

May 9, 1995

Dr. Lee A. Barclay  
U.S. Fish and Wildlife Service  
446 Neal Street  
Cookeville, TN 38501

Dear Dr. Barclay:

I am responding to your April 24, 1995, letter requesting a copy of the draft Environmental Protection Plan (EPP) for Watts Bar Nuclear Plant, Unit 1. Enclosed is a copy of the draft EPP.

If you have any questions, please contact Scott Flanders at (301) 415-1172.

Sincerely,

Original signed by Dennis M. Crutchfield

Dennis M. Crutchfield, Associate Director  
for Advanced Reactors and License Renewal  
Office of Nuclear Reactor Regulation

Enclosure: As stated

Docket Nos: 50-390  
50-391

**Distribution:**

Docket Files	PUBLIC	PDLR/RF
WRussell/FMiraglia, 12G18	ATHadani, 12G18	RZimmerman, 12G18
KBohrer, 12G18	DCrutchfield, 11H21	SNewberry, 11F23
LLuther, 11F23	FAkstulewicz, 11F23	SFlanders, 11F23
BSweeney, 11H21, YT0950093	VBolling, YT0950093	FHebdon, 14B21
PTam, 14B21		

PDLR:LA	PDLR:RE	PDLR:SC	PDLR:D	ADAR/NRR BS
LLuther	SFlanders	FAkstulewicz	SNewberry	DCrutchfield
05/5/95	05/5/95	05/8/95	05/8/95	05/9/95

DOCUMENT NAME: YT0950093

NRC FILE CENTER COPY

9505150111 950509  
PDR ADOCK 05000390  
P PDR

DFC

# Draft of April 1995

## APPENDIX B

### TO FACILITY OPERATING LICENSE NPF-20

### WATTS BAR NUCLEAR PLANT, UNIT 1

### ENVIRONMENTAL PROTECTION PLAN

#### 1.0 OBJECTIVES OF THE ENVIRONMENTAL PROTECTION PLAN

The Environmental Protection Plan (EPP) is to provide for protection of nonradiological environmental values during operation of the nuclear facility. The principal objectives of the EPP are as follows:

- (1) Verify that the facility is operated in an environmentally acceptable manner, as described by the Final Environmental Statement - Operating License Stage (FES-OL, NUREG-0498), Supplement No. 1 of the FES-OL, and other NRC environmental impact assessments.
- (2) Coordinate NRC requirements and maintain consistency with other Federal, State and local requirements for environmental protection.
- (3) Keep NRC informed of the environmental effects of facility construction and operation and of actions taken to control those effects.

Environmental concerns identified in the FES-OL which relate to water quality matters are regulated by way of the licensee's National Pollution Discharge Elimination System (NPDES) permit.

#### 2.0 ENVIRONMENTAL PROTECTION ISSUES

In the FES-OL dated December 1978, and Supplement No. 1 dated April 1995, the staff considered the environmental impacts associated with the operation of the two-unit Watts Bar Nuclear Plant. Certain environmental issues were identified which required study or license conditions to resolve environmental concerns, and to assure adequate protection of the environment.

##### 2.1 Aquatic Issues

Five endangered species have been identified in the Tennessee River and tributary streams near the Watts Bar Nuclear Site. The U.S. Fish and Wildlife Service (FWS) issued a Biological Opinion that concluded plant operation would not likely jeopardize the continued existence of any of the species. The incidental taking of any individuals of the endangered species known to occur in the Tennessee River and tributary streams near the site could result in reinitiating formal consultation with the FWS.

ENCLOSURE

## 2.2 Terrestrial Issues

Two federally designated terrestrial species are known to occur near the Watts Bar Nuclear Site. The FWS's Biological Opinion concluded that plant operation would not likely jeopardize the continued existence of either of the two species. The incidental taking of any individual of either of the two endangered species known to occur near the site could result in reinitiating formal consultation with the FWS.

## 3.0 CONSISTENCY REQUIREMENTS

### 3.1 Plant Design and Operation

The licensee may make changes in station design or operation, or perform tests or experiments affecting the environment provided such activities do not involve an unreviewed environmental question and do not involve a change in the EPP<sup>1</sup>. Changes in station design or operation, or performance of tests or experiments that do not affect the environment are not subject to the requirements of this EPP. Activities governed by Section 3.3 are not subject to the requirements of this section.

Before engaging in additional construction or operational activities that may significantly affect the environment, the licensee shall prepare and record an environmental evaluation of such activity. Activities are excluded from this requirement if all measurable nonradiological environmental effects are confined to the onsite areas previously disturbed during site preparation and plant construction. When the evaluation indicates that such activity involves an unreviewed environmental question, the licensee shall provide a written evaluation of such activity and obtain NRC approval. When such activity involves a change in the EPP, such activity and change to the EPP may be implemented only in accordance with an appropriate license amendment as set forth in Section 5.3 of this EPP.

A proposed change, test or experiment shall be deemed to involve an unreviewed environmental question if it concerns: (1) a matter that may result in a significant increase in any adverse environmental impact previously evaluated in the FES-OL, environmental impact appraisals, or in any decisions of the Atomic Safety and Licensing Board; or (2) a significant change in effluents or power level; or (3) a matter, not previously reviewed and evaluated in the documents specified in (1) of this subsection, that may have a significant adverse environmental impact.

The licensee shall maintain records of changes in facility design or operation and of tests and experiments carried out pursuant to this subsection. These records shall include written evaluations that provide bases for the determination that the change, test, or experiment does not involve an unreviewed environmental question or constitute a decrease in the effectiveness of this EPP to meet the objectives specified in Section 1.0.

---

<sup>1</sup> This provision does not relieve the licensee of the requirements of 10 CFR 50.59.

The licensee shall include as part of the Annual Environmental Operating Report (per Subsection 5.4.1) brief descriptions, analyses, interpretations, and evaluations of such changes, tests and experiments.

### 3.2 Reporting Requirements for Changes to, and Renewal of, the NPDES Permit or State Certification

Changes to, and renewals of, the NPDES permits or the State certification shall be reported to the NRC within 30 days following the date the change or renewal is approved. If a permit or certification, in part or in its entirety, is appealed and stayed, the NRC shall be notified within 30 days following the date the stay is granted.

The licensee shall notify the NRC of proposed revisions to the effective NPDES permit if the proposed revision is a significant change of waste stream flow rate, concentration, or point of discharge. This shall be done by providing the NRC with a copy of the proposed revision at the same time it is submitted to the permitting agency. The licensee shall provide the NRC with a copy of the application for renewal of the NPDES permit at the same time the application is submitted to the permitting agency.

### 3.3 Changes Required for Compliance with Other Environmental Regulations

Changes in plant design or operation and performance of tests or experiments that are required to achieve compliance with other Federal, State, and local environmental regulations are not subject to the requirements of Section 3.1.

## 4.0 ENVIRONMENTAL CONDITIONS

### 4.1 Environmental Monitoring

#### 4.1.1 Aquatic Monitoring

The certifications and permits required under the Clean Water Act provide mechanisms for protecting water quality and, indirectly, aquatic biota. The NRC will rely on decisions made by the U. S. Environmental Protection Agency and the State of Tennessee under the authority of the Clean Water Act for any requirements for aquatic monitoring. These monitoring requirements are included in the Watts Bar Nuclear Plant NPDES permit.

#### 4.1.2 Maintenance of Transmission Line Corridors

Herbicides used for transmission line corridor maintenance should conform with current Federal and State requirements. (Section 6.3.6.3 of the FES-OL).

A survey of the transmission line corridors for the presence of State or Federally protected or candidate species will be completed prior to mechanical or chemical maintenance activities.

#### 4.2 Unusual or Important Environmental Events

Any occurrence of an unusual or important event that indicates, or could result, in significant environmental impact causally related to plant operation shall be recorded and reported to the NRC within 24 hours, followed by a written report per Subsection 5.4.2. The following are examples: excessive bird impact events, onsite plant or animal disease outbreaks, mortality of, or unusual occurrence involving any species protected by the Endangered Species Act of 1973 (ESA), the identification of any threatened or endangered species for which the NRC has not initiated consultation with the FWS, fish kills, increase in nuisance organisms or conditions, and unanticipated or emergency discharge of waste water or any other chemical substance that exceeds the limits of, or is not authorized by the NPDES permit.

The licensee shall also notify the FWS Cookeville Field Office when an unusual or important event results in the taking of, or could result in an adverse impact to any species protected by the ESA. TVA should also notify the FWS law enforcement agent in Nashville, TN if an unusual or important event involves the death, injury, or illness of any individual of a species protected by the ESA. Initial notification must be completed within 24 hours of the unusual or important event, followed by a written report per subsection 5.4.2.

No routine monitoring programs are required to implement this condition.

#### 5.0 ADMINISTRATIVE PROCEDURES

##### 5.1 Review and Audit

The licensee shall provide for review and audit of compliance with the EPP. The audits shall be conducted independently of the individual or groups responsible for performing the specific activity. A description of the organizational structure used to achieve the independent review and audit functions, and results of the audit activities shall be maintained and made available for inspection.

##### 5.2 Records Retention

Records and logs relative to the environmental aspects of station operation shall be made and retained in a manner convenient for review and inspection. These records and logs shall be made available to NRC on request.

Records of modifications to station structures, systems and components determined to potentially affect the continued protection of the environment shall be retained for the life of the station. All other records, data and logs relating to this EPP shall be retained for five (5) years or, where applicable, in accordance with the requirements of other agencies.

##### 5.3 Changes in Environmental Protection Plan

Requests for changes in the EPP shall include an assessment of the environmental impact of the proposed change and a supporting justification.

Implementation of such changes in the EPP shall not commence before NRC approval of the proposed changes in the form of a license amendment incorporating the appropriate revision to the EPP.

#### 5.4 Plant Reporting Requirements

##### 5.4.1 Routine Reports

An Annual Environmental Operating Report describing implementation of this EPP for the previous year shall be submitted to the NRC and FWS within 90 days following each anniversary of issuance of the operating license. The period of the first report shall begin with the date of issuance of the operating license.

The report shall include summaries and analyses of the results of the environmental protection activities required by Subsection 4.1 of this EPP for the report period, including the results of monitoring activities required by the NPDES permit, a comparison with related preoperational studies, operational controls (as appropriate), and previous nonradiological environmental monitoring reports, and an assessment of the observed impacts of the plant operation on the environment. If harmful effects or evidence of trends toward irreversible damage to the environment are observed, the licensee shall provide a detailed analysis of the data and a proposed course of mitigating actions.

The Annual Environmental Operating Report shall also include:

1. A list of EPP noncompliances and the corrective actions taken to remedy them.
2. A list of all changes in station design or operation, tests, and experiments made in accordance with Subsection 3.1 which involved a potentially significant unreviewed environmental question.
3. A list of nonroutine reports submitted in accordance with Subsection 5.4.2.

In the event that some results are not available by the report due date, the report shall be submitted noting and explaining the missing results. The missing results shall be submitted as soon as possible in a supplementary report.

##### 5.4.2 Nonroutine Reports

A written report shall be submitted to the NRC and FWS within 30 days of occurrence of an unusual or important event as required by subsection 4.2 of this EPP. The report shall (a) describe, analyze, and evaluate the event, including extent and magnitude of the impact, and plant operating characteristics, (b) describe the probable cause of the event, (c) indicate the action taken to correct the reported event, (d) indicate the corrective action taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems, (e) indicate the agencies notified and their preliminary responses, and (f) include, if appropriate, an explanation of the apparent cause of the taking of any species protected by the ESA.

DE

Events reportable under this subsection that also require reports to other Federal, State or local agencies shall be reported in accordance with those reporting requirements in lieu of the requirements of this subsection. The NRC shall be provided with a copy of such report at the same time it is submitted to the other agency.