

APPENDIX B
TO FACILITY OPERATING LICENSE NO.
HOPE CREEK GENERATING STATION

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

ENVIRONMENTAL PROTECTION PLAN
(NONRADIOLOGICAL)

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HOPE CREEK GENERATING STATION
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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 NJPDES 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

Specific issues raised by the staff in the FES-OL were:

Consumptive surface water use by Hope Creek during periods of river flow below $85 \text{ m}^3/\text{s}$ ($3,000 \text{ ft}^3/\text{s}$), as measured at Trenton, New Jersey, is to be compensated for under a ruling of the Delaware River Basin Commission. The applicant is participating in the development of a supplementary reservoir for this purpose. (FES Section 4.2.3.2)

2.2 Terrestrial Issues

Specific issues raised by the staff in the FES-OL were:

The primary potential effect of station operation on terrestrial resources derives from cooling tower drift. Since issuance of the FES-CP, one unit and its associated cooling tower have been cancelled, reducing the potential impact by about one-half. In addition, more operating experience has been gained with natural

draft cooling towers at other power plants. This experience shows that significant impacts on terrestrial resources will likely not occur at Hope Creek if the cooling tower functions properly and is adequately maintained. (FES Section 5.5.1.1)

2.3 Noise Issues

Specific issues raised by the staff in the FES-OL were:

Area residents will not be affected by noise resulting from station operation (FES Section 5.12); however, a potential impact to the public may be the periodic testing of the early notification system. This impact will be infrequent and insignificant. (FES Section 5.13)

2.4 Atmospheric/Air Quality Issues

Specific issues raised by the staff in the FES-OL were:

Operation of the emergency diesel generators and the auxiliary boilers will not significantly degrade air quality in the vicinity of the plant. The applicant has committed to the New Jersey Department of Environmental Protection to operate no more than two of the three auxiliary boilers at one time. (FES Section 5.4.2)

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 that 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

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

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.

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 NRC 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 by 4 p.m. of the following business day 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. Therefore, 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 that may be required during plant operation.

4.2.2 Terrestrial Monitoring

- (1) To ensure proper cooling tower operation, the staff and the New Jersey Department of Environmental Protection (NJDEP) requires that the applicant measure particulate emission during the period of initial power plant operation, report quarterly the calculated particulate emission, and to report annually the cumulative particulate emission and maintenance procedures applied to the tower.
- (2) The applicant has committed to perform deposition measurements and native vegetative leaf analyses to detect any effects of cooling tower drift on vegetation.

4.2.3 Atmospheric/Air Quality Monitoring

- (1) The applicant has determined that the present onsite meteorological measurements system complies with the accuracy specifications presented in RG 1.23, "Onsite Meteorological Programs." The meteorological measurements program during plant operation will include those parameters currently measured.

5.0 Administrative Procedures

5.1 Review and Audit

The licensee shall provide for review and audit of compliance with the EPP. The audits 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 and audit function and results of the audit 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 and in accordance with PSE&G's Nuclear Department Records Management Program. These records and logs shall be made available to NRC on request.

Records of modification 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 EEP shall be retained for five years or, where applicable, in accordance with the requirements of other agencies.

5.3 Changes for 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.