

PROPOSED TECHNICAL SPECIFICATIONS CHANGED PAGES
(Marked-up Version)

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TECHNICAL SPECIFICATION CHANGES
APPENDIX A TO THE OPERATING LICENSE

UNIT 1

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UNIT 2

Insertion Instructions

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APPENDIX A

TO

OPERATING LICENSE DPR- 57

TECHNICAL SPECIFICATIONS AND BASE

FOR

EDWIN I. HATCH NUCLEAR PLANT UNIT 1

GEORGIA POWER COMPANY

DOCKET NO. 50-321

SOUTHERN NUCLEAR OPERATING COMPANY

Date of Issuance: AUG 6, 1974

1.0 DEFINITIONS (Continued)

ZZ. MEMBER(S) OF THE PUBLIC

MEMBER(S) OF THE PUBLIC shall include all persons who are not occupationally associated with the plant. This category does not include employees of the ~~utility~~, its contractors, or its vendors. Also excluded from this category are persons who enter the site to service equipment or to make deliveries. This category does include persons who use portions of the site for recreational, occupational, or other purposes not associated with the plant. * licensee,

AAA. SITE BOUNDARY

The SITE BOUNDARY ^{leased} shall be that line beyond which the land is not owned, ~~based~~, or otherwise controlled by Georgia ~~Power Company~~ ^{the licensee}, as shown in figure 3.15-1.

BBB. UNRESTRICTED AREA

An UNRESTRICTED AREA shall be any area at or beyond the SITE BOUNDARY to which access for purposes of protection of individuals from exposure to radiation and radioactive materials is not controlled by the licensee. This includes any area within the SITE BOUNDARY used for residential quarters or for long-term industrial, commercial, institutional, and/or recreational purposes.

CCC. PURGE - PURGING

PURGE or PURGING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration, or other operating condition in such a manner that replacement air or gas is required to purify the confinement.

DDD. VENTING

VENTING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration, or other operating condition in such a manner that replacement air or gas is not provided or required during VENTING. The term "vent" used in system names, does not imply a VENTING process.

* The term "licensee," when used in the Hatch-Unit 1 Technical Specifications, shall refer to Southern Nuclear Operating Company.

0. MAJOR DESIGN FEATURES

Oglethorpe Power Corporation, Municipal Electric Authority of Georgia and the City of Dalton, Georgia and operated by Southern Nuclear Operating Company

A. Site

Edwin I. Hatch Nuclear Plant Unit No. 1 is located on a site of about 2244 acres, which is owned by Georgia Power Company, on the south side of the Altamaha River in Appling County near Baxley, Georgia. The Universal Transverse Mercator Coordinates of the center of the reactor building are: Zo. 17R LF 372,935.2m E and 3,533,765.2m N

B. Reactor Core

1. Fuel Assemblies

The core shall consist of not more than 560 fuel assemblies and shall be limited those fuel assemblies which have been analyzed with NRC-approved codes and methods and have been shown to comply with all Safety Design Bases in the Final Safety Analysis Report (FSAR).

2. Control Rods

The reactor shall contain 137 cruciform-shaped control rods.

C. Reactor Vessel

The reactor vessel is described in Table 4.2-2 of the FSAR. The applicable design specifications shall be as listed in Table 4.2-1 of the FSAR.

D. Containment

1. Primary Containment

The principal design parameters are characteristics of the primary containment shall be as given in Table 5.2-1 of the FSAR.

2. Secondary Containment* (See Page 5.0-1a)

The secondary containment shall be as described in Section 5.3.3.1 of the FSAR and the applicable codes shall be as given in Section 12.4.4 of the FSAR.

3. Primary Containment Penetrations

Penetrations to the primary containment and piping passing through such penetrations shall be designed in accordance with standards set forth in Section 5.2.3.4 of the FSAR.

E. Fuel Storage

1. Spent Fuel

All arrangements of fuel in the spent fuel storage racks and in other credible configurations in the spent fuel pool outside the racks shall be evaluated and shown to have a K_{eff} not greater than 0.95.

2. New Fuel

The new fuel storage vault shall be such that the k_{eff} dry shall not be greater than 0.90 and the k_{eff} flooded shall not be greater than 0.95.

SOUTHERN NUCLEAR OPERATING COMPANY

~~GEORGIA POWER COMPANY~~

EDWIN I. HATCH NUCLEAR PLANT

UNIT 2

(HATCH-UNIT 2)

TECHNICAL SPECIFICATIONS

APPENDIX "A"

TO

LICENSE NO. NPF-5

1.0 DEFINITIONS (Continued)

MEMBER(S) OF THE PUBLIC

MEMBER(S) OF THE PUBLIC shall include all persons who are not occupationally associated with the plant. This category does not include employees of the utility, ~~its contractors, or its vendors.~~ Also excluded from this category are persons who enter the site to service equipment or to make deliveries. This category does include persons who use portions of the site for recreational, occupational, or other purposes not associated with the plant. licensee *

SITE BOUNDARY

The SITE BOUNDARY shall be that line beyond which the land is not owned, leased, or otherwise controlled by ~~Georgia Power Company,~~ the licensee, as shown in figure 3.11-1.

UNRESTRICTED AREA

An UNRESTRICTED AREA shall be any area at or beyond the SITE BOUNDARY to which access for purposes of protection of individuals from exposure to radiation and radioactive materials is not controlled by the licensee. This includes any area within the SITE BOUNDARY used for residential quarters or for long term industrial, commercial, institutional, and/or recreational purposes.

DOSE EQUIVALENT IODINE *

The DOSE EQUIVALENT I-131 shall be that concentration of I-131 (microcurie/gram), which alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in table III of TID-14844 or those in NRC Regulatory Guide 1.109, Revision 1, October 1977.

PURGE - PURGING

PURGE or PURGING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration, or other operating condition in such a manner that replacement air or gas is required to purify the confinement.

* The term "licensee," when used in the Hatch-Unit 2 Technical Specifications, shall refer to Southern Nuclear Operating Company.

PROPOSED ETS CHANGED PAGES
(Marked-up Version)

ENVIRONMENTAL TECHNICAL SPECIFICATIONS CHANGES
APPENDIX B TO THE OPERATING LICENSE

UNIT 1

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ENVIRONMENTAL TECHNICAL SPECIFICATIONS

EDWIN I. HATCH NUCLEAR PLANT

UNIT 1

SOUTHERN NUCLEAR OPERATING COMPANY

~~GEORGIA POWER COMPANY~~

JUNE 1978

1.0 Definitions

Aerial Remote Sensing - The measurement or acquisition from aircraft or spacecraft of information on some property of an object or phenomenon by a recording device that is not in physical or intimate contact with the object or phenomenon under study. The technique employs such devices as the camera, radio frequency receivers, and radar systems.

Annually - Once per calendar year at intervals of 12 calendar months, \pm 30 days.

Bi-Weekly - Once every 2 weeks, \pm 4 days.

Ground Truth or Ground Data Surveys - Supporting data collected on the ground and information derived therefrom, as an aid to the interpretation of a remotely recorded survey, such as aerial imagery. To the extent possible, this should be performed concurrently with the airborne surveys.

Infrared, Photographic - Pertaining to or designating that portion of the electromagnetic spectrum with wavelengths just beyond the red end of the visible spectrum; generally defined as being from 0.7 to about 1.0 μ m, or the useful limits of film sensitivities.

Monthly - Once during each calendar month at 30-day intervals, \pm 6 days.

Normal Operation - Operation of either unit at the station at greater than 5 percent of rated thermal power in other than a safety or power emergency situation.

NPDES Permit - The National Pollutant Discharge Elimination System Permit No. GA 0004120 (or its subsequent revisions) issued by the State of Georgia, Department of Natural Resources, Environmental Protection Division, to ~~Georgia Power Company~~. This permit authorizes ~~Georgia Power Company~~ ^{the licensee} to discharge controlled waste water from HNP into the waters of the Altamaha River.

Quarterly - Once during each successive 3-month period of the calendar year, counting from January 1, at 13-week intervals, \pm 14 days.

Scale - The ratio of a distance on a photograph or map to its corresponding distance on the ground.

Licensee - The term licensee, when used in the E.I. Hatch Unit 1 Environmental Technical Specifications, refers to Southern Nuclear Operating Company (Southern Nuclear).

5.3 Review and Audit

5.3.1 Independent Review

Services

5.3.1.1 The Manager-Environmental ~~Affairs~~ shall review the following:

- a. Proposed changes to plant systems or equipment, provided such changes are identified by the Plant Review Board (PRB) as having a potential adverse environmental impact.
- b. Proposed changes to the Environmental Technical Specifications (ETS).

5.3.1.2 The Safety Review Board (SRB) shall review the following:

- a. Proposed changes to the ETS.
- b. Violations of ETS to determine whether adequate corrective action is being taken to prevent recurrence.
- c. Procedures or changes hereto (which could affect the monitoring of station operation) that may be considered by the Manager-Environmental ~~Affairs~~ or the PRB to be appropriate for SRB review. Services

5.3.1.4 The PRB shall review the following:

- a. Procedures for implementing the responsibilities specified in section 5.1.1 and proposed changes thereto.
- b. Proposed changes to the ETS.

5.3.2 Audit Responsibility

Insert A

5.3.2.1 The Manager-Safety Audit and Engineering Review is responsible for an audit, conducted annually, of the activities of the AGM-PO and the Manager-Environmental Affairs, related to compliance with ETS.

5.3.2.2 Audits of facility activities shall be performed annually under the cognizance of the SRB to ensure conformance of facility operation to provisions of the ETS.

5.4 State and Federal Permit and Certificates

Section 401 of PL 92-500, the Federal Water Pollution Control Act Amendments of 1972 (FWPCA), requires any applicant for a Federal license or permit to conduct any activity that may result in any discharge into provisions of Sections 301, 302, 306, and 307 of the FWPCA. Section 401 of PL 92-500 further requires that any certification provided under this section shall set any effluent limitations and other limitations and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with the applicable limitations. Certifications provided in accordance with Section 401 set forth conditions on the Federal license or permit for which the certification is provided. Accordingly, the licensee shall comply with the requirements set forth in the currently applicable 401 certification and amendments thereto issued to the licensee by the Georgia Environmental Protection Division. In accordance with the provisions of the Georgia Water Quality Control Act, the FWPCA and the rules and regulations promulgated pursuant to each of these acts, the Georgia Environmental Protection Division, under authority delegated by the U.S. EPA, issued NPDES permit No. GA 0004120 to the licensee. The NPDES permit authorizes the licensee to discharge from HNP Units 1 and 2 to the Altamaha River in accordance with effluent limitations, monitoring requirements, and other conditions stipulated in the permit.

Subsequent revisions to the certifications will be accommodated in accordance with the provisions of section 5.6.3.

5.5 Procedures

Detailed written procedures, including applicable checklists and instructions, shall be prepared and followed for all activities involved in implementing the ETS. All procedures shall be maintained in a manner convenient for review and inspection.

Procedures that are the responsibility of the AGM-PO shall be kept at the plant. Procedures that are the responsibility of the Manager-Environmental Affairs shall be kept at the Georgia Power Company General Office.

INSERT A

The licensee shall provide for an annual review and audit of compliance with the ETS. The audit 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.

Services

Proposed changes to the ETS shall be reviewed and approved by the Manager-Environmental Affairs, the Plant Review Board, and the Safety Review Board. Prior to approval, the possible impact of the proposed changes will be evaluated.

5.6.3.2 Changes in Permits and Certificates

Changes or additions to required Federal, State, local, and regional authority permits and certificates for the protection of the environment that pertain to the requirements of the ETS shall be reported to the NRC within 30 days. In the event that the licensee initiates or becomes aware of a request for changes to any water quality requirements, limits, or values stipulated in any certificate or permit issued pursuant to Section 401 or 402 of PL 92-500, which are also the subject of an ETS reporting requirement, the NRC shall be notified concurrently with the authorizing agency. The notification to the NRC shall include an evaluation of the environmental impact of the revised requirement, limit, or value being sought.

If, during NRC's review of the proposed change, it is determined that a potentially severe environmental impact could result from the change, the NRC will consult with the authorizing agency to determine the appropriate action to be taken.

5.7 Records Retention

5.7.1 Records and logs relative to the following areas shall be made and retained for the life of the plant in a manner convenient for review and inspection. These logs shall be made available to the NRC on request.

- a. Records and drawings detailing plant design changes and modifications made to systems and equipment as described in section 5.5.3.
- b. Records of all data from environmental monitoring and surveillance programs required by the ETS.

5.7.2 All other records and logs relating to the ETS shall be retained, in a manner convenient for review and inspection, for 5 years following logging or recording.

5.7.3 These records shall be stored at the plant or at the Georgia Power Company General Office, as appropriate, under the control of the responsible organization.

ENVIRONMENTAL TECHNICAL SPECIFICATIONS

EDWIN I. HATCH NUCLEAR PLANT

UNITS ~~1 AND~~ 2

SOUTHERN NUCLEAR OPERATING COMPANY

~~GEORGIA POWER COMPANY~~

JUNE 1978

1.0 Definitions

Aerial Remote Sensing - The measurement or acquisition from aircraft or spacecraft of information on some property of an object or phenomenon by a recording device that is not in physical or intimate contact with the object or phenomenon under study. The technique employs such devices as the camera, radio frequency receivers, and radar systems.

Annually - Once per calendar year at intervals of 12 calendar months, \pm 30 days.

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Quarterly - Once during each successive 3-month period of the calendar year, counting from January 1, at 13-week intervals, \pm 14 days.

Scale - The ratio of a distance on a photograph or map to its corresponding distance on the ground.

Licensee - The term licensee, when used in the E.J. Hatch Unit 2 Environmental Technical Specifications, refers to Southern Nuclear Operating Company (Southern Nuclear).

5.3 Review and Audit

5.3.1 Independent Review

Services

5.3.1.1 The Manager-Environmental ~~Affairs~~ shall review the following:

- a. Proposed changes to plant systems or equipment, provided such changes are identified by the Plant Review Board (PRB) as having a potential adverse environmental impact.
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Insert A

5.3.2 Audit Responsibility

5.3.2.1 The Manager-Safety Audit and Engineering Review is responsible for an audit, conducted annually, of the activities of the AGM-PO and the Manager-Environmental Affairs, related to compliance with ETS.

5.3.2.2 Audits of facility activities shall be performed annually under the cognizance of the SRB to ensure conformance of facility operation to provisions of the ETS.

5.4 State and Federal Permit and Certificates

Section 401 of PL 92-500, the Federal Water Pollution Control Act Amendments of 1972 (FWPCA), requires any applicant for a Federal license or permit to conduct any activity that may result in any discharge into provisions of Sections 301, 302, 306, and 307 of the FWPCA. Section 401 of PL 92-500 further requires that any certification provided under this section shall set any effluent limitations and other limitations and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with the applicable limitations. Certifications provided in accordance with Section 401 set forth conditions on the Federal license or permit for which the certification is provided. Accordingly, the licensee shall comply with the requirements set forth in the currently applicable 401 certification and amendments thereto issued to the licensee by the Georgia Environmental Protection Division. In accordance with the provisions of the Georgia Water Quality Control Act, the FWPCA and the rules and regulations promulgated pursuant to each of these acts, the Georgia Environmental Protection Division, under authority delegated by the U.S. EPA, issued NPDES permit No. GA 0004120 to the licensee. The NPDES permit authorizes the licensee to discharge from HNP Units 1 and 2 to the Altamaha River in accordance with effluent limitations, monitoring requirements, and other conditions stipulated in the permit.

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INSERT A

The licensee shall provide for an annual review and audit of compliance with the ETS. The audit 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.

Services

Proposed changes to the ETS shall be reviewed and approved by the Manager-Environmental Affairs, the Plant Review Board, and the Safety Review Board. Prior to approval, the possible impact of the proposed changes will be evaluated.

5.6.3.2 Changes in Permits and Certificates

Changes or additions to required Federal, State, local, and regional authority permits and certificates for the protection of the environment that pertain to the requirements of the ETS shall be reported to the NRC within 30 days. In the event that the licensee initiates or becomes aware of a request for changes to any water quality requirements, limits, or values stipulated in any certificate or permit issued pursuant to Section 401 or 402 of PL 92-500, which are also the subject of an ETS reporting requirement, the NRC shall be notified concurrently with the authorizing agency. The notification to the NRC shall include an evaluation of the environmental impact of the revised requirement, limit, or value being sought.

If during the NRC's review of the proposed change, it is determined that a potentially severe environmental impact could result from the change, the NRC will consult with the authorizing agency to determine the appropriate action to be taken.

5.7 Records Retention

5.7.1 Records and logs relative to the following areas shall be made and retained for the life of the plant in a manner convenient for review and inspection. These logs shall be made available to the NRC on request.

- a. Records and drawings detailing plant design changes and modifications made to systems and equipment as described in section 5.5.3.
- b. Records of all data from environmental monitoring and surveillance programs required by the ETS.

5.7.2 All other records and logs relating to the ETS shall be retained, in a manner convenient for review and inspection, for 5 years following logging or recording.

5.7.3 These records shall be stored at the plant or at the Georgia Power Company General Office, as appropriate, under the control of the responsible organization.

PROPOSED OPERATING LICENSES
(EXCLUDING APPENDICES)

SOUTHERN NUCLEAR OPERATING COMPANY
GEORGIA POWER COMPANY
OGLETHORPE POWER CORPORATION
MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA
CITY OF DALTON, GEORGIA

DOCKET NO. 50-321

(Edwin I. Hatch Nuclear Plant Unit 1)

FACILITY OPERATING LICENSE

License No. DPR-57

1. The Atomic Energy Commission (the Commission) having that:
 - A. The application for license filed by the Georgia Power Company¹ complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Edwin I. Hatch Nuclear Plant Unit 1 (facility) has been substantially completed in conformity with Construction Permit No. CPPR-65 and the application, as amended, the provisions of the Act and the rules and regulations of the Commission;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - 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 rules and regulations of the Commission;

¹ Following the initial filing of the application for license, Oglethorpe Power Corporation, the Municipal Electric Authority of Georgia and The City of Dalton, Georgia became co-owners with Georgia Power Company (GPC) of the Edwin I. Hatch Nuclear Plant, Unit 1, and together with GPC are hereinafter referred to as the Owners.

- E. Southern Nuclear Operating Company² (herein called Southern Nuclear) is technically qualified and, together, Southern Nuclear and the Owners are financially qualified to engage in the activities authorized by this operating license in accordance with the rules and regulations of the Commission;
 - F. The Owners have satisfied the applicable provisions to 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
 - G. The issuance of this operating license will not be inimical to the common defense and security or to the health and safety of the public;
 - H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental costs and considering available alternatives, the issuance of Facility Operating License No. DPR-57 is in accordance with 10 CFR Part 50, Appendix D, of the Commission's regulations and all applicable requirements of said Appendix D 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, including 10 CFR Sections 30.33, 40.32, 70.23 and 70.31.
2. Facility Operating License No. DPR-57 is hereby issued to Southern Nuclear, the Georgia Power Company, the Oglethorpe Power Corporation, the Municipal Electric Authority of Georgia and the City of Dalton, Georgia to read as follows:
- A. This license applies to the Edwin I. Hatch Nuclear Plant Unit No. 1, a direct cycle boiling water reactor and associated equipment (the facility), owned by the Georgia Power Company, the Oglethorpe Power Corporation, the Municipal Electric Authority of Georgia and the City of Dalton, Georgia and operated by Southern Nuclear. The facility is located eleven miles north of Baxley in Appling County, Georgia, and is described in the Final Safety Analysis Report as supplemented and amended (Amendments 9 through 46) and the Environmental Report as supplemented and amended (Supplement 1 and Amendment 1).
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
 - (1) Southern Nuclear, pursuant to Section 104b of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, manage, use, maintain and operate the facility at the designated location in Appling County, Georgia, in accordance with

² Southern Nuclear Operating Company succeeds Georgia Power Company as the operator of the Edwin I. Hatch Nuclear Plant, Unit 1. Southern Nuclear is authorized by the Owners to exercise exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

the procedures and limitations set forth in this license; and the Georgia Power Company, the Oglethorpe Power Corporation, the Municipal Electric Authority of Georgia and the City of Dalton, Georgia to possess but not operate the facility in accordance with the procedures and limitations set forth in this license;

- (2) Southern Nuclear, 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;
- (3) Southern Nuclear, 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;
- (4) Southern Nuclear, 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;
- (5) Southern Nuclear, pursuant to the Act and 10 CFR Parts 30 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 following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50-54 and 50-59 of Part 50, and Section 70.32 of Part 70; 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 conditions³ specified or incorporated below:

(1) Maximum Power Level

Southern Nuclear is authorized to operate the facility at steady state reactor core power levels not in excess of 2436 megawatts thermal.

³ The original licensee authorized to possess, use and operate the facility was Georgia Power Company (GPC). Consequently, certain historical references to GPC remain in the license conditions.

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. are hereby incorporated in the license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications.

- (3) Southern Nuclear shall implement and maintain in effect all provisions of the fire protection program, which is referenced in the Final Safety Analysis Report for the facility, as contained in the updated Edwin I. Hatch Nuclear Plant Units 1 and 2 Fire Hazards Analysis and Fire Protection Program, originally submitted by a letter dated July 22, 1986. Southern Nuclear may make changes to the fire protection program without prior approval of the Commission only if the changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

(4) Physical Protection

Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Edwin I. Hatch Physical Security Plan," with revisions submitted through December 14, 1988; "Edwin I. Hatch Guard Training and Qualification Plan" with revisions submitted through October 24, 1988; and "Edwin I. Hatch Safeguards Contingency Plan," with revisions submitted through July 21, 1988. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedules set forth therein.

- (5) Georgia Power Company shall submit, for the Commission's review and approval, plans for inspection and/or modification during the next refueling outage (following Cycle 7 operation and prior to startup for Cycle 8 operation) of the Recirculation and Reactor Heat Removal Systems piping. These plans shall be submitted to the Commission at least three months prior to the start of the next refueling outage.

D. Southern Nuclear shall not market or broker power or energy from Edwin I. Hatch Nuclear Plant, Unit 1.

- E. This license is effective as of the date of issuance and shall expire at midnight, August 6, 2014.

FOR THE ATOMIC ENERGY COMMISSION

Original Signed by
Roger S. Boyd FOR

A. Giambusso, Deputy Director
for Reactor Projects
Directorate of Licensing

Attachment:
Appendices A & B - Technical Specifications

SOUTHERN NUCLEAR OPERATING COMPANY

GEORGIA POWER COMPANY
OGLETHORPE POWER CORPORATION
MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA AND
CITY OF DALTON, GEORGIA

DOCKET NO. 50-366

EDWIN I. HATCH NUCLEAR PLANT, UNIT 2

FACILITY OPERATING LICENSE

License No. NPr-5

1. The Nuclear Regulatory Commission (the Commission) having found that:
 - A. The application for license filed by Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, And the City of Dalton, Georgia (the Owners) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Edwin I. Hatch Nuclear Plant, Unit No. 2 (the facility) has been substantially completed in conformity with Construction Permit No. CPPR-90 and the application, as amended, the provisions of the Act and the rules and regulations of the Commission;
 - C. The facility requires exemptions from certain requirements of (1) Section 50.55a(g)(2) of 10 CFR Part 50, (2) Criterion 2 of Appendix A to 10 CFR Part 50, (3) Criterion 50 of Appendix A to 10 CFR Part 50, and (4) Appendices G and H to 10 CFR Part 50. These exemptions are described in the Office of Nuclear Reactor Regulation's safety evaluations supporting the granting of these exemptions which are enclosed in the letter dated June 13, 1978 transmitting this license. These exemptions are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest. The exemptions are, therefore, hereby granted. With the granting of these exemptions, the facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;

- 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 rules and regulations of the Commission;
 - E. Southern Nuclear Operating Company¹ (herein called Southern Nuclear) is technically qualified to engage in the activities authorized by this operating license in accordance with the rules and regulations of the Commission;
 - F. Southern Nuclear and the Owners, together, are financially qualified to engage in the activities authorized by this operating license in accordance with the rules and regulations of the Commission;
 - G. The Owners have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
 - H. The issuance of this operating license will not be inimical to the common defense and security or to the health and safety of the public;
 - I. 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-5 subject to the conditions for protection of the environment set forth herein, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and
 - J. 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, including 10 CFR Sections 30.33, 40.32, 70.23 and 70.31.
2. Facility Operating License No. NPF-5 is hereby issued to Southern Nuclear, Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and the City of Dalton, Georgia to read as follows:
- A. The license applies to the Edwin I. Hatch Nuclear Plant, Unit No. 2, a boiling water reactor and associated equipment (the facility) owned by Georgia Power Company, Oglethorpe Power

¹ Southern Nuclear Operating Company succeeds Georgia Power Company as operator of the Edwin I. Hatch Nuclear Plant, Unit 2. Southern Nuclear is authorized by the Owners to exercise exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

Corporation, Municipal Electric Authority of Georgia, and the City of Dalton, Georgia and operated by Southern Nuclear. The facility is located in Appling County, Georgia, and is described in the Final Safety Analysis Report as supplemented and amended (Amendments 18 through 45) and Environmental Report as supplemented and amended (Supplements 1 and 2 and Amendment 1).

B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:

- (1) Southern Nuclear, pursuant to Section 103 of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, manage, use, maintain and operate the facility at the designated location in Appling County, Georgia in accordance with the procedures and limitations set forth in this license;
- (2) Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and the City of Dalton, Georgia, pursuant to the Act and 10 CFR Part 50, to possess but not operate, the facility at the designated location in Appling County, Georgia, in accordance with the procedures and limitations set forth in this license;
- (3) Southern Nuclear, 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) Southern Nuclear, pursuant to the Act of 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) Southern Nuclear, 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) Southern Nuclear, pursuant to the Act and 10 CFR Parts 30 and 70, to process, 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 following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; 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 conditions² specified or incorporated below:

(1) Maximum Power Level

Southern Nuclear is authorized to operate the facility at steady state reactor core power levels not in excess of 2436 megawatts thermal in accordance with the conditions specified herein and in Attachment 2 to this license. Attachment 2 is an integral part of this license.

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. , are hereby incorporated in the license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications.

(3) Additional Conditions

The matters specified in the following conditions shall be completed to the satisfaction of the Commission within the stated time periods following the issuance of the license or within the operational restrictions indicated. The removal of these conditions shall be made by an amendment to the license supported by a favorable evaluation by the Commission.

- (b) Southern Nuclear shall implement and maintain in effect all provisions of the fire protection program, which is referenced in the Final Safety Analysis Report for the facility, as contained in the updated Edwin I. Hatch Nuclear Plant Units 1 and 2 Fire Hazards Analysis and Fire Protection Program, originally submitted by a GPC letter dated July 22, 1986. Southern Nuclear may make changes to the fire protection program without prior approval of the Commission only if the changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

² The original licensee authorized to possess, use, and operate the facility was Georgia Power Company (GPC). Consequently, certain historical references to GPC remain in the license conditions.

(f) Initial Test Program

Georgia Power Company shall conduct the post-fuel-loading initial test program that has been reviewed and approved by the Commission at the time of issuance of this license without making major changes to this program. Major changes are deemed to involve unreviewed safety questions under Section 50.59 of 10 CFR Part 50 and are defined as:

- (1) Elimination of any test identified in Section 14 of the Final Safety Analysis Report as essential.
- (2) Modification of test objectives, methods or acceptance criteria for any test identified in Section 14 of the Final Safety Analysis Report as essential.
- (3) Performance of any test identified in Section 14 of the Final Safety Analysis Report as essential at a power level different by more than five (5) percent of rated power from that described.
- (4) Failure to complete all tests included in the described program (planned or scheduled for power levels up to the authorized power level) prior to exceeding a core burnup of one hundred and twenty (120) effective full power days.

D. Physical Protection

Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Edwin I. Hatch Physical Security Plan," with revisions submitted through December 14, 1988; "Edwin I. Hatch Guard Training and Qualification Plan" with revisions submitted through October 24, 1988; and "Edwin I. Hatch Safeguards Contingency Plan," with revisions submitted through July 21, 1988. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedules set forth therein.

- E. This license is subject to the following additional condition for the protection of the environment:

Before engaging in additional construction or operational activities which may result in a significant adverse environmental impact that has not been evaluated or that is significantly greater than that evaluated in the Final Environmental Statement (NUREG-0417), Southern Nuclear shall provide written notification to the Director, Office of Nuclear Reactor Regulation.

- F. This license is subject to the following antitrust conditions:

(1) As used herein:

- (a) "Entity" means any financially responsible person, private or public corporation, municipality, county, cooperative, association, joint stock association or business trust, owning, operating or proposing to own or operate equipment or facilities within the State of Georgia (other than Chatham, Effingham, Fannin, Towns and Union Counties) for the generation, transmission or distribution of electricity, provided that, except for municipalities, counties, or rural electric cooperatives, "entity" is restricted to those which are or will be public utilities under the laws of the State of Georgia or under the laws of the United States, and are or will be providing retail electric service under a contract or rate schedule on file with and subject to the regulation of the Public Service Commission of the State of Georgia or any regulatory agency of the United States, and, provided further, that as to municipalities, counties or rural electric cooperatives, "entity" is restricted to those which provide electricity to the public at retail within the State of Georgia (other than Chatham, Effingham, Fannin, Towns and Union Counties) or to responsible and legally qualified organizations of such municipalities, counties and/or cooperatives in the State of Georgia (other than Chatham, Effingham, Fannin, Towns and Union Counties) to the extent they may bind their members.
- (b) "Power Company" means Georgia Power Company, any successor, assignee of this license, or assignee of all or substantially all of Georgia Power Company's assets, and any affiliate or subsidiary of Georgia Power Company to the extent it engages in the ownership of any bulk power supply generation or transmission resource in the State of Georgia (but specifically not including (1) flood rights and other land rights acquired in the State of Georgia incidental to hydroelectric generation

facilities located in another state and (2) facilities located west of the thread of the stream on that part of the Chattahoochee River serving as the boundary between the States of Georgia and Alabama).

- (2) Power Company recognizes that it is often in the public interest for those engaging in bulk power supply and purchases to interconnect, coordinate for reliability and economy, and engage in bulk power supply transactions in order to increase interconnected system reliability and reduce the costs of electric power. Such arrangements must provide for Power Company's costs (including a reasonable return) in connection therewith and allow other participating entities full access to the benefits available from interconnected bulk power supply operations and must provide net benefits to Power Company. In entering into such arrangements neither Power Company nor any other participant should be required to violate the principles of sound engineering practice or forego a reasonably contemporaneous alternative arrangement with another, developed in good faith in arms length negotiations (but not including arrangements between Power Company and its affiliates or subsidiaries which impair entities' rights hereunder more than they would be impaired were such arrangements made in good faith between Power Company and a non-affiliate or non-subsidiary) which affords it greater benefits. Any such arrangement must provide for adequate notice and joint planning procedures consistent with sound engineering practice, and must relieve Power Company from obligations undertaken by it in the event such procedures are not followed by any participating entity.

Power Company recognizes that each entity may acquire some or all of its bulk power supply from sources other than Power Company.

In the implementation of the obligations stated in the succeeding paragraphs, Power Company and entities shall act in accordance with the foregoing principles, and these principles are conditions to each of Power Company's obligations herein undertaken.

- (3) Power Company shall interconnect with any entity which provides, or which has undertaken firm contractual obligations to provide, some or all of its bulk power supply from sources other than Power Company on terms to be included in an interconnection agreement which shall provide for appropriate allocation of the costs of interconnection facilities; provided however, that if an entity undertakes to negotiate such a firm contractual obligation, the Power Company shall, in good faith, negotiate with such entity concerning any proposed interconnection. Such interconnection agreement shall provide, without undue

preference or discrimination, for the following among other things, insofar as consistent with the operating necessities of Power Company's and any participating entity's systems:

- (a) maintenance and coordination of reserves, including, where appropriate, the purchase and sale thereof,
- (b) emergency support,
- (c) maintenance support,
- (d) economy energy exchanges,
- (e) purchase and sale of firm and non-firm capacity and energy,
- (f) economic dispatch of power resources within the State of Georgia,

provided, however, that in no event shall such arrangements impose a higher percentage of reserve requirements on the participating entity than that maintained by Power Company for similar resources.

- (4) Power Company shall sell full requirements power to any entity. Power Company shall sell partial requirements power to any entity. Such sales shall be made pursuant to rates on file with the Federal Power Commission, or any successor regulatory agency, and subject to reasonable terms and conditions.
- (5) (a) Power Company shall transmit ("transmission service") bulk power over its system to any entity or entities with which it is interconnected, pursuant to rate schedules on file with the Federal Power Commission which will fully compensate Power Company for the use of its system, to the extent that such arrangements can be accommodated from a functional engineering standpoint and to the extent that Power Company has surplus line capacity or reasonably available funds to finance new construction for this purpose. To the extent the entity or entities are able, they shall reciprocally provide transmission service to Power Company. Transmission service will be provided under this subparagraph for the delivery of power to an entity for its or its members' consumption and retail distribution or for casual resale to another entity for (1) its consumption or (2) its retail distribution. Nothing contained herein shall require the Power Company to transmit bulk power so as to have the effect of making the Tennessee Valley Authority ("TVA") or its distributors, directly or indirectly, a source of power supply outside the area determined by the TVA Board

of Directors by resolution of May 16, 1966 to be the area for which the TVA or its distributors were the primary source of power supply on July 1, 1957, the date specified in the Revenue Bond Act of 1959, 16 USC 831 n-4.

- (b) Power Company shall transmit over its system from any entity or entities with which it is interconnected, pursuant to rate schedules on file with the Federal Power Commission which will fully compensate Power Company for the use of its system, bulk power which results from any such entity having excess capacity available from self-owned generating resources in the State of Georgia, to the extent such excess necessarily results from economic unit sizing or from failure to forecast load accurately or from such generating resources becoming operational earlier than the planned in-service date, to the extent that such arrangements can be accommodated from a functional engineering standpoint, and to the extent Power Company has surplus line capacity available.
- (6) Upon request, Power Company shall provide service to any entity purchasing partial requirements service, full requirements service or transmission service from Power Company at a delivery voltage appropriate for loads served by such entity, commensurate with Power Company's available transmission facilities. Sales of such service shall be made pursuant to rates on file with the Federal Power Commission or any successor regulatory agency, and subject to reasonable terms and conditions.
- (7) Upon reasonable notice, Power Company shall grant any entity the opportunity to purchase an appropriate share in the ownership of, or, at the option of the entity, to purchase an appropriate share of unit power from each of the following nuclear generating units at Power Company's costs, to the extent the same are constructed and operated: Hatch 2, Vogtle 1, Vogtle 2, Vogtle 3, Vogtle 4, and any other nuclear generating unit constructed by Power Company in the State of Georgia which, in the application filed with the USAEC or its successor agency, is scheduled for commercial operation prior to January 1, 1989.

An entity's request for a share must have regard for the economic size of such nuclear unit(s), for the entity's load size, growth and characteristics, and for demands upon Power Company's system from other entities and Power Company's retail customers, all in accordance with sound engineering practice. Executory agreements to accomplish the foregoing shall contain provisions reasonably specified by Power Company requiring the entity to consummate and pay for such purchase by an early date or dates certain. For purposes of this provision, "unit power" shall mean capacity and associated energy from a specified generating unit.

- (8) Southern Nuclear shall not market or broker power or energy from Edwin I. Hatch Nuclear Plant, Unit 2. Georgia Power Company shall continue to be responsible for compliance with the obligations imposed on it in its antitrust license conditions. Georgia Power Company is responsible and accountable for the actions of Southern Nuclear, to the extent that Southern Nuclear's actions may, in any way, contravene the existing antitrust license conditions.
- (9) To effect the foregoing conditions, the following steps shall be taken:
 - (a) Power Company shall file with the appropriate regulatory authorities and thereafter maintain in force as needed an appropriate transmission tariff available to any entity;
 - (b) Power Company shall file with the appropriate regulatory authorities and thereafter maintain in force as needed an appropriate partial requirements tariff available to any entity; Power Company shall have its liability limited to the partial requirements service actually contracted for and the entity shall be made responsible for the security of the bulk power supply resources acquired by the entity from sources other than the Power Company;
 - (c) Power Company shall amend the general terms and conditions of its current Federal Power Commission tariff and thereafter maintain in force as needed provisions to enable any entity to receive bulk power at transmission voltage at appropriate rates;
 - (d) Power Company shall not have the unilateral right to defeat the intended access by each entity to alternative sources of bulk power supply provided by the conditions to this license; but Power Company shall retain the right to seek regulatory approval of changes in its tariffs to the end that it be adequately compensated for services it provides, specifically including, but not limited to, the provisions of Section 205 of the Federal Power Act;
 - (e) Power Company shall use its best efforts to amend any outstanding contract to which it is a party that contains provisions which are inconsistent with the conditions of this license;
 - (f) Power Company affirms that no consents are or will become necessary from Power Company's parent, affiliates or subsidiaries to enable Power Company to carry out its obligations hereunder or to enable the entities to enjoy their rights hereunder;

- (g) All provisions of these conditions shall be subject to and implemented in accordance with the laws of the United States and of the State of Georgia, as applicable, and with rules, regulations and orders of agencies of both, as applicable.

G. This license is effective as of the date of issuance and shall expire at midnight, June 13, 2018.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed by
Roger S. Boyd

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Attachments:

1. Appendices A and B - Technical Specifications
2. Items to be Completed Prior to Opening Main Steam Isolation Valves

Date of Issuance: JUN 13 1978

ATTACHMENT 2

ITEMS TO BE COMPLETED PRIOR TO OPENING MAIN STEAM ISOLATION VALVES DURING REACTOR OPERATION

Georgia Power Company shall prior to opening the main steam isolation valves during reactor operation, complete to the satisfaction of the Commission, the testing and significant incomplete work list items which affect the operability of the following systems:

- | | | |
|-----|------------|-------------------------------------|
| 1. | 2C91-3510 | PROCESS COMPUTER SYSTEM |
| 2. | 2D11-3510 | OFF GAS RADIATION MONITORING SYSTEM |
| 3. | 2D12-3510 | TIP SYSTEM |
| 4. | 2G11-3510C | RADWASTE - SOLID |
| 5. | 2G11-3510D | RADWASTE - CHEMICAL |
| 6. | 2G11-3510E | RADWASTE - CONVEYOR |
| 7. | 2N21-3510 | CONDENSATE SYSTEM |
| 8. | 2N21-3520 | REACTOR FEEDWATER SYSTEM |
| 9. | 2N30-3510 | TURBINE & AUXILIARIES |
| 10. | 2N36-3510 | EXTRACTION STEAM & FEEDWATER HEATER |
| 11. | 2N61-3510 | CONDENSER & AUXILIARIES |
| 12. | 2N62-3510 | OFF GAS SYSTEM |
| 13. | 2N71-3510 | CONDENSER CIRCULATING WATER SYSTEM |
| 14. | 2P33-3510 | SAMPLING SYSTEM |
| 15. | 2P70-3510 | DRYWELL PNEUMATICS SYSTEM |
| 16. | 2W24-3510 | COOLING TOWER SYSTEM |

Georgia Power Company shall not open the main steam isolation valves during reactor operation without prior written authorization from the Commission.

PROPOSED TECHNICAL SPECIFICATIONS CHANGED PAGES
(Typed Version)

TECHNICAL SPECIFICATION CHANGES
APPENDIX A TO THE OPERATING LICENSE

UNIT 1

Insertion Instructions

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APPENDIX A
TO
OPERATING LICENSE DPR-57
TECHNICAL SPECIFICATIONS AND BASES
FOR
EDWIN I. HATCH NUCLEAR PLANT UNIT 1
SOUTHERN NUCLEAR OPERATING COMPANY
DOCKET NO. 50-321

Date of Issuance: AUG 6, 1974

1.0 DEFINITIONS (Continued)

ZZ. MEMBER(S) OF THE PUBLIC

MEMBER(S) OF THE PUBLIC shall include all persons who are not occupationally associated with the plant. This category does not include employees of the licensee,* its contractors, or its vendors. Also excluded from this category are persons who enter the site to service equipment or to make deliveries. This category does include persons who use portions of the site for recreational, occupational, or other purposes not associated with the plant.

AAA. SITE BOUNDARY

The SITE BOUNDARY shall be that line beyond which the land is not owned, leased, or otherwise controlled by the licensee, as shown in figure 3.15-1.

BBB. UNRESTRICTED AREA

An UNRESTRICTED AREA shall be any area at or beyond the SITE BOUNDARY to which access for purposes of protection of individuals from exposure to radiation and radioactive materials is not controlled by the licensee. This includes any area within the SITE BOUNDARY used for residential quarters or for long-term industrial, commercial, institutional, and/or recreational purposes.

CCC. PURGE - PURGING

PURGE or PURGING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration, or other operating condition in such a manner that replacement air or gas is required to purify the confinement.

DDD. VENTING

VENTING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration, or other operating condition in such a manner that replacement air or gas is not provided or required during VENTING. The term "vent" used in system names, does not imply a VENTING process.

*The term "licensee," when used in the E. I. Hatch Unit 1 Technical Specifications, shall refer to Southern Nuclear Operating Company.

5.0. MAJOR DESIGN FEATURES

A. Site

Edwin I. Hatch Nuclear Plant Unit No. 1 is located on a site of about 2244 acres, which is owned by Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia and the City of Dalton, Georgia, and is operated by Southern Nuclear Operating Company, on the south side of the Altamaha River in Appling County near Baxley, Georgia. The Universal Transverse Mercator Coordinates of the center of the reactor building are: Zone 17R LF 372,935.2m E and 3,533,765.2m N.

B. Reactor Core

1. Fuel Assemblies

The core shall consist of not more than 560 fuel assemblies and shall be limited to those fuel assemblies which have been analyzed with NRC-approved codes and methods and have been shown to comply with all Safety Design Bases in the Final Safety Analysis Report (FSAR).

2. Control Rods

The reactor shall contain 137 cruciform-shaped control rods.

C. Reactor Vessel

The reactor vessel is described in Table 4.2-2 of the FSAR. The applicable design specifications shall be as listed in Table 4.2-1 of the FSAR.

D. Containment

1. Primary Containment

The principal design parameters are characteristics of the primary containment shall be as given in Table 5.2-1 of the FSAR.

2. Secondary Containment* (See Page 5.0-1a)

The secondary containment shall be as described in Section 5.3.3.1 of the FSAR and the applicable codes shall be as given in Section 12.4.4 of the FSAR.

3. Primary Containment Penetrations

Penetrations to the primary containment and piping passing through such penetrations shall be designed in accordance with standards set forth in Section 5.2.3.4 of the FSAR.

E. Fuel Storage

1. Spent Fuel

All arrangements of fuel in the spent fuel storage racks and in other credible configurations in the spent fuel pool outside the racks shall be evaluated and shown to have a K_{eff} not greater than 0.95.

2. New Fuel

The new fuel storage vault shall be such that the k_{eff} dry shall not be greater than 0.90 and the k_{eff} flooded shall not be greater than 0.95.

SOUTHERN NUCLEAR OPERATING COMPANY

EDWIN I. H NUCLEAR PLANT

UNIT 2

(HATCH-UNIT 2)

TECHNICAL SPECIFICATIONS

APPENDIX "A"

TO

LICENSE NO. NPF-5

1.0 DEFINITIONS (Continued)

MEMBER(S) OF THE PUBLIC

MEMBER(S) OF THE PUBLIC shall include all persons who are not occupationally associated with the plant. This category does not include employees of the licensee,* its contractors, or its vendors. Also excluded from this category are persons who enter the site to service equipment or to make deliveries. This category does include persons who use portions of the site for recreational, occupational, or other purposes not associated with the plant.

SITE BOUNDARY

The SITE BOUNDARY shall be that line beyond which the land is not owned, leased, or otherwise controlled by the licensee, as shown in figure 3.11-1.

UNRESTRICTED AREA

An UNRESTRICTED AREA shall be any area at or beyond the SITE BOUNDARY to which access for purposes of protection of individuals from exposure to radiation and radioactive materials is not controlled by the licensee. This includes any area within the SITE BOUNDARY used for residential quarters or for long term industrial, commercial, institutional, and/or recreational purposes.

DOSE EQUIVALENT IODINE

The DOSE EQUIVALENT I-131 shall be that concentration of I-131 (microcurie/gram), which alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in table III of TID-14844 or those in NRC Regulatory Guide 1.109, Revision 1, October 1977.

PURGE - PURGING

PURGE or PURGING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration, or other operating condition in such a manner that replacement air or gas is required to purify the confinement.

*The term "licensee," when used in the E. I. Hatch Unit 2 Technical Specifications, shall refer to Southern Nuclear Operating Company.

PROPOSED ETS CHANGED PAGES
(Typed Version)

ENVIRONMENTAL TECHNICAL SPECIFICATIONS CHANGES
APPENDIX B TO THE OPERATING LICENSE

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ENVIRONMENTAL TECHNICAL SPECIFICATIONS

EDWIN I. HATCH NUCLEAR PLANT

UNIT 1

SOUTHERN NUCLEAR OPERATING COMPANY

JUNE 1978

1.0 Definitions

Aerial Remote Sensing - The measurement or acquisition from aircraft or spacecraft of information on some property of an object or phenomenon by a recording device that is not in physical or intimate contact with the object or phenomenon under study. The technique employs such devices as the camera, radio frequency receivers, and radar systems.

Annually - Once per calendar year at intervals of 12 calendar months, \pm 30 days.

Bi-Weekly - Once every 2 weeks, \pm 4 days.

Ground Truth or Ground Data Surveys - Supporting data collected on the ground and information derived therefrom, as an aid to the interpretation of a remotely recorded survey, such as aerial imagery. To the extent possible, this should be performed concurrently with the airborne surveys.

Infrared, Photographic - Pertaining to or designating that portion of the electromagnetic spectrum with wavelengths just beyond the red end of the visible spectrum; generally defined as being from 0.7 to about 1.0mm, or the useful limits of film sensitivities.

Licensee - The term licensee, when used in the E. I. Hatch Unit 1 Environmental Technical Specifications, refers to Southern Nuclear Operating Company (Southern Nuclear).

Monthly - Once during each calendar month at 30-day intervals, \pm 6 days.

Normal Operation - Operation of either unit at the station at greater than 5 percent of rated thermal power in other than a safety or power emergency situation.

NPDES Permit - The National Pollutant Discharge Elimination System Permit No. GA 0004120 (or its subsequent revisions) issued by the State of Georgia, Department of Natural Resources, Environmental Protection Division. This permit authorizes the licensee to discharge controlled waste water from HNP into the waters of the Altamaha River.

Quarterly - Once during each successive 3-month period of the calendar year, counting from January 1, at 13-week intervals, \pm 14 days.

Scale - The ratio of a distance on a photograph or map to its corresponding distance on the ground.

5.3 Review and Audit

5.3.1 Independent Review

5.3.1.1 The Manager-Environmental Services shall review the following: |

- a. Proposed changes to plant systems or equipment, provided such changes are identified by the Plant Review Board (PRB) as having a potential adverse environmental impact.
- b. Proposed changes to the Environmental Technical Specifications (ETS).

5.3.1.2 The Safety Review Board (SRB) shall review the following:

- a. Proposed changes to the ETS.
- b. Violations of ETS to determine whether adequate corrective action is being taken to prevent recurrence.
- c. Procedures or changes hereto (which could affect the monitoring of station operation) that may be considered by the Manager-Environmental Services or the PRB to be appropriate for SRB review. |

5.3.1.4 The PRB shall review the following:

- a. Procedures for implementing the responsibilities specified in section 5.1.1 and proposed changes thereto.
- b. Proposed changes to the ETS.

5.3.2 Audit Responsibility

5.3.2.1 The licensee shall provide for an annual review and audit of compliance with the ETS. 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.

5.3.2.2 Audits of facility activities shall be performed annually under the cognizance of the SRB to ensure conformance of facility operation to provisions of the ETS.

5.4 State and Federal Permit and Certificates

Section 401 of PL 92-500, the Federal Water Pollution Control Act Amendments of 1972 (FWPCA), requires any applicant for a Federal license or permit to conduct any activity that may result in any discharge into provisions of Sections 301, 302, 306, and 307 of the FWPCA. Section 401 of PL 92-500 further requires that any certification provided under this section shall set any effluent limitations and other limitations and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with the applicable limitations. Certifications provided in accordance with Section 401 set forth conditions on the Federal license or permit for which the certification is provided. Accordingly, the licensee shall comply with the requirements set forth in the currently applicable 401 certification and amendments thereto issued to the licensee by the Georgia Environmental Protection Division. In accordance with the provisions of the Georgia Water Quality Control Act, the FWPCA and the rules and regulations promulgated pursuant to each of these acts, the Georgia Environmental Protection Division, under authority delegated by the U.S. EPA, issued NPDES permit No. GA 0004120 to the licensee. The NPDES permit authorizes the licensee to discharge from HNP Units 1 and 2 to the Altamaha River in accordance with effluent limitations, monitoring requirements, and other conditions stipulated in the permit.

Subsequent revisions to the certifications will be accommodated in accordance with the provisions of section 5.6.3.

5.5 Procedures

Detailed written procedures, including applicable checklists and instructions, shall be prepared and followed for all activities involved in implementing the ETS. All procedures shall be maintained in a manner convenient for review and inspection.

Proposed changes to the ETS shall be reviewed and approved by the Manager-Environmental Services, the Plant Review Board, and the Safety Review Board. Prior to approval, the possible impact of the proposed changes will be evaluated.

5.6.3.2 Changes in Permits and Certificates

Changes or additions to required Federal, State, local, and regional authority permits and certificates for the protection of the environment that pertain to the requirements of the ETS shall be reported to the NRC within 30 days. In the event that the licensee initiates or becomes aware of a request for changes to any water quality requirements, limits, or values stipulated in any certificate or permit issued pursuant to Section 401 or 402 of PL 92-500, which are also the subject of an ETS reporting requirement, the NRC shall be notified concurrently with the authorizing agency. The notification to the NRC shall include an evaluation of the environmental impact of the revised requirement, limit, or value being sought.

If, during NRC's review of the proposed change, it is determined that a potentially severe environmental impact could result from the change, the NRC will consult with the authorizing agency to determine the appropriate action to be taken.

5.7 Records Retention

5.7.1 Records and logs relative to the following areas shall be made and retained for the life of the plant in a manner convenient for review and inspection. These logs shall be made available to the NRC on request.

- a. Records and drawings detailing plant design changes and modifications made to systems and equipment as described in section 5.5.3.
- b. Records of all data from environmental monitoring and surveillance programs required by the ETS.

5.7.2 All other records and logs relating to the ETS shall be retained, in a manner convenient for review and inspection, for 5 years following logging or recording.

ENVIRONMENTAL TECHNICAL SPECIFICATIONS

EDWIN I. HATCH NUCLEAR PLANT

UNIT 2

SOUTHERN NUCLEAR OPERATING COMPANY

JUNE 1978

1.0 Definitions

Aerial Remote Sensing - The measurement or acquisition from aircraft or spacecraft of information on some property of an object or phenomenon by a recording device that is not in physical or intimate contact with the object or phenomenon under study. The technique employs such devices as the camera, radio frequency receivers, and radar systems.

Annually - Once per calendar year at intervals of 12 calendar months, \pm 30 days.

Bi-Weekly - Once every 2 weeks, \pm 4 days.

Ground Truth or Ground Data Surveys - Supporting data collected on the ground and information derived therefrom, as an aid to the interpretation of a remotely recorded survey, such as aerial imagery. To the extent possible, this should be performed concurrently with the airborne surveys.

Infrared, Photographic - Pertaining to or designating that portion of the electromagnetic spectrum with wavelengths just beyond the red end of the visible spectrum; generally defined as being from 0.7 to about 1.0 μ m or the useful limits of film sensitivities.

Licensee - The term licensee, when used in the E. I. Hatch Unit 2 Environmental Technical Specifications, refers to Southern Nuclear Operating Company (Southern Nuclear).

Monthly - Once during each calendar month at 30-day intervals, \pm 6 days.

Normal Operation - Operation of either unit at the station at greater than 5 percent of rated thermal power in other than a safety or power emergency situation.

NPDES Permit - The National Pollutant Discharge Elimination System Permit No. GA 0004120 (or its subsequent revisions) issued by the State of Georgia, Department of Natural Resources, Environmental Protection Division. This permit authorizes the licensee to discharge controlled waste water from HNP into the waters of the Altamaha River.

Quarterly - Once during each successive 3-month period of the calendar year, counting from January 1, at 13-week intervals, \pm 14 days.

Scale - The ratio of a distance on a photograph or map to its corresponding distance on the ground.

5.3 Review and Audit

5.3.1 Independent Review

5.3.1.1 The Manager-Environmental Services shall review the following:

- a. Proposed changes to plant systems or equipment, provided such changes are identified by the Plant Review Board (PRB) as having a potential adverse environmental impact.
- b. Proposed changes to the Environmental Technical Specifications (ETS).

5.3.1.2 The Safety Review Board (SRB) shall review the following:

- a. Proposed changes to the ETS.
- b. Violations of ETS to determine whether adequate corrective action is being taken to prevent recurrence.
- c. Procedures or changes hereto (which could affect the monitoring of station operation) that may be considered by the Manager-Environmental Services the PRB to be appropriate for SRB review.

5.3.1.4 The PRB shall review the following:

- a. Procedures for implementing the responsibilities specified in section 5.1.1 and proposed changes thereto.
- b. Proposed changes to the ETS.

5.3.2 Audit Responsibility

5.3.2.1 The licensee shall provide for an annual review and audit of compliance with the ETS. 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.

5.3.2.2 Audits of facility activities shall be performed annually under the cognizance of the SRB to ensure conformance of facility operation to provisions of the ETS.

5.4 State and Federal Permit and Certificates

Section 401 of PL 92-500, the Federal Water Pollution Control Act Amendments of 1972 (FWPCA), requires any applicant for a Federal license or permit to conduct any activity that may result in any discharge into provisions of Sections 301, 302, 306, and 307 of the FWPCA. Section 401 of PL 92-500 further requires that any certification provided under this section shall set any effluent limitations and other limitations and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with the applicable limitations. Certifications provided in accordance with Section 401 set forth conditions on the Federal license or permit for which the certification is provided. Accordingly, the licensee shall comply with the requirements set forth in the currently applicable 401 certification and amendments thereto issued to the licensee by the Georgia Environmental Protection Division. In accordance with the provisions of the Georgia Water Quality Control Act, the FWPCA and the rules and regulations promulgated pursuant to each of these acts, the Georgia Environmental Protection Division, under authority delegated by the U.S. EPA, issued NPDES permit No. GA 0004120 to the licensee. The NPDES permit authorizes the licensee to discharge from HNP Units 1 and 2 to the Altamaha River in accordance with effluent limitations, monitoring requirements, and other conditions stipulated in the permit.

Subsequent revisions to the certifications will be accommodated in accordance with the provisions of section 5.6.3.

5.5 Procedures

Detailed written procedures, including applicable checklists and instructions, shall be prepared and followed for all activities involved in implementing the ETS. All procedures shall be maintained in a manner convenient for review and inspection.

Proposed changes to the ETS shall be reviewed and approved by the Manager-Environmental Services, the Plant Review Board, and the Safety Review Board. Prior to approval, the possible impact of the proposed changes will be evaluated.

5.6.3.2 Changes in Permits and Certificates

Changes or additions to required Federal, State, local, and regional authority permits and certificates for the protection of the environment that pertain to the requirements of the ETS shall be reported to the NRC within 30 days. In the event that the licensee initiates or becomes aware of a request for changes to any water quality requirements, limits, or values stipulated in any certificate or permit issued pursuant to Section 401 or 402 of PL 92-500, which are also the subject of an ETS reporting requirement, the NRC shall be notified concurrently with the authorizing agency. The notification to the NRC shall include an evaluation of the environmental impact of the revised requirement, limit, or value being sought.

If during the NRC's review of the proposed change, it is determined that a potentially severe environmental impact could result from the change, the NRC will consult with the authorizing agency to determine the appropriate action to be taken.

5.7 Records Retention

5.7.1 Records and logs relative to the following areas shall be made and retained for the life of the plant in a manner convenient for review and inspection. These logs shall be made available to the NRC on request.

- a. Records and drawings detailing plant design changes and modifications made to systems and equipment as described in section 5.5.3.
- b. Records of all data from environmental monitoring and surveillance programs required by the ETS.

5.7.2 All other records and logs relating to the ETS shall be retained, in a manner convenient for review and inspection, for 5 years following logging or recording.