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Docket No. 50-354
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Docket No. 50-354

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

Dear Mr. McNeill:
Subject: Hope Creek Draft Low Power License

As you are aware, the staff is preparing a low power license (NPF-50) for the Hope Creek Generating Station facility. At the request of Mr. Dave Distel of your staff, enclosed is a draft copy of this license, without the attachments and appendices. It is provided for your information, review and comment to ensure that it accurately reflects the commitments required of you as described in tne FSAR, SER and other documents. The enclosed draft license supersedes the one sent to you by our letter dated March 17, 1986. We request that you review this draft low power license and provide any comments in writing.

If you have any questions regarding this draft low power license, contact the Hope Creek Project Manager, Dave Wagner at (301) 492-9418.

Sincerely,

Original Signed by

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

Enclosure:
As stated

cc: See next page

BWD-3:DBL	LA:BWD-3:DBL	D:BWD-3:DBL
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4/4/86	4/4/86	4/4/86

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

DRAFT

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 Electric Company and has exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

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 its 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 and in Attachment 1 to this license. The preoperational tests, startup tests, and other items identified in Attachment 1 to this license shall be completed as specified. Attachment 1 is hereby incorporated into this license. 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(g) 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, all Tobar Model 32, Series 2 transmitters shall be replaced with qualified Rosemount Model 1153 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 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. 14 and as described in submittals dated August 12 and 27, November 21 and 29, December 3 and 16, 1985, and January 3, 1986, and as approved in the SER dated October 1984 (and Supplements 1 through 5) subject to the following provision below.

> 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, their 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. Conbustible 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. 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 (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 transverse 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. 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. 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(m), 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

FOR THE NUCLEAR REGULATORY COMMISSION

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

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

Date of Issuance: