## APPENDIX B

TO FACILITY OPERATING LICENSE NO. \_\_\_\_\_ WATERFORD STEAM FLECTRIC STATION - UNIT NO. 3

LOUISIANA POWER & LIGHT COMPANY

DOCKET NO 50-382

ENVIRONMENTAL PROTECTION PLAN

(NON-RADIOLOGICAL)

۶

# WATERFORD SES - UNIT NO. 3

×.

# ENVIRONMENTAL PROTECTION PLAN

## (NON-RADIOLOGICAL)

## TABLE OF CONTENTS

| 1.0 | Objectives of the Environmental Protection Plan                | 1-1 |
|-----|--|-----|
| 2.0 | Environmental Resource Ftotection Issues                       | 2-1 |
| 2.1 | Aquatic Resources  | 2-1 |
| 2.2 | Terrestrial Resources  | 2-2 |
| 2.3 | Cultural Resources   | 2-2 |
| 3.0 | Consistency Requirements                                       | 3-1 |
| 3.1 | Plant Design and Operation                                     | 3-1 |
| 3.2 | Reporting Related to the NPDES Permits and State Certification | 3-3 |
| 3.3 | Changes Required for Compliance with Other Environmental       |     |
|     | Regulations  | 3-3 |
| 4.0 | Environmental Conditions                                       | 4-1 |
| 4.1 | Unusual or Important Environmental Events                      | 4-1 |
| 4.2 | Environmental Monitoring                                       | 4-2 |
| 5.0 | Administrative Procedures                                      | 5-1 |
| 5.1 | Review and Audit   | 5-1 |
| 5.2 | Records Retention  | 5-1 |
| 5.3 | Changes in Environmental Protection Plan                       | 5-2 |
| 5.4 | Plant Reporting Requirements                                   | 5-2 |

1.0 Objectives of the Environmental Protection Plan

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

- 1 Verify that the plant is operated in an environmentally acceptable manner, as established by the FES and other NRC environmental impact assessments.
- 2 Coordinate NRC requirements and maintain consistency with other applicable 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 Resource Protection Issues

The staff described the existing environment in the vicinity of Waterford 3 and the potential environmental effects from its operation in the FES. The staff analyzed these effects and concluded that the only resource requiring special protective measures is of an archaeological nature (see Cultural Resources section below). The environmental resources which were evaluated, and the corresponding NRC staff decisions regarding the protection of each resource are as follows:

## 2.1 Aquatic Resources

LP6L has gathered data on the aquatic resources of the Mississippi River in the vicinity of Waterford 3 during the preoperational phase in a series of seasonal and monthly sampling surveys. Analysis of this data and evaluation of the impacts on the aquatic resources from the operation of Waterford 3 is contained in demonstrations prepared by LP6L for the US Environmental Protection Agency (EPA), Region VI, pursuant to Sections 316 (a) and (b) of the Clean Water Act. The conclusion of these demonstrations, which was subsequently concurred with by EPA, is that the aquatic ecology and water quality of the Mississippi River in the vicinity of the site are areas of low potential for adverse impact. This fact, coupled with the plans for infrequent usage of chlorination and the quality of wastewater discharges at Waterford 3, was considered in developing water quality monitoring requirements.

Aquatic resource effects and other water quality matters are taken into consideration in assigning effluent limitations and monitoring requirements contained in the NPDES Permit No. LA 0007374 issued by the US Environmental Protection Agency, Region VI. The NRC will rely on this agency for resolution of the issues involving protection of water quality and equatic biota.

## 2.2 Terrestrial Resources

LP&L has gathered terrestrial ecology data on the Waterford site and in the vicinity of the site for the preoperational phase of the project. As documented in the FES, the staff reviewed the results of this monitoring program. It concluded that the operational impact of Waterford 3 is not expected to have any long-term effects on the terrestrial biota, and therefore has determined that there is no need for an operational phase terrestrial ecology monitoring program.

## 2.3 Cultural Resources

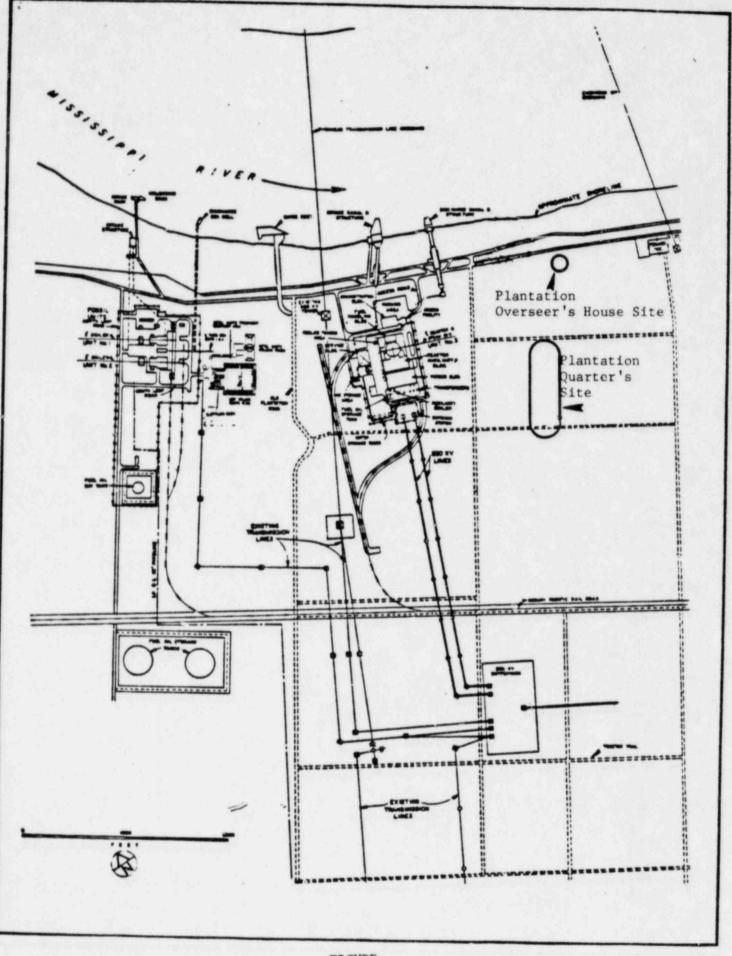
#### I. DESCRIPTION OF RESOURCE

LP&L's Waterford Property contains two distinct areas with cultural resource remains from the Waterford Plantation that have been determined to be eligible for the National Register of Historic Places. These remains are associated with the Plantation Overseer's House and the Plantation Quarters Site. Both of these archaeological sites consist solely of artifactual material (glass, metal, bone, ceramic, wood, etc.) lying immediately beneath the present ground surface. No standing ruins or readily identifiable surface remains are present. The cultural value of the two sites lies in the information they may provide to historians, archaeologists, and anthropologists.

The Waterford Plantation Overseer's House Site is located within a circular area approximately 200 feet in diameter with its approximate center at UTM coordinates Zone 15, Easting 744520, Northing 3320720. The Waterford Plantation Quarters Site is a north-south generally rectangular area measuring approximately 900 feet by 200 feet with its approximate center at UTM coordinates Zone 15, Easting 744285, Northing 3320420. The boundaries of both areas are shown on the accompanying figure. As shown on this figure, both areas lie outside the limits of the plant security fence.

## II. PROTECTION PROCEDURES

The environmental protection program for ensuring that these cultural resource remains are not damaged consists of routine arveillance to protect these artifacts and their context from unauthorized removal or damage, and institution of a program to ensure that, in the event that ground disturbance is required in these areas in the future, these remains will be appropriately protected for their cultural resource information value.



FIGURE

Location of Waterford Plantation Quarter's Site and Plantation Overseer's house

A. Routine Environmental Protection Procedures

The protected areas will be checked as a part of the station's routine environmental surveillance procedures to ensure that no unauthorized activities occur which could damage the resources. In the event that any significant ground disturbing activities unauthorized by LP&L are found to have taken place within the protected area, LP&L shall notify the State Historic Preservation Office (SHPO) and the NRC and have an assessment of the damage made by an archaeologist certified by the Society of Professional Archaeologists. Any such assessments shall commence as soon as practicable after the discovery of the unauthorized activities. The assessment shall be forwarded to the SHPO and the NRC as soon as it is available. In addition, appropriate corrective actions shall be initiated by LP&L to ensure the continued protection of the resource.

B. Cultural Resources - Special Protection Procedures

Should LP&L, or an authorized representative, agent, sub-contractor or consultant find it necessary to conduct any activities within the protected areas in the future, the Special Protection Procedures (as outlined below) will be employed. Activities requiring implementation of these procedures include:

Excavation (including trenching, drilling or any other form of soil removal or displacement whether by hand or machine);

- Landscaping, sodding or planting of shrubbery or trees except that routine maintenance of existing landscaping and or continuation of agricultural activities shall be permitted;
- Placement of any fill, spoil, or ground cover; and

Any construction.

In the event that uncertainty exists concerning the applicability of the Special Protection Procedures, LP&L will consult the SHPO for a final decision.

Should activities other than those described above be necessary, LP&L shall ensure that all personnel involved in such activities are instructed not to pick up, collect, or otherwise disturb any artifactual material (including any object or fragment of wood, bone, stone, glass, metal, ceramic, textile, etc.) within the protected area.

- 1) Special Protection Procedures
- LP&L shall notify the SHPO and the NRC in writing of any activities involving ground disturbance in the protected areas. This communication should include the following:
  - A description of the proposed activity (ie drawings and/or available specifications, if applicable);

- A description of the need for the activity;
- A map showing the location of the planned activity in relation to the protected areas; and
- A demonstration of the need to perform the activity within the protected area.
- The NRC, after consultation with the SHPO, will advise LP&L whether or not a mitigation plan is required.

Items 3, 4, 5 and 6 (below) only apply if a mitigation plan is necessary.

- 3) If a mitigation plan is necessary, LP&L will submit a mitigation plan prepared by an archaeologist certified by the Society of Professional Archaeologists in field research and cultural resource management to the NRC.
- 4) The NRC shall consult with the SHPO on the proposed mitigation plan and provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment.
- 5) LP&L will revise the mitigation plan to respond, as appropriate, to the comments of the SHPO, the NRC and the ACHP, and shall execute the plan in accordance with the schedule which shall be part of the plan.

6) At the conclusion of mitigation activities, LP&L shall submit a report to the SHPO and the NRC as described below.

11. Mitigation Program

In the event that the SHPO advises that a mitigation plan is needed for the protection of the cultural resource remains, LP&L shall have the plan preparation supervised by in archaeologist certified by the Society of Professional Archaeologists in field research and cultural resource management. The scope of the plan shall be commensurate with the degree of disturbance to the resource. If the planned action involving disturbance of this resource requires data recovery operations to ensure adequate protection of the resource, the research design and its execution will conform as closely as possible to the "Recommendations for Archaeological Data Recovery" contained in <u>Treatment of Archaeological</u> <u>Properties</u> published by the Advisory Council on Historic Preservation. The plan shall include a schedule of major milestone dates for its completion and the subsequent approval process.

The results of the mitigation plan shall be documented in a report to be submitted to the SHPO and the NRC. The report shall describe the activity in question, the adopted mitigation plan and the results of the mitigation activities. The report may include maps showing the locations and boundaries of the mitigation activities as well as the locations of the resource with respect to the disturbing activity. In addition, the

report shall provide documentation of the implementation of the mitigation plan. If data recovery operations are involved, LP&L will consider permitting publication and appropriate distribution of the final report to those interested parties such as archaeologists, historians, local libraries and universities.

## III. OTHER PROTECTIVE MEASURES

Should LP&L find it necessary in the future to engage in ground disturbing activities (such as those listed above) in close proximity to, but not within, the boundary of a protected area, LP&L will ensure that the protected areas are not infringed upon by these activities and are thereby protected for the duration of such work. It will not be necessary for LP&L to notify the SHPO of such activities.

IV. EMERGENCY SITUATIONS

In the event that LP6L finds it necessary to engage in activities within the protected area for the immediate protection of public health and safety, and any delay in the execution of those activities could result in the creation of a public health hazard, LP6L may proceed with those activities without an approved mitigation plan. As soon as practicable following completion of activities, LP6L shall submit to the SHPO an evaluation of the current condition of the protected area(s) (including a description of any damages) prepared by an archaeologist certified by the Society of Professional Archaeologists.

## V. ARCHAEOLOGICAL RESEARCH IN PROTECTED AREAS

In the event that LP&L is notified that any individual, agency, institution, or organization desires to engage in archaeological research within the protected areas, and should LP&L consider authorizing such activity, LP&L shall request preparation of a statement of qualifications and a research design. LP&L will consult with the NRC and the SHPO to determine if the qualifications of the party requesting permission to conduct the research are adequate. In order to ensure protection of the resource, the research design must be approved by LP&L, the SHPO, the NRC and the ACHP prior to the start of any research. LP&L shall be under no obligation to allow, fund or otherwise support such research. Any artifactual material recovered will be the property of LP&L.

#### VI. NOTIFICATIONS

The NRC and the SHPO shall be notified by the LP&L Vice President of Nuclear Operations or his designated representative of any future plans which could disturb the protected areas or unauthorized activities which have disturbed the protected areas. This notification shall apply to both routine and special protection procedures as described in Section II of this plan.

Should unauthorized ground disturbing activity occur within the protected areas, LP&L shall notify the SHPO within 30 days of discovering evidence

of such activity. The notification shall include a brief description of the ground disturbing activity and, as appropriate, a statement of corrective actions taken to ensure continued protection of the resource. For planned ground disturbing activity within the protected areas, LP&L shall follow the procedures outlined in Section 2.3.II. B.i.

#### 3.0 Consistency Requirements

The consistency requirements of this EPP provide for NRC's review of changes in the design and operation of Waterford 3 which involve an unreviewed environmental question. Should this type of change be required, LP&L must receive NRC approval prior to initiating the particular activity. In this manner, this EPP ensures the continued protection of environmental resources from potential adverse effects associated with unreviewed actions which may occur during the operation of Waterford 3.

## 3.1 Plant Design and Operation

LP&L 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 nor a change in the EPP. Changes in plant design or operation or performance of tests or experiments which do not affect the environment are not subject to the requirements of this EPP. Activities governed by Section 3.3 are not subject to the requirements of this section.

Before engaging in unauthorized construction or operational activities which may significantly affect the environment, LP&L shall prepare

and record an environmental evaluation of such activity\*. When the evaluation indicates that such activity involves an unreviewed environmental question, LP&L shall provide a written evaluation of such activities and obtain prior NRC approval . When such activity involves a change in the EPP, such activity and change to the EPP may be implemented only in accordance with an appropriate license amendment as set forth in Section 5.3 of this plan.

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 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, but which may have a significant adverse environmental impact.

LP&L 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 evaluation(s) which provide bases for the determination that the change, test, or experiment does not involve an unreviewed environmental question or constitute a decrease in the

\*Activities are excluded from this requirement if all measurable nonradiological effects are confined to the on-site areas previously disturbed during site preparation and plant construction. effectiveness of this EPP to meet the objectives specified in Section 1.0. LP&L shall include as part of its Annual Environmental Operating Report (per Subsection 5.4.1) brief descriptions, analyses, interpretations, and evaluations of such changes, tests and experiments.

#### 3.2 Reporting Related to the NPDES Permit

Violations of the NPDES Permit or the state certification (pursuant to Section 40% of the Clean Water Act) shall be reported to the NRC, Region VI, by submittal of copies of the reports required by the NPDES Permit or certification. Changes and additions to the NPDES Permit shall be reported to the NRC within 30 days following the date the change is approved. If a permit, 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. NRC shall be notified of changes to the effective NPDES Permit proposed by the licensee by providing a copy of the proposed change at the same time it is submitted to the permitting agency. LP&L 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 EPA.

# 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

The environmental conditions of this EPP identify the environmental concerns LP6L must continue to observe and protect from adverse effects associated with the operation of Waterford 3. The conditions investigated for Waterford 3 involved protection of the existing terrestrial and aquatic resources and the cultural remains of the Waterford Plantation. Should there be any unusual, important or significant activities causally related to the operation of Waterford 3 which affect these resources, these environmental conditions specify the course of action LP6L is to follow.

## 4.1 Unusual or Important Environmental Events

Any occurrence of an unusual or important event that indicates or results in significant environmental impact causally related to station operation shall be recorded and promptly reported to the NRC within 24 hours followed by a written report within 30 days, as specified in 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; substantial fish kills; significant increase in nuisance organisms or conditions; and unanticipated or emergency discharge of waste or chemical substances.

No routine monitoring programs are required to implement this condition.

#### 4.2 Environmental Monitoring

The environmental conditions of the EPP specify monitoring requirements to protect the cultural resource remains of the Waterford Plantation. These monitoring requirements are specified below.

4.2.1 Protection of Remains of the Eligible Portions of the Waterford Plantation

LP&L shall avoid disturbances to the cultural resource remains of the Waterford Plantation Overseer's House Site and the Plantation Quarters Site. In the event that disturbance of these areas does become necessary, LP&L will consult with the SHPO and the NRC prior to commencing any activity.

No significant disrupting activities shall be undertaken until the procedures outlined in Section 2.3 of this EPP are effectuated.

In addition, the areas containing these cultural resource remains will be routinely checked as a part of the station's environmental surveillance program.

#### 5.0 Administrative Procedures

The administrative procedures involved in the conduct of this EPP shall include independent audit to demonstrate compliance with the plan, retention of plan records and preparation of both routine and nonroutine reports. In addition, these procedures provide a methodology for LP&L to request a change in any of the conditions of this EPP.

#### 5.1 Review and Audit

LP&L shall provide for review and audit of compliance with the EPP. Audics shall be conducted independently of the individual or groups responsible for performing the specific activity. A description of the organizational 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 maintained in a manner convenient for review and inspection. These records and logs shall be made available to the 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 at

least five years or, longer, when required by appropriate regulatory agencies.

5.3 Changes in Environmental Protection Plan

Requests for changes in this 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 prior to NRC approval of those proposed changes.

5.4 Plant Reporting Requirements

This EPP requires the submittal of both annual routine reports and nonroutine reports. The contents of these reports are described below.

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.

The report shall include summaries and analyses of the results of the environmental protection activities required by Section 4.2 of this EPP for the report period, including a comparison with any related

studies, operational controls (as appropriate), and previous nonradiological environmental monitoring reports, as well as an assessment of the observed impacts of the plant operation on the environment. If harmful effects or evidence of trends towards irreversible damage to the environment are observed, LP&L shall provide a detailed analysis of the data and a proposed course of mitigating action.

In addition to reporting the results of these routine EPP requirements, 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 all data are not available by the due date of the report, 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 the occurrence of an unusual or important environmental event described in Section 4.1 of this plan. The report shall (a) describe, analyze, and evaluate the event, including extent and magnitude of the impact and plant operating characteristics, (b) describe the probable cause of the event, (c) indicate the action taken to correct the reported event, (d) indicate the corrective action taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems, and (e) indicate the agencies notified and their preliminary responses.

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