



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

April 11, 1986

Docket No. 50-354

Mr. Corbin A. McNeill, Jr.
Vice President - Nuclear
Public Service Electric & Gas Company
P.O. Box 236
Hancocks Bridge, New Jersey 08038

Dear Mr. McNeill:

Subject: Issuance of Facility Operating License NPF-50 - Hope Creek
Generating Station

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Facility Operating License NPF-50, together with Technical Specifications and Environmental Protection Plan for the Hope Creek Generating Station. License No. NPF-50 authorizes operation of the Hope Creek Generating Station at reactor power levels not in excess of 3293 megawatts thermal (100% rated power). Pending Commission approval, operation is restricted to power levels not to exceed five percent of rated power (164.65 megawatts thermal).

Enclosed is a copy of a related notice, the original of which has been forwarded to the Office of the Federal Register for publication.

Five signed copies of Amendment No. 11 to Indemnity Agreement No. B-74 which covers the activities authorized under License No. NPF-50 are also enclosed. Please sign all copies and return one copy to this office.

Safety Evaluation Report Supplement No. 5 (SSER 5) was prepared in support of issuing the enclosed license. Enclosed is a pre-printed copy of SSER 5. Twenty (20) bound copies of SSER 5 will be sent to you in the near future.

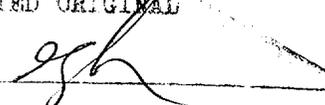
Sincerely,


Robert M. Bernero, Director
Division of BWR Licensing
Office of Nuclear Reactor Regulation

Enclosures:

1. Facility Operating License NPF-50
2. Federal Register Notice
3. Amendment No. 11 to Indemnity Agreement No. B-74
4. Supplement No. 5 to the Safety Evaluation Report

DESIGNATED ORIGINAL

Certified By 

cc w/enclosures:
See next page

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PDR ADOCK 05000354
P PDR

Mr. C. A. McNeill
Public Service Electric & Gas Co.

Hope Creek Generating Station

CC:

Gregory Minor
Richard Hubbard
Dale Bridenbaugh
MHB Technical Associates
1723 Hamilton Avenue, Suite K
San Jose, California 95125

Susan C. Remis
Division of Public Interest Advocacy
New Jersey State Department of
the Public Advocate
Richard J. Hughes Justice Complex
CN-850
Trenton, New Jersey 08625

Troy B. Conner, Jr. Esquire
Conner & Wetterhahn
1747 Pennsylvania Avenue N.W.
Washington, D.C. 20006

Office of Legal Counsel
Department of Natural Resources
and Environmental Control
89 Kings Highway
P.O. Box 1401
Dover, Delaware 19903

Richard Fryling, Jr., Esquire
Associate General Solicitor
Public Service Electric & Gas Company
P. O. Box 570 T5E
Newark, New Jersey 07101

Mr. K. W. Burrowes, Project Engineer
Bechtel Power Corporation
50 Beale Street
P. O. Box 3965
San Francisco, California 94119

Resident Inspector
U.S.N.R.C.
P. O. Box 241
Hancocks Bridge, New Jersey 08038

Manager - Licensing and Regulation
c/o Public Service Electric & Gas
Bethesda Office Center, Suite 550
4520 East-West Highway
Bethesda, Maryland 20814

Richard F. Engel
Deputy Attorney General
Division of Law
Environmental Protection Section
Richard J. Hughes Justice Complex
CN-112P
Trenton, New Jersey 08625

Ms. Rebecca Green
New Jersey Bureau of Radiation
Protection
380 Scotch Road
Trenton, New Jersey 08628

Mr. Robert J. Touhey,
Acting Director
DNREC - Division of
Environmental Control
89 Kings Highway
P. O. Box 1401
Dover, Delaware 19903

Mr. Anthony J. Pietrofitta
General Manager
Power Production Engineering
Atlantic Electric
1199 Black Horse Pike
Pleasantville, New Jersey 08232

Mr. R. S. Salvesen
General Manager-Hope Creek Operation
Public Service Electric & Gas Co.
P.O. Box A
Hancocks Bridge, New Jersey 08038

Regional Administrator, Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

4/11/86

HOPE CREEK LOW POWER OPERATING LICENSE

DISTRIBUTION:

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* w/Technical Specifications

Public Service Electric & Gas Co. - 2 -

Hope Creek Generating Station

cc:

Mr. B. A. Preston
Public Service Electric & Gas Co.
Hope Creek Site, MC12Y
Licensing Trailer 12LI
Foot of Buttonwood Road
Hancocks Bridge, New Jersey 08038



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

PUBLIC SERVICE ELECTRIC & GAS COMPANY AND
ATLANTIC CITY ELECTRIC COMPANY
DOCKET NO. 50-354
HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE

License No. NPF-50

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
 - A. The application for a license filed by the Public Service Electric & Gas Company, acting on behalf of itself and Atlantic City Electric Company (the licensees), complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Hope Creek Generating Station (the facility) has been substantially completed in conformity with Construction Permit No. CPPR-120 and the application, as amended, the provisions of the Act and the regulations of the Commission;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission (except as exempted from compliance in Section 2.D. below);
 - D. There is reasonable assurance: (i) that the activities authorized by this operating license 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 (except as exempted from compliance in Section 2.D. below);
 - E. Public Service Electric & Gas Company* is technically qualified to engage in the activities authorized by this license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
 - F. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
 - G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;

*Public Service Electric & Gas Company is authorized to act as agent for Atlantic City Electric Company and has exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

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- H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Facility Operating License No. NPF-50, subject to the conditions for protection of the environment set forth in the Environmental Protection Plan attached as Appendix B, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and
 - I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.
2. Based on the foregoing findings regarding this facility, Facility Operating License No. NPF-50 is hereby issued to the Public Service Electric & Gas Company and Atlantic City Electric Company (the licensees) to read as follows:
- A. This license applies to the Hope Creek Generating Station, a boiling water nuclear reactor, and associated equipment (the facility) owned by Public Service Electric & Gas Company and Atlantic City Electric Company. The facility is located on the licensees' site on the east bank of the Delaware River in Lower Alloways Creek Township, Salem County, New Jersey. The facility is located approximately eight miles southwest of Salem, New Jersey and is described in the Public Service Electric & Gas Company's Final Safety Analysis Report, as supplemented and amended, and in the Environmental Report, as supplemented and amended.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
 - (1) Public Service Electric & Gas Company (PSE&G), pursuant to Section 103 of the Act and 10 CFR Part 50, to possess, use and operate the facility at the above designated location in Salem County, New Jersey, in accordance with the procedures and limitations set forth in this license;
 - (2) Atlantic City Electric Company, pursuant to Section 103 of the Act and 10 CFR Part 50, to possess the facility at the designated location in Salem County, New Jersey, in accordance with the procedures and limitations set forth in this license;
 - (3) PSE&G, pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;

- (4) PSE&G, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 - (5) PSE&G, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
 - (6) PSE&G, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

PSE&G is authorized to operate the facility at reactor core power levels not in excess of 3293 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein. Pending Commission approval, this license is restricted to power levels not to exceed five percent of rated power (164.65 megawatts thermal).

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. PSE&G shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Turbine System Maintenance Program (Section 3.5.1.3.3, SER; Section 3.5.1.3.3, SSER No. 5)*

PSE&G shall submit a turbine system maintenance program based on the manufacturer's calculations of missile-generated probabilities by no later than 3 years from the date of this license.

(4) Inservice Testing of Pumps and Valves (Section 3.9.6, SSER No. 4)

Pursuant to 10 CFR 50.55a and for the reasons set forth in Section 3.9.6 of SSER No. 4, the relief identified in the PSE&G submittal dated July 12, 1985, requesting relief from certain pump and valve testing requirements of 10 CFR 50.55a(a) is granted, for a period of no longer than two years from the date of issuance of this license or until a detailed review of the inservice testing program for pumps and valves, has been completed, whichever comes first.

(5) Environmental Qualification (Section 3.11.5, SSER No. 5)

- a. Prior to startup following the first refueling outage, the qualified life of the electrical equipment under purchase order M-48 shall be recalculated on the basis of the actual temperatures monitored at the equipment locations during the first cycle of operation, with adequate consideration of margin.
- b. Prior to achieving initial criticality, the 53 Tobar Model 32, Series 2 transmitters included in the harsh environment qualification program shall be replaced with qualified Rosemount Model 1153B transmitters.

(6) Inservice Inspection (Section 6.6, SER; Sections 5.2.4.3 and 6.6.3, SSER No. 5)

- a. PSE&G shall submit an inservice inspection program in accordance with 10 CFR 50.55a(g)(4) for staff review within six months of the issuance of this license.
- b. Pursuant to 10 CFR 50.55a(a)(3) and for the reasons set forth in Sections 5.2.4.3 and 6.6.3 of SSER No. 5, the relief identified in the PSE&G submittal dated November 18, 1985, as revised by the submittal dated January 20, 1986, requesting relief from certain requirements of 10 CFR 50.55a(g) for the preservice inspection program, is granted.

*The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

(7) Fuel Storage and Handling (Section 9.1, SSER No. 5)

- a. No more than a total of three (3) fuel assemblies shall be out of approved shipping containers or fuel assembly storage racks or the reactor at any one time.
- b. The above three (3) fuel assemblies as a group shall maintain a minimum edge-to-edge spacing of twelve (12) inches from the shipping container array and the storage rack array.
- c. Fresh fuel assemblies, when stored in their shipping containers, shall be stacked no more than three (3) containers high.

(8) Fire Protection (Section 9.5.1.8, SSER No. 5)

PSE&G shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility through Amendment No. 13 and as described in submittals dated August 12 and 27, November 21 and 29, December 3 and 16, 1985, January 3, and April 8, 1986, and as approved in the SER dated October 1984 (and Supplements 1 through 5) subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

(9) Solid Waste Process Control Program (Section 11.4.2, SER; Section 11.4, SSER No. 4)

PSE&G shall obtain NRC approval of the Class B and C solid waste process control program prior to processing Class B and C solid wastes.

(10) Emergency Planning (Section 13.3, SSER No. 5)

In the event that the NRC finds that the lack of progress in completion of the procedures in the Federal Emergency Management Agency's final rule, 44 CFR Part 350, is an indication that a major substantive problem exists in achieving or maintaining an adequate state of emergency preparedness, the provisions of 10 CFR Section 50.54(s)(2) will apply.

(11) Initial Startup Test Program (Section 14, SSER No. 5)

Any changes to the Initial Test Program described in Section 14 of the FSAR made in accordance with the provisions of 10 CFR 50.59 shall be reported in accordance with 50.59(b) within one month of such change.

(12) Partial Feedwater Heating (Section 15.1, SER; Section 15.1, SSER No. 5)

PSE&G shall not operate the facility (other than for normal start-up or shutdown) with the feedwater inlet temperature less than 424.5°F.

(13) Detailed Control Room Design Review (Section 18.1, SSER No.5)

- a. PSE&G shall submit for staff review Detailed Control Room Design Review Summary Reports II and III on a schedule consistent with, and with contents as specified in, its letter of January 9, 1986.
- b. Prior to exceeding five percent power, PSE&G shall provide temporary zone markings on safety-related instruments in the control room.

(14) Safety Parameter Display System (Section 18.2, SSER No. 5)

Prior to restart following the first refueling outage, the licensee shall, per its commitment made in a letter dated March 7, 1986, add the following parameters to the SPDS and have them operational:

- a. Primary containment radiation
- b. Primary containment isolation status
- c. Combustible gas concentration in primary containment
- d. Source range neutron flux

- D. The facility requires exemptions from certain requirements of 10 CFR Part 50 and 10 CFR Part 70. An exemption from the criticality alarm requirements of 10 CFR 70.24 was granted in Special Nuclear Material License No. 1953, dated August 21, 1985. This exemption is described in Section 9.1 of Supplement No. 5 to the SER. This previously granted exemption is continued in this operating license. Exemptions from certain requirements of Appendix A to 10 CFR Part 50, are described in Supplement No. 5 to the SER. These include (a) a schedular exemption to the requirements of General Design Criterion 17, permitting delaying completion of preoperational testing of Diesel Generator "D" until prior to initial criticality (Appendix R of SSER 5); (b) a schedular exemption to the requirements of General Design Criterion 13, permitting delaying completion of preoperational testing of the Traversing Incore Probe System until prior to initial criticality (Appendix R of SSER 5); (c) a schedular exemption to the requirements of General Design Criterion 60, permitting delaying completion of preoperational testing of the Offgas System until prior to fully tensioning the reactor pressure vessel head closure bolts (Appendix R of SSER 5); (d) a schedular exemption to the requirements of General

Design Criterion 64, permitting delaying functionality of the Turbine Building Circulating Water System-Radiation Monitoring System until 5 percent power for local indication, and until 120 days after fuel load for control room indication (Appendix R of SSER 5). Exemptions from certain requirements of Appendix J to 10 CFR Part 50, are described in Supplement No. 5 to the SER. These include (a) an exemption from the requirement of Paragraph III.D.2(b)(ii) of Appendix J, exempting overall containment air lock leakage testing unless maintenance has been performed on the air lock that could affect air lock sealing capability (Section 6.2.6 of SSER 5); (b) an exemption from the requirement of Paragraph III.C.2(b) of Appendix J, exempting main steam isolation valve leak-rate testing at 1.10 Pa (Section 6.2.6 of SSER 5); (c) an exemption from Paragraph III.D.3 of Appendix J, exempting Type C testing on traversing incore probe system shear valves (Section 6.2.6 of SSER 5); (d) an exemption from Paragraph III.D.2(a) of Appendix J, exempting Type C testing for instrument lines and lines containing excess flow check valves (Section 6.2.6 of SSER 5); and (e) an exemption from Paragraph III.C.2(a) of Appendix J, exempting Type C testing of thermal relief valves (Section 6.2.6 of SSER 5). These exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. These exemptions are hereby granted. The special circumstances regarding each exemption are identified in the referenced section of the safety evaluation report and the supplements thereto. These exemptions are granted pursuant to 10 CFR 50.12. With these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

- E. PSE&G shall fully implement and maintain in effect all provisions of the physical security, guard training and qualification, and safeguards contingency plans previously approved by the Commission and all amendments and revisions to such plans made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). These plans, which contain safeguards information protected under 10 CFR 73.21, are entitled: "Hope Creek Generating Station Security Plan," with revisions submitted through March 20, 1986, "Hope Creek Generating Station Security Training and Qualification Plan," with revisions submitted through July 18, 1984, and "Hope Creek Generating Station Security Contingency Plan," with revisions submitted through July 23, 1985.
- F. Except as otherwise provided in the Technical Specifications or Environmental Protection Plan, PSE&G shall report any violations of the requirements contained in Section 2.C of this license in the following manner: initial notification shall be made within 24 hours to the NRC Operations Center via the Emergency Notification System with written followup within thirty days in accordance with the procedures described in 10 CFR 50.73(b), (c), and (e).

- G. The licensees shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- H. This license is effective as of the date of issuance and shall expire at midnight on April 11, 2026.

FOR THE NUCLEAR REGULATORY COMMISSION



Darrell G. Eisenhut, Acting Director
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Appendix A - Technical Specifications (NUREG-1186)
- 2. Appendix B - Environmental Protection Plan

Date of Issuance: April 11, 1986

U. S. NUCLEAR REGULATORY COMMISSION
PUBLIC SERVICE ELECTRIC & GAS COMPANY
AND
ATLANTIC CITY ELECTRIC COMPANY
HOPE CREEK GENERATING STATION
DOCKET NO. 50-354
NOTICE OF ISSUANCE OF FACILITY OPERATING LICENSE

Notice is hereby given that the U.S. Nuclear Regulatory Commission (the Commission or NRC), has issued Facility Operating License No. NPF-50 to Public Service Electric & Gas Company and Atlantic City Electric Company (the licensees) which authorizes operation of the Hope Creek Generating Station (the facility), at reactor core power levels not in excess of 3293 megawatts thermal in accordance with the provisions of the License, the Technical Specifications and the Environmental Protection Plan with a condition currently limiting operation to five percent of full power (164.65 megawatts thermal). Authorization to operate beyond five percent of full power will require specific Commission approval.

The Hope Creek Generating Station is a boiling water nuclear reactor located on the east shore of the Delaware River in Lower Alloways Creek Township, Salem County, New Jersey. The license is effective as of the date of issuance.

The application for the license complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations. The Commission has made appropriate findings as required by the Act and the Commission's regulations in 10 CFR Chapter I which are set forth

in the License. Prior public notice of the overall action involving the proposed issuance of an operating license was published in the Federal Register on August 10, 1983 (48 F.R. 36357).

The Commission has determined that the issuance of this license will not result in any environmental impacts other than those evaluated in the Final Environmental Statement since the activity authorized by the license is encompassed by the overall action evaluated in the Final Environmental Statement.

For further details with respect to this action, see (1) Facility Operating License No. NPF-50, with Technical Specifications (NUREG-1186) and the Environmental Protection Plan; (2) the report of the Advisory Committee on Reactor Safeguards, dated December 18, 1984; (3) the Commission's Safety Evaluation Report, dated October 1984 (NUREG-1048), and Supplements 1 through 5; (4) the Final Safety Analysis Report and Amendments thereto; (5) the Environmental Report and supplements thereto; and (6) the Final Environmental Statement dated December 1984 (NUREG-1074).

These items are available for inspection at the Commission's Public Document Room located at 1717 H Street, N.W., Washington, DC 20555 and in the Pennsville Public Library, 190 South Broadway, Pennsville, New Jersey 08070. A copy of Facility Operating License NPF-50 may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Director, Division of BWR Licensing. Copies of the Safety Evaluation Report and Supplements 1 through 5 (NUREG-1048) and the Final Environmental Statement (NUREG-1074) may be purchased at current rates from the National Technical Information Service, Department of Commerce, 5285 Port Royal Road, Springfield, Virginia

22161, or may be ordered by calling (202) 275-2060 or by writing to the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 37082, Washington, DC 20013-7082. All orders should clearly identify the NRC publication number and the requester's GPO deposit account, or VISA or Mastercard number and expiration date.

Dated at Bethesda, Maryland this 11th day of April 1986.

FOR THE NUCLEAR REGULATORY COMMISSION

Elinor G. Adensam
Elinor G. Adensam, Director
BWR Project Directorate No. 3
Division of BWR Licensing



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

Docket Nos. 50-272
50-311
50-354

AMENDMENT TO INDEMNITY AGREEMENT NO. B-74
AMENDMENT NO. 11

Effective April 11, 1986, Indemnity Agreement No. B-74, between Public Service Electric and Gas Company, Philadelphia Electric Company, Delmarva Power and Light Company, Atlantic City Electric Company and the Atomic Energy Commission, dated November 5, 1974, as amended, is hereby further amended as follows:

Item 3 of the Attachment to the indemnity agreement is deleted in its entirety and the following substituted therefor:

Item 3 - License number or numbers

SMN-1480	(From 12:01 a.m., November 5, 1974, to 12:00 midnight, August 12, 1976, inclusive)
DPR-70	(From 12:01 a.m., August 13, 1976)
SNM-1831	(From 12:01 a.m., October 4, 1978 to 12:00 midnight, April 17, 1980, inclusive)
DPR-75	(From 12:01 a.m., April 18, 1980)
SNM-1953	(From 12:01 a.m., August 21, 1985, to 12:00 midnight, inclusive)
NPF-50	(From 12:01 a.m., April 11, 1986)

FOR THE U.S. NUCLEAR REGULATORY COMMISSION


Jerome Saltzman, Assistant Director
State and Licensee Relations
Office of State Programs

Accepted _____, 1986

By _____
PUBLIC SERVICE ELECTRIC AND
GAS COMPANY

Accepted _____, 1986

By _____
PHILADELPHIA ELECTRIC COMPANY

Accepted _____, 1986

By _____
DELMARVA POWER AND LIGHT
COMPANY

Accepted _____, 1986

By _____
ATLANTIC CITY ELECTRIC COMPANY

APPENDIX B

TO FACILITY OPERATING LICENSE NO. NPF-50
HOPE CREEK GENERATING STATION

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
DOCKET NO. 50-354

ENVIRONMENTAL PROTECTION PLAN
(NONRADIOLOGICAL)

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PDR ADOCK 05000354
P PDR

HOPE CREEK GENERATING STATION
ENVIRONMENTAL PROTECTION PLAN
(NONRADIOLOGICAL)

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 Objectives of the Environmental Protection Plan.....	1-1
2.0 Environmental Protection Issues.....	2-1
2.1 Aquatic/Water Quality Issues.....	2-1
2.2 Terrestrial Issues.....	2-1
3.0 Consistency Requirements.....	3-1
3.1 Plant Design and Operation.....	3-1
3.2 Reporting Related to the NPDES Permit and State Certifications.....	3-2
3.3 Changes Required for Compliance with Other Environmental Regulations.....	3-3
4.0 Environmental Conditions.....	4-1
4.1 Unusual or Important Environmental Events.....	4-1
4.2 Environmental Monitoring.....	4-1
5.0 Administrative Procedures.....	5-1
5.1 Review.....	5-1
5.2 Records Retention.....	5-1
5.3 Changes in Environmental Protection Plan.....	5-2
5.4 Plant Reporting Requirements.....	5-2

1.0 Objectives of the Environmental Protection Plan

The Environmental Protection Plan (EPP) is to provide for protection of nonradiological environmental values during operation of the nuclear facility. The principal objectives of the EPP are as follows:

- (1) Verify that the facility is operated in an environmentally acceptable manner, as established by the Final Environmental Statement - Operating Licensing Stage (FES-OL) and other NRC environmental impact assessments.
- (2) Coordinate NRC requirements and maintain consistency with other Federal, State and local requirements for environmental protection.
- (3) Keep NRC informed of the environmental effects of facility construction and operation and of actions taken to control those effects.

Environmental concerns identified in the FES-OL which relate to water quality matters are regulated by way of the licensee's NPDES permit.

2.0 Environmental Protection Issues

In the FES-OL dated December 1984, the staff considered the environmental impacts associated with the operation of the Hope Creek Generating Station. Certain environmental issues were identified which required study or license conditions to resolve environmental concerns and to assure adequate protection of the environment.

2.1 Aquatic/Water Quality Issues

Consumptive surface water use by Hope Creek during periods of river flow below 85 m³/s (3,000 ft³/s), as measured at Trenton, New Jersey, is to be compensated for under a ruling of the Delaware River Basin Commission (DRBC). The applicant is participating in the development of a supplementary reservoir for this purpose. (FES Section 4.2.3.2 and 5.3.1.1). The NRC will defer to the DRBC for any further actions regarding flow compensation.

2.2 Terrestrial Issues

The primary potential effect of station operation on terrestrial resources derives from cooling tower drift. Significant impacts on terrestrial resources will likely not occur if the cooling tower functions properly

and is adequately maintained. To ensure proper cooling tower operation, the need to measure drift rates and deposition on native vegetation was identified by the staff (FES Section 5.14.1). Accordingly, the applicant will implement a Salt Drift Monitoring Program as discussed in Section 4.2.2 of this Plan.

3.0 Consistency Requirements

3.1 Plant Design and Operation

The licensee may make changes in station design or operation or perform tests or experiments affecting the environment provided such activities do not involve an unreviewed environmental question and do not involve a change in the EPP*. Changes in station design or operation or performance of tests or experiments which do not affect the environment are not subject to the requirements of this EPP. Activities governed by Section 3.3 are not subject to the requirements of this Section.

Before engaging in additional construction or operational activities which may significantly affect the environment, the licensee shall prepare and record an environmental evaluation of such activity. Activities are excluded from this requirement if all measurable nonradiological environmental effects are confined to the on-site areas previously disturbed during site preparation and plant construction. When the evaluation indicates that such activity involves an unreviewed environmental question, the licensee shall provide a written evaluation of such activity and obtain prior NRC approval. When such activity involves a change in the EPP, such activity and change to the EPP may be implemented only in accordance with an appropriate license amendment as set forth in Section 5.3 of this EPP.

* This provision does not relieve the licensee of the requirements of 10 CFR 50.59.

A proposed change, test or experiment shall be deemed to involve an unreviewed environmental question if it concerns: (1) a matter which may result in a significant increase in any adverse environmental impact previously evaluated in the FES-OL, environmental impact appraisals, or in any decisions of the Atomic Safety and Licensing Board; or (2) a significant change in effluents or power level; or (3) a matter, not previously reviewed and evaluated in the documents specified in (1) of this Subsection, which may have a significant adverse environmental impact.

The licensee shall maintain records of changes in facility design or operation and of tests and experiments carried out pursuant to this Subsection. These records shall include written evaluations which provide bases for the determination that the change, test, or experiment does not involve an unreviewed environmental question or constitute a decrease in the effectiveness of this EPP to meet the objectives specified in Section 1.0. The licensee shall include as part of the Annual Environmental Operating Report (per Subsection 5.4.1) brief descriptions, analyses, interpretations, and evaluations of such changes, tests and experiments.

3.2 Reporting Related to the NJPDES Permit and State Certification

Changes to, or renewals of, the NJPDES Permits or the State certification shall be reported to the NPC within 30 days following the date the change or renewal is approved. If a permit or certification, in part or in its entirety, is appealed and stayed, the NRC shall be notified within 30 days following the date the stay is granted.

The licensee shall notify the NRC of changes to the effective NJPDES Permit proposed by the licensee by providing NRC with a copy of the proposed change at the same time it is submitted to the permitting agency. The licensee shall provide the NRC a copy of the application for renewal of the NJPDES Permit at the same time the application is submitted to the permitting agency.

3.3 Changes Required for Compliance with Other Environmental Regulations

Changes in plant design or operation and performance of tests or experiments which are required to achieve compliance with other Federal, State, and local environmental regulations are not subject to the requirements of Section 3.1.

4.0 Environmental Conditions

4.1 Unusual or Important Environmental Events

Any occurrence of an unusual or important event that indicates or could result in significant environmental impact causally related to plant operation shall be recorded and reported to the NRC within 24 hours followed by a written report per Subsection 5.4.2. The following are examples: excessive bird impaction events; onsite plant or animal disease outbreaks; mortality or unusual occurrence of any species protected by the Endangered Species Act of 1973; fish kills; increase in nuisance organisms or conditions; and unanticipated or emergency discharge of waste water or chemical substances.

No routine monitoring programs are required to implement this condition.

4.2 Environmental Monitoring

4.2.1 Aquatic Monitoring

The certifications and permits required under the Clean Water Act provide mechanisms for protecting water quality and, indirectly, aquatic biota. The NRC will rely on the decisions made by the State of New Jersey under the authority of the Clean Water Act for any requirements for aquatic monitoring.

4.2.2 Terrestrial Ecology Monitoring

The applicant will implement the Salt Drift Monitoring Program to assess the impacts of cooling tower salt drift on the environment in the HCGS vicinity provided to NRC by letter dated March 28, 1984 from Robert L. Mittl, Public Service Electric & Gas Co., to A. Schwencer, U.S. Nuclear Regulatory Commission.

The monitoring program shall commence one year prior to the onset of commercial operation of the HCGS and include low-power testing and operational data up to three years from receipt of license or until such earlier time that the licensee can demonstrate that the objectives of the study have been fulfilled. Annual monitoring reports shall be submitted to the NRC for review.

The licensee may make changes in the salt drift monitoring procedures without prior Commission approval unless the proposed change affects the program objectives described in the introduction to the Salt Drift Monitoring Program. Changes in the procedures, for example, changes which affect sampling frequency, location, gear, or replication, shall be recorded. Records shall describe the changes made, the reasons for making the changes, and a statement showing how continuity of the study will be affected. Any modifications or changes of the monitoring program, once initiated, shall be governed by the need to maintain consistency with previously used procedures so that direct comparisons of data are technically valid. Such modifications or changes shall be justified and

supported by adequate comparative sampling programs or studies demonstrating the comparability of results or which provide a basis for making adjustments that would permit direct comparisons. The annual report should describe monitoring procedures and changes in such procedures made during the report period.

5.0 Administrative Procedures

5.1 Review

The licensee shall provide for review of compliance with the EPP. The review shall be conducted independently of the individual or groups responsible for performing the specific activity. A description of the organization structure utilized to achieve the independent review function and results of the review activities shall be maintained and made available for inspection.

5.2 Records Retention

Records and logs relative to the environmental aspects of station operation shall be made and retained in a manner convenient for review and inspection. These records and logs shall be made available to NRC on request.

Records of modifications to station structures, systems and components determined to potentially affect the continued protection of the environment shall be retained for the life of the station. All other records, data and logs relating to this EPP shall be retained for five years or, where applicable, in accordance with the requirements of other agencies.

5.3 Changes in Environmental Protection Plan

Requests for changes in the EPP shall include an assessment of the environmental impact of the proposed change and a supporting justification. Implementation of such changes in the EPP shall not commence prior to NRC approval of the proposed changes in the form of a license amendment incorporating the appropriate revision to the EPP.

5.4 Plant Reporting Requirements

5.4.1 Routine Reports

An Annual Environmental Operating Report describing implementation of this EPP for the previous year shall be submitted to the NRC prior to May 1 of each year. The initial report shall be submitted prior to May 1 of the year following issuance of the operating license.

The report shall include summaries and analyses of the results of the environmental protection activities required by Subsection 4.2 of this EPP for the report period, including a comparison with related preoperational studies, operational controls (as appropriate), and previous nonradiological environmental monitoring reports, and an assessment of the observed impacts of the plant operation on the environment. If harmful effects or evidence of trends toward irreversible damage to the environment are observed, the licensee shall provide a detailed analysis of the data and a proposed course of mitigating action.

The Annual Environmental Operating Report shall also include:

- (1) A list of EPP noncompliances and the corrective actions taken to remedy them.
- (2) A list of all changes in station design or operation, tests, and experiments made in accordance with Subsection 3.1 which involved a potentially significant unreviewed environmental question.
- (3) A list of nonroutine reports submitted in accordance with Subsection 5.4.2.

In the event that some results are not available by the report due date, the report shall be submitted noting and explaining the missing results. The missing results shall be submitted as soon as possible in a supplementary report.

5.4.2 Nonroutine Reports

A written report shall be submitted to the NRC within 30 days of occurrence of a nonroutine event. The report shall: (a) describe, analyze, and evaluate the event, including extent and magnitude of the impact, and plant operating characteristics; (b) describe the probable cause of the event; (c) indicate the action taken to correct the reported event; (d) indicate the corrective

action taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems; and (e) indicate the agencies notified and their preliminary responses.

Events reportable under this subsection which also require reports to other Federal, State or local agencies shall be reported in accordance with those reporting requirements in lieu of the requirements of this subsection. The NRC shall be provided with a copy of such report at the same time it is submitted to the other agency.