



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 199 TO FACILITY OPERATING LICENSE DPR-57
AND AMENDMENT NO. 140 TO FACILITY OPERATING LICENSE NPF-5
GEORGIA POWER COMPANY, ET AL.
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2
DOCKET NOS. 50-321 AND 50-366

1.0 INTRODUCTION

By letter dated December 2, 1994, Georgia Power Company, et al. (GPC or the licensee), proposed license amendments to replace the current Environmental Technical Specifications (ETS) with a common Environmental Protection Plan (EPP) (Nonradiological) for the Edwin I. Hatch Nuclear Plant, Units 1 and 2. The objective of the proposed EPP is to protect the environment at the Hatch plant site and the immediate adjacent areas by ensuring that the plant is operated in an environmentally acceptable manner, NRC requirements are reviewed to assure consistency with other Federal, State, and local environmental protection requirements, and the NRC is informed of any significant environmental effects caused by the facility operation and of the actions taken to control these effects.

2.0 EVALUATION

The proposed amendments entail replacing Appendix B - Environmental Technical Specifications (ETS) with an Environmental Protection Plan (EPP) (Nonradiological) containing the programmatic controls currently residing in the ETS, and revising the operating licenses to change the Appendix B reference from "ETS" to "EPP." Appropriate plant procedures will serve as implementing documents. The proposed amendments clarify and streamline ETS requirements, and revise the ETS format to be consistent with the current EPP format. The EPP is to be incorporated in and made a part of the license, as Appendix B to the license, in accordance with 10 CFR Part 50.36.

Currently, Hatch Units 1 and 2 have separate, but identical, ETS. The proposed EPP is a common document, identical for both units.

The licensee provided most of the following paragraphs which present the wording in each section of the current Hatch ETS, the proposed EPP wording, and the bases for the proposed changes. Where no ETS section exists, the proposed EPP wording and the bases for the proposed changes are provided.

PROPOSED CHANGE 1

ETS SECTION 1.0

ETS Section 1.0, "Definitions," defines terms associated with the content of the ETS. This section will be deleted.

Proposed EPP Section 1.0

The EPP does not contain a definitions section. EPP Section 1.0, which is consistent with the current EPP format, states the objectives of the proposed Plan as follows:

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 Statements (FES) and other NRC environmental impact assessments.
- (2) Coordinate NRC requirements and maintain consistency with other Federal, State and local requirements for environmental protection.

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

Basis for Proposed Change 1

The definitions contained in ETS Section 1.0 were originally provided to assist in consistent interpretations of the technical requirements contained in the document. The majority of the technical monitoring requirements once contained in the ETS, to which these definitions were applicable, have been removed. In addition, the proposed EPP does not include definitions since other documents now exist which provide interpretation and clarification of these requirements.

PROPOSED CHANGE 2

ETS SECTION 2.0

Section 2.0, "Limiting Conditions for Operation," was deleted from the current Plant Hatch ETS.

Proposed EPP Section 2.0

The following wording for EPP Section 2.0 is proposed:

2.0 Environmental Protection Issues

In the Final Environmental Statements dated October, 1972 and March, 1978, the staff considered the environmental impacts associated with the operation of Edwin I. Hatch Nuclear Plant (HNP) Units 1 and 2. Certain environmental issues were identified which required study, or license conditions to resolve concerns and assure adequate protection of the environment.

2.1 Aquatic Issues

Initial post-operational studies to evaluate impacts of station intake and discharge effects are complete. No additional aquatic monitoring requirements are necessary.

2.2 Terrestrial Issues

Initial post-operational studies to evaluate terrestrial impacts are complete. No additional terrestrial studies or monitoring requirements are necessary.

Basis for Proposed Charge 2

The Edwin I. Hatch Unit 2 Final Environmental Statement (FES) (NUREG-0417), dated March 1978, specified certain requirements for post-operational studies and monitoring to verify the effects of two-unit operation on the environment. Specifically, these requirements included:

1. A monitoring program to verify the impact of two-unit operation on benthic organisms and impingement/entrainment effects of the intake.
2. A study to determine the quantity and type of corrosion products in the cooling system discharge.

These studies were completed in 1981 and submitted to the NRC for review. The aquatic monitoring requirements were subsequently removed from the Unit 1 ETS by License Amendment No. 94 and from the Unit 2 ETS by License Amendment No. 31, both dated March 11, 1983.

3. A monitoring program to determine the effects of salt deposition on vegetation associated with cooling tower drift. The program consisted of a 4-year extension of the Unit 1 study.
4. A 4-year surveillance on the Hatch-Bonaire transmission corridor to verify stabilization of erosion and/or vegetation damage.

These requirements were also removed from the Unit 1 and Unit 2 ETS by License Amendment Nos. 94 and 31.

5. A program to conduct aerial remote sensing to verify the long-term effects of cooling tower drift.

This requirement was removed from the Unit 1 and Unit 2 ETS by License Amendment Nos. 115 and 56, respectively, dated September 9, 1985.

The above referenced studies required by the Unit 2 FES actually verify the effects of two-unit operation by extending studies and monitoring requirements of the Unit 1 FES or adding additional requirements to be completed after Unit 2 became operational. As such, the results of the above programs summarize the effects of two-unit operation on the environment and support approval of a single two-unit EPP in lieu of separate EPP documents for each unit. This language is consistent with the current EPP format.

PROPOSED CHANGE 3

ETS SECTION 3.0

ETS Section 3.0, "Environmental Monitoring," was previously deleted from the Plant Hatch ETS.

Proposed EPP Section 3.0 title.

3.0 Consistency Requirements

Basis For Proposed Change 3

This change is consistent with the current EPP format.

PROPOSED CHANGE 4

Proposed EPP Section 3.1

3.1 Plant Design and Operation

The licensee may make changes in plant design or operation or perform tests or experiments affecting the environment provided that such activities do not involve an unreviewed environmental question and do not involve a change in the EPP*. Changes in plant 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.

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

When the evaluation indicates that such activity involves an unreviewed environmental question, the licensee shall provide 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.

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, 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 plant 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 the 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.

Basis for Proposed Change 4

This change is consistent with the current EPP format, thereby defining actions related to Plant Design and Operation. This section functionally replaces ETS Section 5.5.3, "Changes in Procedures and Station Design or Operation."

ETS Section 5.5.3 addresses procedural changes, as well as changes in plant design or operation, or tests or experiments. The requirement to review procedural changes is specifically addressed in ETS Section 5.5.3(e) and defines the procedural review process and personnel who must approve the revisions. This requirement is not consistent with the language contained in the EPP format which does not specifically define procedure review and approval requirements. Procedures which implement actions associated with plant design and operation, and meet the criteria for review as changes in plant design or operation, or tests or experiments will be reviewed under EPP requirements. The existing matrix for review and approval responsibility, as defined in the appropriate plant procedures and documents, will be revised to reflect the EPP requirements.

PROPOSED CHANGE 5

Proposed EPP Section 3.2

3.2 Reporting Related to the NPDES Permit and State Certification

Changes to, or renewals of, the NPDES Permit 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 NPDES 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 NPDES Permit at the same time the application is submitted to the permitting agency.

This change, which functionally replaces ETS Sections 5.4 and 5.6.3.2, is consistent with the current EPP format. Conditions and monitoring requirements for the protection of water quality and aquatic biota are addressed in the NPDES Permit originally issued by EPA Region IV and implemented by the State of Georgia Department of Natural Resources) Environmental Protection Division. The proposed EPP language provides a mechanism within the EPP to ensure the NRC is informed of activities under the purview of the NPDES Permit, while recognizing the role of the EPA and the State of Georgia in matters involving implementation and enforcement of permit requirements.

PROPOSED CHANGE 6

Proposed EPP Section 3.3

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.

Basis for Proposed Change 6

This section functionally replaces a portion of the requirements in ETS Section 4.3, "Exceeding Limits of Other Relevant Permits," relative to reporting associated with matters not of NEPA concern.

PROPOSED CHANGE 7

ETS SECTION 4.0

ETS Section 4.0, "Special Surveillance and Study Activities," has no text and thus, will be deleted.

Proposed EPP Section 4.0

The following title for EPP Section 4.0 is proposed:

4.0 Environmental Conditions

Basis for Proposed Change 7

This change is consistent with the current EPP format.

PROPOSED CHANGE 8

ETS SECTION 4.1

ETS Section 4.1, "Erosion Control Inspection," contains no text and thus, will be deleted.

Proposed EPP Section 4.1

The following wording is proposed as EPP Section 4.1 which will effectively replace ETS Section 4.2, "Unusual or Important Event Requirements," of the current ETS.

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 occurrences of any species protected by the Endangered Species Act of 1973; fish kills or impingement events on the intake screens; increase in nuisance organisms or conditions; unanticipated or emergency discharge of waste water or chemical substances; and damage to vegetation resulting from cooling tower operations.

No routine monitoring programs are required to implement this condition.

Basis for Proposed Change 8

This change, which provides a reference to the reporting requirements associated with unusual or important environmental events, is consistent with the current EPP format.

PROPOSED CHANGE 9

ETS SECTION 4.2

ETS Section 4.2 "Unusual or Important Events Requirements" has been relocated to Section 4.1 of the proposed EPP. (See discussion above.)

Proposed EPP Section 4.2

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 decision made by the State of Georgia under the authority of the Clean Water Act for any requirements for aquatic monitoring.

4.2.2 Terrestrial Monitoring

Terrestrial monitoring is not required.

4.2.3 Maintenance of Transmission Line Corridors

The use of herbicides within the Edwin I. Hatch Nuclear Plant transmission line corridors shall conform to the approved use of selected herbicides as registered by the Environmental Protection Agency and approved by the State of Georgia authorities and applied as directed on the herbicide label.

Records shall be maintained in accordance with EPA or State of Georgia requirements by the licensee's Transmission Operating and Maintenance Department concerning herbicide use. Such records shall be made readily available to the NRC upon request. There shall be no routine reporting requirement associated with this condition.

Basis for Proposed Change 9

As discussed in the narrative for proposed EPP Section 2.0, aquatic monitoring requirements were removed from the ETS by license amendments. The wording in EPP Section 4.2.1 is consistent with the current EPP format.

PROPOSED CHANGE 10

ETS SECTION 4.3

ETS Section 4.3, "Exceeding Limits of Other Relevant Permits," has been deleted. This requirement is satisfied in EPP Sections 3.3 and 4.1.

Basis for Proposed Change 10

ETS Section 4.3 provides for reporting of exceedances of limits for other relevant permits associated with reportable events. This requirement has been merged into EPP Section 4.1, "Unusual or Important Environmental Events," where recording and reporting of events that could result in significant environmental impact causally related to plant operation are required.

PROPOSED CHANGE 11

ETS SECTIONS 5.0, 5.1, and 5.2

These sections, which address Administrative Controls, Responsibility, and Organization, respectively, have been deleted from the proposed document. This change is consistent with the current EPP format.

Proposed EPP Section 5.0 title

5.0 Administrative Procedures

Basis for Proposed Change 11

This change is consistent with the current EPP format.

PROPOSED CHANGE 12

Proposed EPP Section 5.1

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.

Basis for Proposed Change 12

The proposed section functionally replaces ETS Sections 5.3, 5.3.1, and 5.3.2. ETS Section 5.3 specifically outlined the audit function and organizational structure. The proposed EPP specifies that the structure be defined, but allows it to be maintained in implementing documents, such as plant procedures. The functional structure and requirements, as defined in current ETS Sections 5.3.1 and 5.3.2, will be revised in the appropriate plant implementing documents to reflect the EPP requirements.

PROPOSED CHANGE 13

ETS Section 5.3, "Review and Audit," and associated subsections 5.3.1.1 through 5.3.1.4 and 5.3.2 have been functionally replaced by EPP Section 5.1. See Proposed Change 12 for the Basis of Change discussion.

ETS SECTION 5.4

ETS Section 5.4, "State Permits and Certificates," has been functionally replaced by EPP Section 3.2. The bases for the changes are discussed in the narrative for EPP Section 3.2.

ETS SECTION 5.5

ETS Sections 5.5, "Procedures;" 5.5.1, "Quality Assurance Results;" 5.5.2, "Compliance with Procedures;" and 5.5.4, "NRC Authority to Require Revisions," have been deleted from the proposed EPP. ETS Section 5.5.3 "Changes in Procedures and Station Design or Operation" will be functionally replaced by EPP Section 3.1, with the exception of 5.5.3(e), concerning review of changes by the Plant Review Board and other plant officials, which will not be replaced.

Basis for Proposed Change 13

This change is consistent with the current EPP format which does not specify detailed organizational and procedural responsibilities. Such information shall be contained in appropriate plant implementing documents, consistent with EPP format. The functional structure and requirements, as discussed in the sections listed above, will be implemented in the appropriate plant documents to reflect the EPP requirements.

PROPOSED CHANGE 14

ETS SECTION 5.6

ETS Sections 5.6, "Plant Reporting Requirements;" 5.6.1, "Routine Reports;" and 5.6.2, "Nonroutine Reports," contain the requirements for submittal of routine reports (Annual Environmental Surveillance Report) and nonroutine reports associated with 10 CFR 50.72 and 10 CFR 50.73 requirements. These sections have been deleted and functionally replaced with EPP Section 5.4.

Proposed EPP Section 5.4

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 period of the first report shall begin with the date of issuance of this EPP.

The report shall include summaries and analyses of the results of the environmental protection activities required by Subsection 4.2 (if any) 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.

Basis for Proposed Change 14

The proposed EPP sections functionally replace ETS Sections 5.6, 5.6.1 and 5.6.2. The reporting date change for the Annual Environmental Operating Report is consistent with the current EPP format.

PROPOSED CHANGE 15

ETS SECTIONS 5.6.3, 5.6.3.1, and 5.6.3.2

ETS Section 5.6.3.1, "Changes in Environmental Technical Specifications," has been functionally replaced by EPP Section 5.3, "Changes in Environmental Protection Plan." ETS Section 5.6.3.2, "Changes in Permits and Certificates," has been functionally replaced by EPP Section 3.2, "Reporting Related to the NPDES Permit and State Certificates."

Proposed EPP Section 5.3

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 form of a license amendment incorporating the appropriate revision to the EPP.

Basis for Proposed Change 15

This change is consistent with the current EPP format. See Proposed Change 5 for the Basis for Change discussion relative to ETS Section 5.6.3.2.

PROPOSED CHANGE 16

ETS SECTION 5.7 "Records Retention"

Proposed EPP Section 5.2

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.

Basis for Proposed Change 16

This change is consistent with the current EPP format.

The proposed amendments alter only the format and location of programmatic controls and procedural details relative to nonradiological matters involving protection of the environment. The level of nonradiological environmental

protection at the Hatch plant will not be reduced as the result of these proposed changes.

The proposed Environmental Protection Plan (EPP) (Nonradiological) contains the programmatic controls now residing in the ETS, with appropriate plant procedures serving as implementing documents. The proposed changes to the operating licenses change the Appendix B reference from "ETS" to "EPP." Compliance with applicable regulatory requirements will be maintained. Therefore, the staff finds the changes acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Georgia State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

5.0 CONCLUSION

The Commission 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: K. N. Jabbour
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