluent Release Report pursuant to Specification 6.9.1.7.
- (c)Sampling and analysis shall also be performed following shutdown, startup, or a THERMAL POWER change exceeding 15% of RATED THERMAL POWER within a 1-hour period. This requirement does not apply if (1) analysis shows that the DOSE EQUIVALENT 1-131 concentration in the primary coolant has not increased more than a factor of 3; and (2) the noble gas monitor shows that effluent activity has not increased more than a factor of 3.
- (d)Tritium grab samples shall be taken at least once per 7 days from the spent fuel pool area, whenever spent fuel is in the spent fuel pool.
- (e) The ratio of the sample flow rate to the sampled stream flow rate shall be known for the time period covered by each dose or dose rate calculation made in accordance with Specifications 3.11.2.1, 3.11.2.2, and 3.11.2.3.
- (f)Samples shall be changed at least once per 7 days and analyses shall be completed within 48 hours after changing, or after removal from sampler. Sampling shall also be performed at least once per 24 hours for at least 7 days following each shutdown, startup or THERMAL POWER change exceeding 15% of RATED THERMAL POWER in 1 hour and analyses shall be completed within 48 hours of changing. When samples collected for 24 hours are analyzed, the corresponding LLDs may be increased by a factor of 10. This requirement does not apply if (1) analysis shows that the DOSE EQUIVALENT I-131 concentration in the primary coolant has not increased more than a factor of 3; and (2) the noble gas monitor shows that effluent activity has not increased more than a factor of 3.

RADIOACTIVE EFFLUENTS

DOSE - NOBLE GASES

LIMITING CONDITION FOR OPERATION

- 3.11.2.2 The air dose due to noble gases released in gaseous effluents, from each reactor unit, to areas at and beyond the SITE BOUNDARY (see Figure 5.1.1-1) shall be limited to the following:
 - a. During any calendar quarter: Less than or equal to 5 mrads for gamma radiation and less than or equal to 10 mrads for beta radiation and.
 - b. During any calendar year: Less than or equal to 10 mrads for gamma radiation and less than or equal to 20 mrads for beta radiation.

APPLICABILITY: At all times.

ACTION

- a. With the calculated air dose from radioactive noble gases in gaseous effluents exceeding any of the above limits, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that identifies the cause(s) for exceeding the limit(s) and defines the corrective actions that have been taken to reduce the releases and the proposed corrective actions to be taken to assure that subsequent releases will be in compliance with the above limits.
- b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.2.2 Cumulative dose contributions for the current calendar quarter and current calendar year for noble gases shall be determined in accordance with the methodology and parameters in the ODCM at least once per 31 days.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 28 TO FACILITY OPERATING LICENSE NO. NPF-57

PUBLIC SERVICE ELECTRIC & GAS COMPANY

ATLANTIC CITY ELECTRIC COMPANY

HOPE CREEK GENERATING STATION

DOCKET NO. 50-354

1.0 INTRODUCTION

By letter dated April 12, 1989, Public Service Electric & Gas Company (PSE&G) requested an amendment to Facility Operating License No. NPF-57 for the Hope Creek Generating Station. The proposed amendment would require that samples for tritium be taken at the spent fuel pool area rather than from the ventilation exhaust from that area.

2.0 EVALUATION

The staff evaluation is based on a PSE&G letter of April 12, 1989. Table 4.11.2.1.2-1, TABLE NOTATION (d) currently requires that tritium grab samples be taken at least once per 7 days from the ventilation exhaust from the spent fuel pool area. Sampling for tritium at the spent pool area instead of from the ventilation exhaust from that area would provide a more representative sample and more accurate methodology for the assessment of tritium release from the spent fuel. The proposed change will provide more accurate samples because it will provide only the atmospheric content from the spent fuel pool area for assessment rather than being diluted by the additional ventilation flow of the South Plant Vent of up to 423,900 cfm.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

4.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the <u>Federal Register</u> (54 FR 23322) on May 31, 1989 and consulted with the State of New Jersey. No public comments were received and the State of New Jersey did not have any comments.

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security nor to the health and safety of the public.

Principal Contributor: C. Y. Shiraki

Dated: July 10, 1989