

Appendix E

Southern Nuclear Operating Company's Compliance Status and Selected Consultation Correspondence

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Southern Nuclear Operating Company's Compliance Status and Selected Consultation Correspondence

As part of Southern Nuclear Operating Company's (SNC's) application for renewal of its operating licenses for Units 1 and 2, they prepared a list of licenses, permits, consultations, and other approvals obtained from Federal, State, regional, and local authorities pertinent to Edwin I. Hatch Nuclear Plant (HNP) operations. The list is shown in Table E-1.

Consultation correspondence prepared and sent during the evaluation of the application for renewal of the operating license for the HNP, Units 1 and 2 follows Table E-1.

- Letter from NRC to Charles A. Oravetz, National Marine Fisheries Service, dated August 31, 2000, transmitting biological assessment for license renewal at E.I. Hatch Nuclear Power Plant, Units 1 and 2, and request for informal consultation on shortnose sturgeon (TAC Nos. MA8330 and MA8332).
- Letter from NRC to Charles A. Oravetz, National Marine Fisheries Service, dated February 20, 2001, requesting the status of the informal consultation regarding the shortnose sturgeon.

Table E-1. Federal, State, Local, and Regional Licenses, Permits, Consultations, and Other Approvals Pertinent to Current HNP Station Operation

Agency	Authority	Requirements	HNP Number	Issue Date	Expiration Date	Remarks
CoE	Federal Clean Water Act (Section 404, 33 USC 1344)	Maintenance Dredging Permit	940003870	03/19/95	09/31/04	The permit authorizes periodic dredging in the Altamaha river at the HNP intake structure.
CoE	Rivers and Harbors Appropriation Act of 1899 (Section 10, 33 USC 407) Clean Water Act (Section 404, 33 USC 1344)	Permit for Construction of a Weir	199101536	04/08/93	02/01/03	The permit authorizes construction of a temporary water retaining wall structure (weir) in the Altamaha River near the HNP intake structure. The weir would be placed in the river on in the event of an extreme low-flow situation in the river, after supplemental flows from upstream reservoirs are near exhaustion.
GADNR	Georgia Groundwater Use Act, (Georgia Laws 1972 et seq., as amended by Georgia Laws 1973, et seq.)	State Groundwater Use Permit	001-0001	12/16/97	12/04/04	The permit authorizes withdrawal of groundwater from 4 wells ^(a) for use at HNP sanitary facilities, process water, central water supply, and makeup water for a wildlife habitat pond.
GADNR	Georgia Water Quality Control Act, (Georgia Law 1964, et seq.)	State Surface Water Withdrawal Permit	001-0690-01	12/16/97	01/01/10	Permit authorizes withdrawal of surface water from the Altamaha for cooling water at HNP.
EPA; GADNR	Federal Clean Water Act (33 USC 1251 et seq.); Georgia Water Quality Control Act, (Georgia Law 1964, et seq.)	Individual Discharge Permit	GA 0004120	09/15/97	08/31/02	Permit contains effluent limits for HNP combined plant waste steams, including sanitary wastewater, cooling water, and cooling tower blowdown. SNP would have to submit a renewal application to GADNR no later than 180 days beyond the expiration date to receive authorization to discharge beyond the expiration date of August 31, 2002.
EPA; GADNR	Federal Clean Water Act (33 USC 1251 et seq.); Georgia Water Quality Control Act, (Georgia Law 1964, et seq.)	Stormwater Discharge Permit	GAR000000	06/01/98	05/31/03	The permit covers all discharges of storm water associated with industrial activities. SNC would have to notify GADNR before new storm water discharges from sites where industrial activity will occur.

(a) SNC added two wells for a total of six authorized wells (SNC, December 15, 2000).

Table E-1. (contd)

Agency	Authority	Requirements	HNP Number	Issue Date	Expiration Date	Remarks
EPA; GADNR	Federal Safe Drinking Water Act [42 USC 300(f) et seq., 40 CFR Parts 100-149]; Georgia Safe Drinking Water Act of 1997, Chapter 391-3-5	Public water system, production	PG0010005	03/21/91	03/21/01 ^(a)	The permit authorizes withdrawal of groundwater from 2 wells for use as drinking water at HNP.
EPA; GADNR	Federal Safe Drinking Water Act [42 USC 300(f) et seq., 40 CFR Parts 100-149]; Georgia Safe Drinking Water Act of 1997, Chapter 391-3-5	Public water system, recreation site	NG0010011	02/07/95	02/06/05 ^(a)	The permit authorizes withdrawal of groundwater from one well for use at the HNP recreation area.
EPA; GADNR	Resource Conservation and Recovery Act (Solid Waste Disposal Act) (42 USC 6901 et seq.); Georgia Solid Waste Management Act, Section 1486, Georgia Laws of 1972 as amended, Chapter 391-3-4	Solid waste landfill, phase II.	001-004 D(L)(I)	09/12/80	Upon Closure	Imposes restrictions on activities at the HNP landfill.
E-3 EPA; GADNR	Federal Clean Air Act, as amended, (42 USC 7401 et seq., (40 CFR 50-99); GA Air Quality Act, Section 12-9-1, et seq. and the Rules, Chapter 391-3-1	Air Quality	4911-001-0001-V-01-0	02/04/99	02/04/04	The permit applies to the following units: Auxiliary Startup Boiler Number 2 Two diesel engine fire pumps Five for emergency diesel generators One Security power diesel generator.
NUREG-1437, Supplement 4 NRC	10 CFR Part 50	NRC license, HNP Unit 1	DPR-57	08/06/74	08/06/14	None
NRC	10 CFR Part 50	NRC license, HNP Unit 2	NPF-5	06/13/78	06/13/18	None
CFR = Code of Federal Regulations.		HNP = Edwin I. Hatch Nuclear Plant.				
CoE = U.S. Corps of Engineers.		NRC = U.S. Nuclear Regulatory Commission.				
EPA = U.S. Environmental Protection Agency.		USC = United States Code.				
GADNR = Georgia Department of Natural Resources.						
(a) Permits renewed - issue date 4/01/99, expiration date 3/31/09.						



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

August 31, 2000

Charles A. Oravetz, Assistant Regional Administrator
Southeast Regional Office
National Marine Fisheries Service
9721 Executive Center Drive
St. Petersburg, FL 33702

SUBJECT: BIOLOGICAL ASSESSMENT FOR LICENSE RENEWAL AT E. I. HATCH
NUCLEAR PLANT, UNITS 1 AND 2 AND REQUEST FOR INFORMAL
CONSULTATION (TAC NOS. MA8330 AND MA8332)

Dear Mr. Oravetz:

The NRC staff has prepared the enclosed biological assessment to evaluate whether the proposed renewal of the Edwin I. Hatch Nuclear Power Plant, Units 1 and 2 operating licenses for a period of an additional 20 years would have adverse effects on a listed species. This biological assessment is for the Hatch Nuclear Power Plant, located on the Altamaha River at river kilometer (rkm) 180, in Appling County, Georgia, slightly southeast of the U.S. Highway 1 crossing of the Altamaha River.

The shortnose sturgeon, *Acipenser brevirostrum*, was considered in this biological assessment. The staff has determined that the proposed action is not a major construction activity and that it may affect, but is not likely to adversely affect the shortnose sturgeon. No designated critical habitat for this listed species is located near the proposed action. We are placing this biological assessment in our project files and are requesting your concurrence with our determination.

In reaching our conclusion, the NRC staff relied on information provided by the licensee, on the geographical information system (GIS) data base information provided by the Georgia Natural Heritage Program, on research performed by the NRC staff, and on current listings of species provided by St. Petersburg, Florida office of the National Marine Fisheries Service.

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C. Oravetz

- 2 -

If you have any questions regarding this biological assessment or the staff's request, please contact the environmental project manager, Jim Wilson, by telephone at (301) 415-1108 or by e-mail at jhw1@nrc.gov

Sincerely,

/RA/ Signed by Barry Zalcmann for

Cynthia A. Carpenter, Chief
Generic Issues, Environmental, Financial
And Rulemaking Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket Nos. 50-321 and 50-366

Enclosure: As stated

cc w/ enclosure: See next page

May 2001

E-5

NUREG-1437, Supplement 4

BIOLOGICAL ASSESSMENT OF THE POTENTIAL IMPACT ON
SHORTNOSE STURGEON RESULTING FROM AN
ADDITIONAL 20 YEARS OF OPERATION OF THE
EDWIN I. HATCH NUCLEAR POWER PLANT, UNITS 1 AND 2

Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

May 2001

E-6

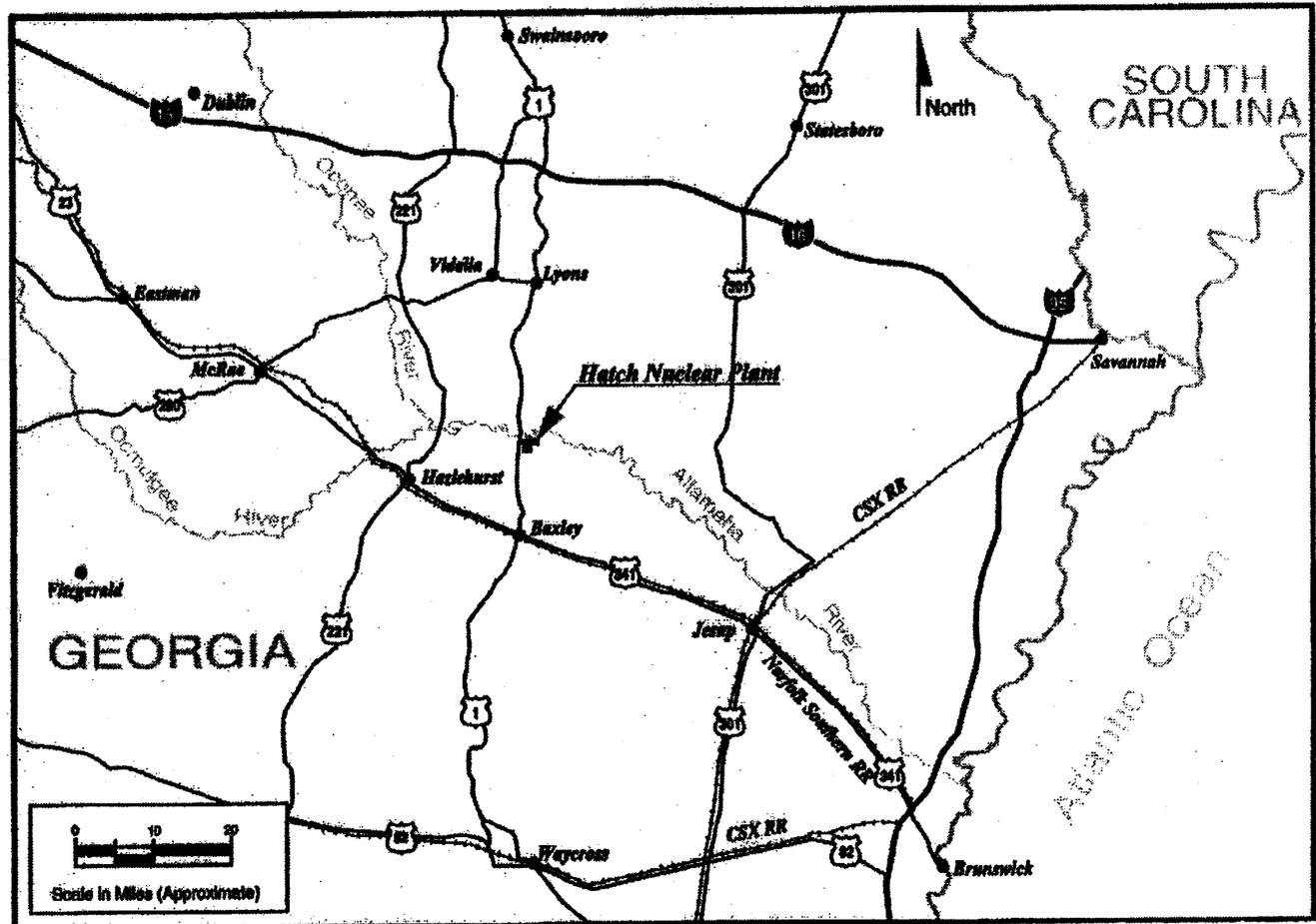
May 2001

Predecessor agency to NRC.

E-7

NUREG-1437, Supplement 4

Figure 1 - Plant Hatch Location Map



(Reference 3), and in 1978, NRC issued a FES for Unit 2 (Reference 4). The FESs evaluate the environmental impacts from plant construction and operation in accordance with the National Environmental Policy Act (NEPA).

The property at the HNP site totals approximately 2,240 acres and is characterized by low, rolling sandy hills that are predominantly forested. A property plan is shown in Figure VI-3. Figure VII-4 provides a more detailed site plan. The property includes approximately 900 acres north of the Altamaha River in Toombs County and approximately 1,340 acres south of the River in Appling County. All industrial facilities associated with the site are located in Appling County. The restricted area, which comprises the reactors, containment buildings, switchyard, cooling tower area and associated facilities, is approximately 300 acres. Approximately 1,600 acres are managed for timber production and wildlife habitat.

B. Heat Dissipation System

The excess heat produced by HNP's two nuclear units is absorbed by cooling water flowing through the condensers and the service water system. Main condenser cooling is provided by mechanical draft cooling towers. Each HNP circulating water system is a closed-loop cooling system that utilizes three cross-flow and one counter-flow mechanical-draft cooling towers for dissipating waste heat to the atmosphere.

For both Units 1 and 2, cooling tower makeup water is withdrawn from the Altamaha River through a single intake structure. The intake structure is located along the southern shoreline of the Altamaha River and is positioned so that water is available to the plant at both minimum flow and probable flood conditions (Figure 2). The main river channel (thalweg) is located closer to the northern shoreline. The intake is approximately 150 feet long, 60 feet wide, and the roof is approximately 60 feet above the water surface at normal river level. The water passage entrance is about 27 feet wide and extends from 16 feet below to 33 feet above normal water levels. Large debris is removed by trash racks, while small debris is removed by vertical travelling screens with a 3/8 inch mesh. Water velocity through the intake screens is 1.9 feet per second (fps) at normal river elevations and decreases at higher river flows.

Water is returned to the Altamaha River via a submerged discharge structure that consists of two 42-inch lines extending approximately 120 feet out from the shore at an elevation of 54 feet mean sea level. The point of discharge is approximately 1,260 feet down-river from the intake structure and approximately 4 feet below the surface when the river is at its lowest level.

The National Pollutant Discharge Elimination System (NPDES) Permit for HNP, issued by the Environmental Protection Division (EPD) of the Georgia Department of Natural Resources (GA DNR) in 1997 requires weekly monitoring of discharge temperatures, but does not stipulate a maximum discharge temperature or maximum temperature rise across the condenser. Maximum discharge temperatures measured at the mixing box, which are reported to EPD on a quarterly basis, range from 62 °F in winter to 94 °F in summer.

End
Note

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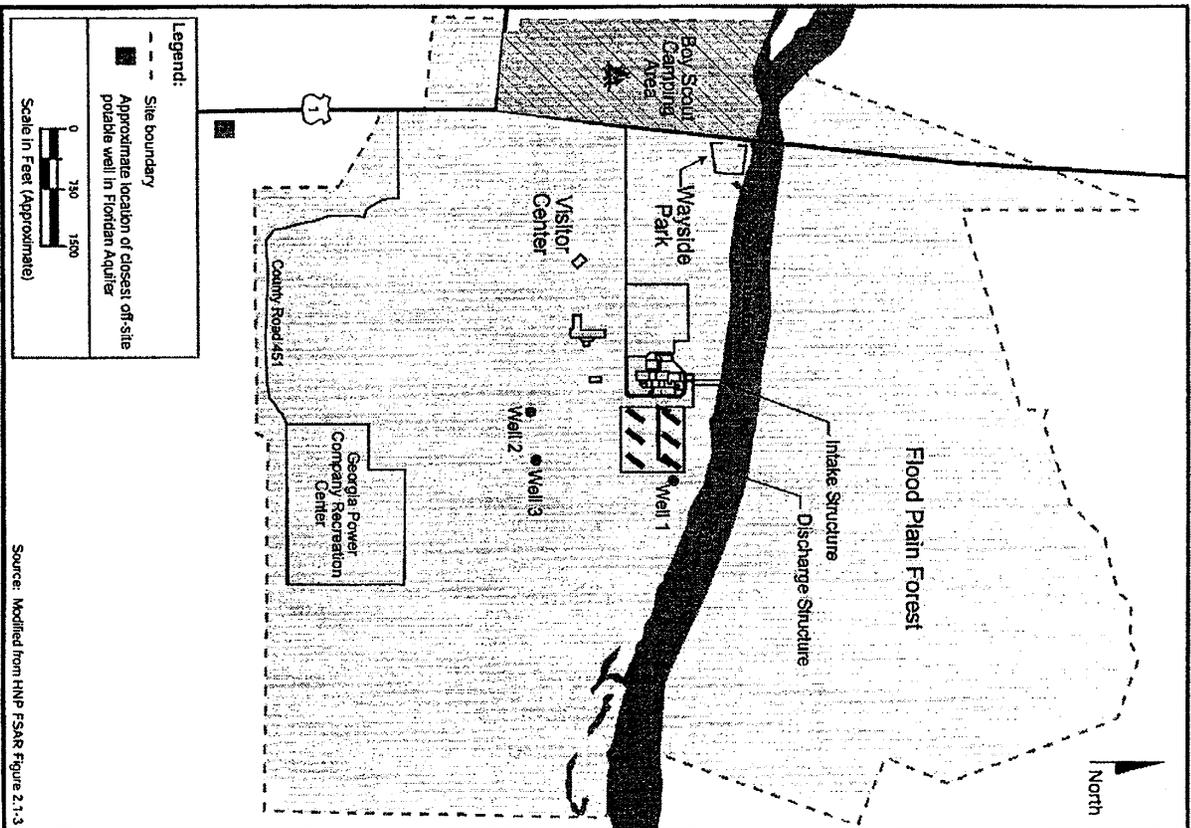


Figure 2 - Plant Hatch Site Plan

May 2001

62°F in winter to 94°F in summer.

E-11

- 4 -

NUREG-1437, Supplement 4

Appendix E

E-12

May 2001

Acipenser brevirostrum

is a member of the family

E-13

May 2001

visiting the site. In the past, the fish are further restricted to a few deep holes near the interface. Recaptures of

E-15

- 8 -

NUREG-1437, Supplement 4

Appendix E

May 2001 HNE... *Acipenser*... *Alosa sapidissima*... *Acipenser* sp. (two juveniles and one larva)

This is the only record of larval sturgeon found in the vicinity of
eggs, with mean densities
larvae were present in drift samples from May

E-17

Trinectes maculatus

E-18

was the most abundant and the only species collected consistently each year.

May 2001

May 2001

at the top of the page. The text is mostly obscured by a thick black horizontal bar.

Acipenser oxyrinchus

and shortnose sturgeon. No shortnose sturgeon

E-19

- 12 -

NUREG-1437, Supplement 4

E-20

Acipenser brevirostrum

May 2001

May 2001

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REFERENCES

Ge America's Salt Fishes. *Journal of the American Fisheries Society*, 1957, 86: 1-11.

oxyrinchus in North America. 61-72 in F.P. Binkowski and S.I. Dorosh (eds.), *Proceedings of the 1997 International Conference on the Biology of the Atlantic Salmon*, University of Georgia, Athens, Georgia, 1997.

brevirostrum Acipenser *brevirostrum* LeSueur 1818. NOAA Technical Memorandum NMFS-37, 1967.

Acipenser *Acipenser* *Acipenser* *Acipenser*

E-21

NUREG-1437, Supplement 4

February 20, 2001

Mr. Charles A. Oravetz, Assistant Regional Administrator
 Southeast Regional Office
 National Marine Fisheries Service
 9721 Executive Center Drive
 St. Petersburg, FL 33702

**SUBJECT: STATUS OF INFORMAL CONSULTATION FOR LICENSE RENEWAL AT
 EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2 (TAC NOS. MA8330 AND
 MA8332)**

Dear Mr. Oravetz:

On August 31, 2000, the U.S. Nuclear Regulatory Commission (NRC) staff submitted a biological assessment to your office, initiating an informal consultation. The biological assessment evaluated whether the proposed renewal of the Edwin I. Hatch Nuclear Plant (HNP), Units 1 and 2, operating licenses for a period of an additional 20 years would have adverse effects on a listed species.

I request that you provide us with your best estimate for the completion of the informal consultation. Discussions have been ongoing between the NRC staff and your staff. In the meantime, the NRC staff is continuing the development of an environmental impact statement for the renewal of the HNP licenses. Under the current schedule, the staff expects to complete development of the final environmental impact statement in April and to issue it to the Environmental Protection Agency in early June.

We will continue to work with your staff to resolve any concerns related to the proposed action. If you have any questions, please contact Andy Kugler at (301) 415-2828.

Sincerely,
 /RA/Signed By: CACarpenter
 Cynthia A. Carpenter, Chief
 Generic Issues, Environmental, Financial
 and Rulemaking Branch
 Division of Regulatory Improvement Programs
 Office of Nuclear Reactor Regulation

Docket Nos. 50-321 and 50-366

Letter ML No.: ML010520188

cc w/enclosure: See next page

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*See previous concurrence:

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