

APPENDIX B
TO FACILITY OPERATING LICENSE NO. NPF _____
CATAWBA NUCLEAR STATION
UNITS 1 AND 2

DUKE POWER COMPANY
DUCKET NOS. 50-413, 50-414

ENVIRONMENTAL PROTECTION PLAN
PART II - NON-RADIOLOGICAL

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CATAWBA NUCLEAR STATION

UNITS 1 AND 2

ENVIRONMENTAL PROTECTION PLAN
(NON-RADIOLOGICAL)

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1.0 OBJECTIVES OF THE ENVIRONMENTAL PROTECTION PLAN

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

1. Verify that the station is operated in an environmentally acceptable manner, as established by the Final Environmental Statement (FES) 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 which relate to water quality matters are regulated by way of the licensee's NPDES permit.

2.0 ENVIRONMENTAL PROTECTION ISSUES

In the FES-OL dated January, 1983, the NRC staff considered the environmental impacts associated with the operation of the two-unit Catawba Nuclear Station. Certain environmental issues were identified which required study or license conditions to resolve environmental concerns and to assure adequate protection of the environment.

2.1 Aquatic Issues

No specific aquatic issues were raised by the NRC staff in the FES-OL.

Aquatic issues are addressed by the effluent limitations, monitoring requirements contained in the effective NPDES permit issued by the South Carolina Department of Health and Environmental Control. The NRC will rely on this agency for regulation of matters involving water quality and aquatic biota.

2.2 Terrestrial Issues

1. Detection of possible changes in or damage to local flora caused by drift deposition due to the operation of the Catawba Station Cooling Towers. (FES-OL Section 5.5)
2. A short-term confirmatory program to quantify operational-phase noise levels and mitigative measures, if any, in the vicinity of noise assessment locations 1 and 3. (FES-OL Subsection 5.14.4)

NRC requirements with regard to terrestrial issues are specified in Section 4.2 of this EPP.

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 changes, tests or experiments do not involve an unreviewed environmental question, and do not involve a change in the Environmental Protection Plan.* Changes in plant design or operation or performance of tests or experiments which do not affect the environment are not subject to the requirements of this EPP. Activities governed by Section 3.3 are not subject to the requirements of this section.

Before engaging in additional construction or operational activities which may affect the environment, the licensee shall prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity involves an unreviewed environmental question, the licensee shall provide a written evaluation of such activities and obtain prior approval from the Director, Office of Nuclear Reactor Regulation. When such activity involves a change in the Environmental Protection Plan, such activity and change to the Environmental Protection Plan may be implemented only in accordance with an appropriate license amendment as set forth in Section 5.3.

A proposed change, test or experiment shall be deemed to involve an unreviewed environmental question if it concerns (1) a matter which may result in a significant increase in any adverse environmental impact previously evaluated in the Final Environmental Statement (FES) as modified by the NRC staff's testimony to the Atomic Safety and Licensing Board, supplements to the FES, environmental impact appraisals, or in any decisions of the Atomic Safety and Licensing Board; or (2) a significant change in effluents or power level [in accordance with 10 CFR Part 51.5(b) (2)] or (3) a matter not previously reviewed and evaluated in the documents specified in (1) of this Subsection, which may have a significant adverse environmental impact.

The licensee shall maintain records of changes in facility design or operation and of tests and experiments carried out pursuant to this Subsection. These records shall include a written evaluation which provide a bases for the determination that the change, test, or experiment does not involve an unreviewed environmental question or constitutes a decrease in the effectiveness of this EPP to meet the objectives specified in Section 1.0. The licensee shall include as part of his Annual Environmental Operating Report (per Subsection 5.4.1) brief descriptions, analyses, interpretations, and evaluations of such changes, tests, and experiments.

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

3.2 Reporting Related to the NPDES Permits and State Certifications

Non-compliance with the NPDES Permit or the State certification (pursuant to Section 401 of the Clean Water Act) shall be reported to the NRC by submittal of copies of the reports required by the NPDES Permit or certification.

Changes and additions to the NPDES Permit or the State certification shall be reported to the NRC within 30 days following the date the change 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 NRC shall be notified of changes to the effective NPDES Permit proposed by the licensee by providing NRC with a copy of the proposed change at the same time it is submitted to the permitting agency. The notification of a licensee-initiated change shall include a copy of the requested revision submitted to the permitting agency. The licensee shall provide the NRC a copy of the application for renewal of the NPDES permit at the same time the application is submitted to the permitting agency.

3.3 Changes Required for Compliance with Other Environmental Regulations

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

4.0 ENVIRONMENTAL CONDITIONS

4.1 Unusual or Important Environmental Events

Any occurrence of an unusual or important event that indicates or could result in significant environmental impact causally related to station operation shall be recorded and promptly reported to the NRC within 24 hours by telephone, telegraph, or facsimile transmissions followed by a written report per Subsection 5.4.2. The following are examples: excessive bird impaction events, onsite plant or animal disease outbreaks, mortality or unusual occurrence of any species protected by the Endangered Species Act of 1973, fish kills, increase in nuisance organisms or conditions, and unanticipated or emergency discharge of waste water or chemical substances.

No routine monitoring programs are required to implement this condition.

4.2 Environmental Monitoring

4.2.1 Aerial Remote Sensing

Vegetative communities of the site and vicinity within 1 Kilometer of the cooling towers in all directions shall be aurally photographed to detect and assess the significance of damage or lack thereof, as related to cooling tower drift dispersions. Photography shall be done by aerial overflight during late summer. Monitoring shall include a program of low altitude color infrared photography. The scale for full coverage shall be adequate to enable identification of vegetative damage over relatively small areas of terrain. Some circumstances may warrant inspection of photographs discerning individual trees. Such scale should be adequate to resolve impacted features.

Photographs taken during plant operation shall be compared with pre-operational photographs (baseline) to ascertain changes in vegetation. Photographic interpretations shall be verified by ground inspection surveys to confirm areas of stress and non-stress. This program shall require annual aerial photographic monitoring beginning the first late summer period following start-up of Unit 1 and continue until two years after start-up of Unit 2. Data will then be obtained in alternate years for three (3) additional periods. A report shall be submitted as part of the annual report following each aerial photographic monitoring period. The report shall contain a description of the program, results and interpretative analysis of environmental impacts. Results reported shall contain information encompassing but not limited to the following: sampling date, time of day, film types, and one (1) set of resultant color transparencies encompassing an area within approximately a one Kilometer (1 Km) radius of the Unit 1 and 2 towers.

4.2.2 Operational Noise Surveillance

A short duration noise monitoring program will be conducted at the site during the first year of operation of each unit to quantify operational-phase noise levels in the vicinity of the Catawba Nuclear Station. In addition, to the extent practicable, ambient noise levels will be measured at a time during which such levels would not be significantly affected by construction or operational activities at the site.

Operational-phase noise monitoring will be conducted utilizing the same locations and techniques employed in the previous study (Catawba ER-OLS Section 2.7) and discussed in the Catawba FES. These locations were selected based on noise-sensitive land uses and where practicable, noise monitoring instrumentation will be sited as previously described.

The results of the surveys conducted under this program shall be summarized, interpreted and reported in accordance with Subsection 5.4.1 of this EPP.

The final report of this program shall present a brief assessment of the environmental impact of plant operation on the offsite acoustic environment, and describe any mitigative measures that may prove necessary in and about noise assessment Areas 1 and 3 (ER 2.7-1 and FES 5.14.4).

This program shall terminate upon completion of the collection of the specified sound level data for each phase and submission of an acceptable final report.

5.0 ADMINISTRATIVE PROCEDURES

5.1 Review and Audit

The licensee shall provide for review and audit of compliance with the Environmental Protection Plan. The audits shall be conducted independently of the individual or groups responsible for performing the specific activity. A description of the organization structure utilized to achieve the independent review and audit function and results of the audit activities shall be maintained and made available for inspection.

5.2 Records Retention

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

5.3 Changes in Environmental Protection Plan

Request for change in the Environmental Protection Plan shall include an assessment of the environmental impact of the proposed change and a supporting justification. Implementation of such changes in the EPP shall not commence prior to NRC approval of the proposed changes in the form of a license amendment incorporating the appropriate revision to the Environmental Protection Plan.

5.4 Plant Reporting Requirements

5.4.1 Routine Reports

An Annual Environmental Operating Report describing implementation of this EPP for the previous year shall be submitted to the NRC prior to May 1 of each year. The initial report shall be submitted prior to May 1 of the year following issuance of the operating license. The period of the first report shall begin with the date of issuance of the operating license for the first operational unit.

The report shall include summaries and analyses of the results of the environmental protection activities required by Section 4.2 of this Environmental Protection Plan for the report period, including a comparison with preoperational studies, operational controls (as appropriate), and previous non-radiological environmental monitoring reports, and an assessment of the observed impact of 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 action to alleviate the problem.

The Annual Environmental Operating Report shall also include:

- (a) A list of EPP noncompliances and the corrective actions taken to remedy them.
- (b) A list of all changes in station design or operation, tests, and experiments made in accordance with Section 3.1 which involved a potentially significant unreviewed environmental issue.
- (c) 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 data shall be submitted as soon as possible in a supplementary report.

5.4.2 Nonroutine Reports

A written report shall be submitted to the NRC within 30 days of occurrence of a nonroutine event. The report shall (a) describe, analyze, and evaluate the event, including the 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 event, (d) indicate the corrective action taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems, and (e) indicate the agencies notified and their preliminary responses.

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