Florida Power & Light Company, 6501 South Ocean Drive, Jensen Beach, FL 34957

January 25, 2002

L-2002-04
10 CFR 50.90

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555

RE: St. Lucie Units 1 and 2
Docket Nos. 50-335 and 50-389
Proposed License Amendments
Environmental Protection Plan Revision

Pursuant to 10 CFR 50.90, Florida Power & Light Company (FPL) requests the following amendments to the Facility Operating Licenses for St. Lucie Units 1 and 2. The proposed amendments revise the Unit 1 and Unit 2 Environmental Protection Plans (EPP) Section 4.2 to incorporate the revised terms and conditions of the Incidental Take Statement included in the Biological Opinion issued by the National Marine Fisheries Service (NMFS) on May 4, 2001 as clarified by NMFS letter dated October 8, 2001. FPL agreed to submit a proposed license amendment incorporating the changes issued in the biological opinion by March 31, 2002.

On May 1, 1995, The Florida Department of Environmental Protection (FDEP) was granted authority by the U.S. Environmental Protection Agency (EPA) to administer the National Pollutant Discharge Elimination System (NPDES) permitting programs. Pursuant to the Florida Administrative Code (FAC) 62-620.105(10), the EPA-issued NPDES permit and the State-issued wastewater permit for each facility were to be combined into one document. A copy of the FAC 62-620 was submitted to the NRC by FPL letter, L-95-150, on May 16, 1995. The resulting single document Wastewater Permit No. FL0002208, combines the NPDES Permit FL0002208 and the State Wastewater Permit IO56-194945. This change in administrative authority and the NPDES permit requires conforming amendments to Environmental Protection Plans (EPP), Appendix B, Sections 1, 2, and 3 of the St. Lucie Units 1 and 2 Operating Licenses. These amendments incorporate the administrative revisions necessary to change the reference from the NPDES permit to the Wastewater permit in the EPPs.

Attachment 1 is a description of the proposed changes to the EPPs and the analysis in support of the proposed changes. Attachment 2 is the "Determination of No Significant Hazards Consideration." Attachment 3 is a marked up copy of the St. Lucie Unit 1 EPP. Attachment 4 is a marked up copy of the Unit 2 EPP.

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The proposed amendments have been reviewed by the St. Lucie Facility Review Group and the Florida Power & Light Company Nuclear Review Board. In accordance with 10 CFR 50.91(b)(1), copies of the proposed amendments are being forwarded to the State Designee for the State of Florida.

Please contact George Madden at 561-467-7155 if there are any questions about this submittal.

I certify under penalty of perjury that the forgoing is true and correct.

Very truly yours,

Donald E. Jernigan
Vice President
St. Lucie Plant

DEJ/GRM

Attachments

cc: Mr. William A. Passetti, Florida Department of Health

ATTACHMENT 1

DESCRIPTION OF THE PROPOSED CHANGES

Background

On November 30, 1999, the NRC formally requested reinitiation of the ESA Section 7(a) Consultation after the St. Lucie Plant exceeded the NMFS anticipated incidental take of three green turtles per year established in the Incidental Take Statement (ITS) of the 1997 Biological Opinion as incorporated in the St. Lucie Environmental Protection Plans (EPP). On May 4, 2001, the NMFS issued a revised Biological Opinion that states that the continued operation of the circulating seawater cooling system at the St. Lucie Plant is not likely to jeopardize the continued existence of the five species of sea turtles found at St. Lucie. However, it revised the ITS and modified some of the terms and conditions of the previous Biological Opinion. After discussions among the NRC, NMFS, and FPL and in response to an NRC letter dated June 8, 2001, the NMFS issued a clarification of the issues in the new Biological Opinion and the ITS on October 8, 2001. On November 6, 2001, NRC issued the clarifications to FPL and requested FPL to revise the EPPs to incorporate the modified terms and conditions of the Biological Opinion and the revised ITS. The proposed amendments would implement the changes to the Biological Opinion and the ITS.

On May 1, 1995, The FDEP was granted authority by the U.S. Environmental Protection Agency (EPA) to administer the NPDES permitting programs. Pursuant to the Florida Administrative Code (FAC) 62-620.105(10), the EPA-issued NPDES permit and the State-issued wastewater permit for each facility were to be combined into one document. A copy of the FAC 62-620 was submitted to the NRC by FPL letter, L-95-150, on May 16, 1995. The resulting single document, Wastewater Permit No. FL0002208, combines the NPDES Permit FL0002208 and the State Wastewater Permit IO56-194945. This change in administrative authority and the NPDES permit requires conforming amendments to Environmental Protection Plans (EPP), Appendix B, of the St. Lucie Unit 1 and Unit 2 Operating Licenses. These amendments also incorporate the administrative revisions necessary to change the reference from the NPDES permit to the Wastewater permit in the EPPs.

Description of the Changes

1. On May 1, 1995, The FDEP was granted authority by the U.S. Environmental Protection Agency (EPA) to administer the NPDES permitting programs. Pursuant to the Florida Administrative Code (FAC) 62-620.105(10), the EPA-issued NPDES permit and the State-issued wastewater permit for each facility were to be combined into one document. A copy of the FAC 62-620 was submitted to the NRC by FPL letter, L-95-150, on May 16, 1995. The resulting single document, Wastewater Permit No. FL0002208, combines the NPDES Permit FL0002208 and the State Wastewater Permit IO56-194945. The following conforming changes are required in Sections 1, 2, and 3 of the Unit 1 and Unit 2 EPPs.

   Section 1.0 - Change "NPDES" to "Wastewater."

Section 2 - Add the following paragraph to the end of Section 2.1 of the Unit 1 EPP and the end of Section 2.0 of the Unit 2 EPP.

> On May 1, 1995, The FDEP was granted authority by the U.S. Environmental Protection Agency (EPA) to administer the NPDES permitting programs. Pursuant to the Florida Administrative Code (FAC) 62-620.105(10), the EPA-issued NPDES permit and the State-issued wastewater permit for each facility were to be combined into one document. A copy of the FAC 62-620 was submitted to the NRC by FPL letter, L-95-150, on May 16, 1995. The resulting single document, Wastewater Permit No. FL0002208, combines the NPDES Permit FL0002208 and the State Wastewater Permit IO56-194945.

Section 3.2 - Change "NPDES" to "Wastewater."

2. On November 30, 1999, the NRC formally requested reinitiation of the ESA Section 7(a) Consultation after the St. Lucie Plant exceeded the NMFS anticipated incidental take of three green turtles per year established in the Incidental Take Statement (ITS) of the 1997 Biological Opinion and incorporated in the St. Lucie EPPs. On May 4, 2001, the NMFS issued a revised Biological Opinion that revised the ITS and modified some of the terms and conditions of the previous Biological Opinion. After discussions among the NRC, NMFS, and FPL and in response to an NRC letter dated June 8, 2001, the NMFS issued a clarification of the issues in the new Biological Opinion and the ITS on October 8, 2001. On November 6, 2001, NRC issued the clarifications to FPL and requested FPL to revise the EPPs to incorporate the modified terms and conditions of the Biological Opinion and the revised ITS. The following changes implement the revised ITS and the revised terms and conditions. FPL is adopting generic wording similar to that approved by the NRC for Salem Units 1 and 2. The generic wording refers to the current Biological Opinion and the ITS and the terms and condition in the current Biological Opinion for the specifics. Additionally, the specific requirements and ITS limits will be specified in plant procedures. Replace Section 4.2 with the following.

   Section 4.2 Terrestrial/Aquatic Issues

   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 the decisions made by the State of Florida under the authority of the Clean Water Act and, in the case of sea turtles, decisions made by the NMFS under the authority of the Endangered Species Act, for any requirements pertaining to terrestrial and aquatic monitoring.

   In accordance with Section 7(a) of the Endangered Species Act, on May 4, 2001, the NMFS issued a revised Biological Opinion that modified the ITS and some of the terms and conditions of the previous Opinion. After discussions among the NRC,

NMFS, and FPL and in response to an NRC letter dated June 8, 2001, the NMFS issued a clarification of the issues in the new Biological Opinion and the ITS on October 8, 2001. The revised Biological Opinion concludes that continued operation of the St. Lucie Plant circulating seawater cooling system is not likely to jeopardize the continued existence of the listed species. No critical habitat has been designated for the specified species in the action area; therefore, none will be affected.

FPL shall adhere to the specific requirements within the ITS in the current Biological Opinion as clarified by the NMFS and NRC. Changes to the ITS or the terms and conditions must be preceded by consultation between the NRC, as the authorizing agency, and NMFS.

ATTACHMENT 2

DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION

Determination Of No Significant Hazards Consideration

Summary of the Proposed Changes

The proposed amendments revise the Unit 1 and Unit 2 Environmental Protection Plans (EPP) Section 4.2, to generically incorporate the proposed terms and conditions of the Incidental Take Statement included in the Biological Opinion issued by the National Marine Fisheries Service (NMFS) on May 4, 2001, as clarified by NMFS letter dated October 8, 2001.

The proposed amendments also revise the Unit 1 and Unit 2 Environmental Protection Plans (EPP) Sections 1, 2, and 3 to incorporate the administrative revisions necessary to change the reference from the NPDES permit to the Wastewater permit in the EPPs. On May 1, 1995, the Florida Department of Environmental Protection (FDEP) was granted authority by the U.S. Environmental Protection Agency (EPA) to administer the National Pollutant Discharge Elimination System (NPDES) permitting programs. Pursuant to the Florida Administrative Code (FAC) 62-620.105(10), the EPA-issued NPDES permit and the State-issued wastewater permit for each facility were to be combined into one document. The resulting single document Wastewater Permit No. FL0002208, combines the NPDES Permit FL0002208 and the State Wastewater Permit IO56-194945. This change in administrative authority and the conforming amendments to Environmental Protection Plans (EPP), Appendix B, Sections 1, 2, and 3 of the St. Lucie Units 1 and 2 Operating Licenses.

Determination of No Significant Hazards Consideration

The standards used to arrive at a determination that a request for amendment involves a no significant hazards consideration are included in the Commission's regulation, 10 CFR 50.92, which states that no significant hazards considerations are involved if the operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. Each standard is discussed as follows:

(1) Operation of the facility in accordance with the proposed amendments would not involve a significant increase in the probability or consequences of an accident previously evaluated.

The changes are administrative in nature and would in no way affect the initial conditions, assumptions, or conclusions of the St. Lucie Unit 1 or Unit 2 accident analyses. In addition, the proposed changes would not affect the operation or performance of any equipment assumed in the accident analyses. Based on the above information, we conclude that the proposed changes would not

significantly increase the probability or consequences of an accident previously evaluated.

(2) Use of the modified specification would not create the possibility of a new or different kind of accident from any previously evaluated.

The changes are administrative in nature and would in no way impact or alter the configuration or operation of the facilities and would create no new modes of operation. We conclude that the proposed changes would not create the possibility of a new or different kind of accident.

(3) Use of the modified specification would not involve a significant reduction in a margin of safety.

The changes are administrative in nature and would in no way affect plant or equipment operation or the accident analysis. We conclude that the proposed changes would not result in a significant reduction in a margin of safety.

Based on the above, we have determined that the proposed amendments do not (1) involve a significant increase in the probability or consequences of an accident previously evaluated, (2) create the probability of a new or different kind of accident from any previously evaluated, or (3) involve a significant reduction in a margin of safety; and therefore, does not involve a significant hazards consideration.

Environmental Consideration

10 CFR 51.22(c)(10) provides criteria for identification of licensing and regulatory actions eligible for categorical exclusion from performing an environmental assessment. Issuance of an amendment to a permit or license pursuant to Part 50 is eligible for categorical exclusion if (1) it changes surety, insurance, and/or indemnity requirements, or (2) it changes recordkeeping, reporting, or administrative procedures or requirements.

The proposed license amendments revise the St. Lucie Units 1 and 2 facility operating licenses to implement the revised requirements in the NMFS Biological Opinion dated May 4, 2001. The proposed license amendments change administrative requirements and therefore, meet the criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). FPL has determined, pursuant to 10 CFR 51.22(b), that an environmental impact statement or environmental assessment need not be prepared in connection with issuance of the amendments.

ATTACHMENT 3

MARK UP OF THE UNIT 1

ENVIRONMENTAL PROTECTION PLAN

Insert 1

On May 1, 1995, the FDEP was granted authority by the U.S. Environmental Protection Agency (EPA) to administer the NPDES permitting programs. Pursuant to the Florida Administrative Code (FAC) 62-620.105(10), the EPA-issued NPDES permit and the State-issued wastewater permit for each facility were to be combined into one document. The resulting single document, Wastewater Permit No. FL0002208, combines the NPDES Permit FL0002208 and the State Wastewater Permit IO56-194945.

Insert 2

Section 4.2 Terrestrial/Aquatic Issues

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 the decisions made by the State of Florida under the authority of the Clean Water Act and, in the case of sea turtles, decisions made by the NMFS under the authority of the Endangered Species Act, for any requirements pertaining to terrestrial and aquatic monitoring.

In accordance with Section 7(a) of the Endangered Species Act, on May 4, 2001, the NMFS issued a revised Biological Opinion that revised the ITS and modified some of the terms and conditions of the previous Opinion. After discussions among the NRC, NMFS, and FPL and in response to an NRC letter dated June 8, 2001, the NMFS issued a clarification of the issues in the new Biological Opinion and the ITS on October 8, 2001. The revised Biological Opinion concludes that continued operation of the St. Lucie Plant circulating seawater cooling system is not likely to jeopardize the continued existence of the listed species. No critical habitat has been designated for the specified species in the action area; therefore, none will be affected.

FPL shall adhere to the specific requirements within the ITS in the Biological Opinion as clarified by the NMFS and NRC. Changes to the ITS or the terms and conditions must be preceded by consultation between the NRC, as the authorizing agency, and NMFS.

1.0 Objectives of the Environmental Protection Plan

The Environmental Protection Plan (EPP) is to provide for protection of the local area environment of the St. Lucie Nuclear Plant during construction and operation.

The principle objectives of the EPP are to:

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 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 Unit 1 FES which relate to water quality matters are to be regulated by way of the licensee's ~~NPDES~~ wastewater permit

2.0 Environmental Protection Issues

In the FES-OL dated June 1973, NRC staff considered the environmental impacts associated with the operation of the St. Lucie Plant Unit 1. Certain environmental issues were identified which required study or license conditions for resolution of environmental concerns and to assure adequate environmental protection. The Unit 1 Appendix B Environmental Technical Specifications accompanying license DPR-67 included discharge restrictions and monitoring

1982, NRC will rely on EPA for resolution of issues involving the monitoring of water quality and aquatic biota.

insert 1

2.2 Terrestrial issues raised have led to programs on sea turtles that:

1. Document the nesting at the site and vicinity; determine effects of the discharge thermal plume on nesting patterns and hatchling migration; and investigate thermal stress on hatching and rearing factors by using turtle eggs from displaced nests

2. Minimize turtle hatchling disorientation by planting a light screen along the beach

The above programs specifically addressed as conditions in the Unit 1 FES, Operating License and Technical Specifications have been completed and the requirements have been satisfied.

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. Changes in plant design or operation or performance of tests or experiments which do not affect the environment are not subject to this requirement.

Activities governed by Section 3.3 of this EPP are not subject to the requirements of this section.

3.2 Reporting related to the ~~NPDES~~ Wastewater Permit and State Certification (pursuant to Section 401 of the Clean Water Act)

1. Violations of the ~~NPDES~~ Wastewater Permit or the State 401 Certification Conditions shall be reported to the NRC by submittal of copies of the reports required by the ~~NPDES~~ Wastewater Permit or State 401 Certification.

2. The licensee shall provide the NRC with a copy of any 316(b) studies and/or related documentation at the same time it is submitted to the permitting agency.

3. Changes and additions to the ~~NPDES~~ Wastewater Permit or the State 401 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.

4. The NRC shall be notified of changes to the effective ~~NPDES~~ Wastewater 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 licensee shall provide the NRC a copy of the application for renewal of the ~~NPDES~~ Wastewater 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 or approval from 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 the indicates or could result in significant environmental impact causally related to station operation shall be recorded and promptly reported to the NRC Operations Center within 72 hours via Emergency Notification System described in 10 CFR 50.72. In addition, the reporting requirement time frame shall be consistent with 10 CFR 50.72 for environmental protection issues. The initial report shall be followed by a written report as described in Section 5.4.2. No routine monitoring programs are required to implement this condition. Events covered by Section 3.2 of this EPP will be subject to reporting requirements as defined in that section and not subject to these requirements.

The following are examples of unusual or important events: excessive bird impaction events; onsite plant or animal disease outbreaks; mortality (causally related to station operation), or unusual occurrence of any species protected by the Endangered Species Act of 1973; unusual fish kills; increase in nuisance organisms or conditions; and unanticipated or emergency discharge of waste water or chemical substances.

4.2 Terrestrial/Aquatic Issues

INSERT 2

~~This section addresses the issues on endangered or threatened sea turtles raised in the Unit 2 FES-OL, and in the Endangered Species Biological Assessment (March 1982). In May 1995, the NRC initiated a formal consultation with the National Marine Fisheries Service (NMFS) regarding sea turtle entrapment at the St. Lucie Plant. As a result of this consultation, an updated Sea Turtle Biological Assessment was submitted by FPL letter L-95-309 dated November 20, 1995. This assessment was reviewed by the NMFS which issued a Biological Opinion dated February 7, 1997. The sea turtle issues will be addressed by the following programs.~~

~~4.2.1 Reinitiation of Endangered Species Act Section 7 Consultation~~

Reinitiation of formal consultation is required if: (1) the amount or extent of taking specified in the Incidental Take Statement is exceeded, (2) new information reveals effects of the action that may affect listed species or critical habitat (when designated) in a manner or to an extent not previously considered, (3) the identified action is subsequently modified in a manner that causes an effect to listed species or critical habitat that was not considered in the NMFS Biological Opinion dated February 7, 1997, or (4) a new species is listed or critical habitat designated that may be affected by the identified action.

~~4.2.2~~ Incidental Take Statement

Section 7(b)(4) of the ESA requires that when an agency action is found to comply with Section 7(a)(2), NMFS will issue a statement specifying the impact of any incidental taking, providing reasonable and prudent measures necessary to minimize impacts, and setting forth terms and conditions that must be followed. Only incidental taking by the licensee that complies with the specified terms and conditions is authorized.

Based on historical records of sea turtle capture and mortality at the St. Lucie Plant cooling water intake canal, NMFS anticipates that continued operation of the circulating water system at St. Lucie Plant may result in the capture and mortality of loggerhead, leatherback, Kemp's ridley, green, and hawksbill turtles. Therefore, an incidental take level, and terms and conditions necessary to minimize and monitor takes is established. Variability in the rate of turtle entrapment at the St. Lucie Plant is considered to be primarily a function of the local abundance of turtles, since the operational characteristics of the intake structures have remained constant over the years. In recent years, green turtle entrapment has increased at a dramatic and unpredicted rate and may continue to increase. Therefore, no take level will be specified for entrapment, capture, and release of any species of turtle.

~~4.2.2.1 Lethal Take Levels~~

The lethal take levels are based on the historical observed lethal takes, but provide for increased total numbers of lethal takes as entrapment levels increase. Consequently, two lethal take levels are specified: one is a fixed level of the number of turtles of each species entrapped during the calendar year, while the other is a percentage of the number of turtles of each species entrapped during the calendar year. The allowable take level will be the greater of the two numbers, considering the prevailing entrapment rates. The annual incidental lethal take levels are established by the NMFS in the current ITS and specified in plant procedures.

~~4.2.2.2 Terms and Conditions of the Incidental Take Statement~~

The following terms and conditions are established to monitor the level of take and to minimize the adverse impacts of entrapment and the possibility of lethal takes:

1) FPL shall install and maintain a five inches (12.7 cm) mesh barrier net across the intake canal, east of the previously existing eight inch mesh barrier net. The new net shall receive regular inspection, maintenance, and repair on at least a quarterly basis. The regular maintenance schedule notwithstanding, any holes or damage to the net that are discovered shall be promptly repaired to prevent the passage of turtles through the barrier net.

2) The existing eight inch mesh barrier net shall be retained to serve as a backup to the new five inch mesh barrier net, which may be lowered occasionally because of fouling and water flow problems. The eight (8) inch mesh net shall receive regular inspection, maintenance, and repair on at least a quarterly basis. The regular maintenance schedule notwithstanding, any holes or damage to the net that are discovered shall be promptly repaired to prevent the passage of turtles through the barrier net.

3) FPL shall continue its current program to capture and release turtles from the intake canals. The handling of captured turtles, treatment and rehabilitation of sick and injured turtles, and disposition of dead turtle carcasses shall be in accordance with permits granted to FPL or FPL's contractor through the FDEP.

4) Capture netting in the intake canal shall be conducted with a surface floating tangle net with an unweighted lead line. The net must be closely and thoroughly inspected via boat at least once per hour. Netting shall be conducted whenever sea turtles are present in the intake canal according to the following schedule:

   a) 8 hours per day, 5 days per week, under normal circumstances;

   b) 12 hours per day or during daylight hours, whichever is less, 7 days per week, under any of the following circumstances:

      i) an adult turtle appears in the canal during mating or nesting season (March 1 through September 30),
      ii) an individual turtle has remained in the canal for 7 days or more,
      iii) a leatherback turtle appears in the canal,

iv) an apparently sick or injured turtle appears in the canal.

Reasonable deviations from this schedule due to human safety considerations (i.e., severe weather) are authorized.

5) If a turtle is observed in the intake canal west of the 8 inch barrier net, directed capture efforts shall be undertaken to capture the turtle and to prevent it from entering the intake wells.

6) FPL shall implement an NMFS approved program to monitor for turtles at the cooling water intake wells. The program should include visual inspection of the intake wells by plant operation, security, or biology personnel. It must also include provisions for notifying appropriate response personnel if turtles are detected and for safely removing turtles from the intake wells.

7) FPL shall propose a plan for the design and implementation of a study to elucidate the effect of various factors on turtle entrapment. These factors may include, but are not limited to, the influence of characteristics of sea turtle behavior, population dynamics, and plant operational characteristics or environmental factors on turtle capture rates. The proposed study plan, design, and implementation date must be approved by NMFS.

8) FPL shall continue to participate in the Sea Turtle Stranding and Salvage Network (STSSN), under proper permits and authority, in order to assess any possible delayed lethal impacts of capture as well as to provide background data on the mortality sources and health of local sea turtles. As a point of clarification, stranded sea turtles are not counted against the authorized level of lethal incidental take in the Incidental Take Statement. Stranding information may be used as the basis for the determination that unanticipated impacts or levels of impact are occurring.

9) FPL shall continue to conduct, under proper permits and authority, the ongoing sea turtle nesting programs and public service turtle walks.

10) Routine Reports

a) Copies of monthly reports covering sea turtle entrapment, capture, rehabilitation, turtle moralities, and any pertinent, unusual events shall be furnished to NMFS.

b) A discussion of the topics specified in ITS condition 10) a), the inspection and maintenance of the barrier nets, and the operation of the Taprogge condenser tube cleaning system including any associated sponge ball loss shall be included in the Annual Environmental Operating Report required by Section 5.4.1. A copy of this annual report shall be furnished by NMFS.

c) A meeting shall be convened between FPL, NRC, and NMFS to discuss endangered and threatened species information and developments at the St. Lucie Plant approximately every two years beginning January 2000.

4.2.3 Light Screen to Minimize Turtle Disorientation

Suitable plants (i.e., native vegetation such as live oak, native figs, wild tamarind, and others) shall be planted and maintained as a light screen along the beach dune line bordering the plant property to minimize turtle disorientation. In addition, FPL owner controlled area lighting shall be shielded so that none of the light is diverted skyward.

4.3 General Exceptions

The environmental conditions of the EPP Section 4 are contingent upon licensee or its contractors being able to obtain the necessary FDEP endangered species permits to take, handle, and experiment with sea turtles. If licensee is unable to obtain the necessary permits, then NRC shall be notified of alternatives by the licensee.

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.

ATTACHMENT 4

MARK UP OF THE UNIT 2

ENVIRONMENTAL PROTECTION PLAN

Insert 1

On May 1, 1995, the FDEP was granted authority by the U.S. Environmental Protection Agency (EPA) to administer the NPDES permitting programs. Pursuant to the Florida Administrative Code (FAC) 62-620.105(10), the EPA-issued NPDES permit and the State-issued wastewater permit for each facility were to be combined into one document. The resulting single document, Wastewater Permit No. FL0002208, combines the NPDES Permit FL0002208 and the State Wastewater Permit IO56-194945.

Insert 2

Section 4.2 Terrestrial/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 the decisions made by the State of Florida under the authority of the Clean Water Act and, in the case of sea turtles, decisions made by the NMFS under the authority of the Endangered Species Act, for any requirements pertaining to terrestrial and aquatic monitoring.

In accordance with Section 7(a) of the Endangered Species Act, on May 4, 2001, the NMFS issued a revised Biological Opinion that modified the ITS and some of the terms and conditions of the previous Opinion. After discussions among the NRC, NMFS, and FPL and in response to an NRC letter dated June 8, 2001, the NMFS issued a clarification of the issues in the new Biological Opinion and the ITS on October 8, 2001. The revised Biological Opinion concludes that continued operation of the St. Lucie Plant circulating seawater cooling system is not likely to jeopardize the continued existence of the listed species. No critical habitat has been designated for the specified species in the action area; therefore, none will be affected.

FPL shall adhere to the specific requirements within the ITS in the Biological Opinion as clarified by the NMFS and NRC. Changes to the ITS or the terms and conditions must be preceded by consultation between the NRC, as the authorizing agency, and NMFS.

1.0 Objectives of the Environmental Protection Plan

The Environmental Protection Plan (EPP) is to provide for protection of the local area environment of the St. Lucie Nuclear plant during construction and operation.

The principle objectives of the EPP are to:

1. Verify that the plant 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 Unit 2 FES which relate to water quality matters are to be regulated by way of the licensee's ~~National Pollutant Discharge Elimination System (NPDES)~~ Wastewater permit.

2.0 Environmental Protection Issues

In the FES-OL, the staff considered the environmental impacts associated with the operation of the St. Lucie Plant Unit 2. Certain environmental issues were identified which required study or license conditions for resolution of environmental concerns and to assure adequate environmental protection.

With assumption of aquatic monitoring programs by U.S. Environmental Protection Agency (EPA) through the NPDES program as delineated in NPDES Permit FL0002208 effective January 29, 1982, NRC will rely on EPA for resolution of issues involving the monitoring of water quality and aquatic biota. The only exception will involve the aquatic and terrestrial marine turtle programs which will be conducted under NRC jurisdiction (Section 2.1 of this EPP).

INSERT 1

2.1 Terrestrial/aquatic issues raised in the Unit 2 FES-OL on marine turtles will be addressed by programs as follows:

1. Beach nesting surveys
2. Engineering/behavioral studies to evaluate and/or mitigate intake entrapment
3. Studies to evaluate and/or mitigate intake canal mortality
4. Light screen provisions at the beach to prevent hatchling misorientation
5. Nest survey and relocation programs in the vicinity of the beach and near-shore construction areas
6. Capture and release program including gross necropsy examinations on selected turtles

NRC requirements with regard to marine turtles issues are specified in Subsection 4.2.1 of this EPP.

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 change in facility design or operation and of tests and experiments carried out pursuant to this Subsection. These records shall include a written evaluation which provides bases for the determination that the change, test, or experiment does not involve an unreviewed environmental question.

Activities governed by Section 3.3 of this EPP are not subject to the requirements of this section.

3.2 Reporting Related to the ~~NPDES~~ Permit and State Certification (pursuant to Section 401 of the Clean Water Act)

1. Violations of the ~~NPDES~~ Permit or the State 401 Certification Conditions shall be reported to the NRC by submittal of copies of the reports required by the ~~NPDES~~ Permit or State Certifications.

2. The licensee shall provide the NRC with a copy of any 316(b) studies related documentation and other biotic monitoring reports required by ~~NPDES~~ Permit conditions at the same time they are submitted to the permitting agency.

3. Changes and additions to the ~~NPDES~~ Permit or the State Certifications shall be reported to the NRC within 30 days following the date the

Clean Water

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.

4. The NRC shall be notified of changes to the effective ~~NPDES~~ wastewater 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 licensee shall provide the NRC a copy of the application for renewal of the ~~NPDES~~ wastewater 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 the indicates or could result in significant environmental impact causally related to station operation shall be recorded and promptly reported to the NRC Operations Center within 72 hours via Emergency Notification System described in 10 CFR 50.72. In addition, the reporting requirements time frame shall be consistent with 10 CFR 50.72 for environmental protection issues. The initial report shall be followed by a written report as described in Section 5.4.2. The initial report shall be followed by a written report as described in Section 5.4.2. No routine monitoring programs are required to implement this condition. Events covered by Section 3.2 of this EPP will be subject to reporting requirements as defined in that section and not subject to these requirements.

The following are examples of unusual or important events: excessive bird impaction events; onsite plant or animal disease outbreaks; mortality (causally related to station operation), or unusual occurrence of any species protected by the Endangered Species Act of 1973; unusual fish kills; increase in nuisance organisms or conditions; and unanticipated or emergency discharge of waste water or chemical substances.

4.2 Terrestrial/Aquatic Issues

INSERT 2

~~This section addresses the issues on endangered or threatened sea turtles raised in the Unit 2 FES-OL, and in the Endangered Species Biological Assessment (March 1982). In May 1995, the NRC initiated a formal consultation with the National Marine Fisheries Service (NMFS) regarding sea turtle entrapment at the St. Lucie Plant. As a result of this consultation, an updated Sea Turtle Biological Assessment was submitted by FPL letter L-95-309 dated November 20, 1995. This assessment was reviewed by the NMFS which issued a Biological Opinion dated February 7, 1997. The sea turtle issues will be addressed by the following programs.~~

4.2.1 Reinitiation of Endangered Species Act Section 7 Consultation

~~Reinitiation of formal consultation is required if: (1) the amount or extent of taking specified in the Incidental Take Statement is exceeded, (2) new information reveals effects of the action that may affect listed species or critical habitat (when designated) in a manner or to an extent not previously considered, (3) the identified action is subsequently modified in a manner that causes an effect to listed species or critical habitat that was not considered in the NMFS~~

Biological Opinion dated February 7, 1997, or (4) a new species is listed or critical habitat designated that may be affected by the identified action.

4.2.2 Incidental Take Statement

Section 7(b)(4) of the ESA requires that when an agency action is found to comply with Section 7(a)(2), NMFS will issue a statement specifying the impact of any incidental taking, providing reasonable and prudent measures necessary to minimize impacts, and setting forth terms and conditions that must be followed. Only incidental taking by the licensee that complies with the specified terms and conditions is authorized.

Based on historical records of sea turtle capture and mortality at the St. Lucie Plant cooling water intake canal, NMFS anticipates that continued operation of the circulating water system at St. Lucie Plant may result in the capture and mortality of loggerhead, leatherback, Kemp's ridley, green, and hawksbill turtles. Therefore, an incidental take level, and terms and conditions necessary to minimize and monitor takes is established. Variability in the rate of turtle entrapment at the St. Lucie Plant is considered to be primarily a function of the local abundance of turtles, since the operational characteristics of the intake structures have remained constant over the years. In recent years, green turtle entrapment has increased at a dramatic and unpredicted rate and may continue to increase. Therefore, no take level will be specified for entrapment, capture, and release of any species of turtle.

4.2.2.1 Lethal Take Levels

The lethal take levels are based on the historical observed lethal takes, but provide for increased total numbers of lethal takes as entrapment levels increase. Consequently, two lethal take levels are specified: one is a fixed level of the number of turtles of each species entrapped during the calendar year, while the other is a percentage of the number of turtles of each species entrapped during the calendar year. The allowable take level will be the greater of the two numbers, considering the prevailing entrapment rates. The annual incidental lethal take levels are established by the NMFS in the current ITS and specified in plant procedures.

4.2.2.2 Terms and Conditions of the Incidental Take Statement

The following terms and conditions are established to monitor the level of take and to minimize the adverse impacts of entrapment and the possibility of lethal takes:

1) FPL shall install and maintain a five inches (12.7 cm) mesh barrier net across the intake canal, east of the previously existing eight inch mesh barrier net. The new net shall receive regular inspection, maintenance, and repair on at least a quarterly basis. The regular maintenance schedule notwithstanding, any holes or damage to the net that are discovered shall be promptly repaired to prevent the passage of turtles through the barrier net.

2) The existing eight inch mesh barrier net shall be retained to serve as a backup to the new five inch mesh barrier net, which may be lowered occasionally because of fouling and water flow problems. The eight (8) inch mesh net shall receive regular inspection, maintenance, and repair on at least a quarterly basis. The regular maintenance schedule notwithstanding, any holes or damage to the net that are discovered shall be promptly repaired to prevent the passage of turtles through the barrier net.

3) FPL shall continue its current program to capture and release turtles from the intake canals. The handling of captured turtles, treatment and rehabilitation of sick and injured turtles, and disposition of dead turtle carcasses shall be in accordance with permits granted to FPL or FPL's contractor through the FDEP.

4) Capture netting in the intake canal shall be conducted with a surface floating tangle net with an unweighted lead line. The net must be closely and thoroughly inspected via boat at least once per hour. Netting shall be conducted whenever sea turtles are present in the intake canal according to the following schedule:

   a) 8 hours per day, 5 days per week, under normal circumstances;

   b) 12 hours per day or during daylight hours, whichever is less, 7 days per week, under any of the following circumstances:

      i) an adult turtle appears in the canal during mating or nesting season (March 1 through September 30),

      ii) an individual turtle has remained in the canal for 7 days or more,

      iii) a leatherback turtle appears in the canal,

      iv) an apparently sick or injured turtle appears in the canal.

Reasonable deviations from this schedule due to human safety considerations (i.e., severe weather) are authorized.

5) If a turtle is observed in the intake canal west of the 8 inch barrier net, directed capture efforts shall be undertaken to capture the turtle and to prevent it from entering the intake wells.

6) FPL shall implement an NMFS approved program to monitor for turtles at the cooling water intake wells. The program should include visual inspection of the intake wells by plant operation, security, or biology personnel. It must also include provisions for notifying appropriate response personnel if turtles are detected and for safely removing turtles from the intake wells.

7) FPL shall propose a plan for the design and implementation of a study to elucidate the effect of various factors on turtle entrapment. These factors may include, but are not limited to, the influence of characteristics of sea turtle behavior, population dynamics, and plant operational characteristics or environmental factors on turtle capture rates. The proposed study plan, design, and implementation date must be approved by NMFS.

8) FPL shall continue to participate in the Sea Turtle Stranding and Salvage Network (STSSN), under proper permits and authority, in order to assess any possible delayed lethal impacts of capture as well as to provide background data on the mortality sources and health of local sea turtles. As a point of clarification, stranded sea turtles are not counted against the authorized level of lethal incidental take in the Incidental Take Statement. Stranding information may be used as the basis for the determination that unanticipated impacts or levels of impact are occurring.

9) FPL shall continue to conduct, under proper permits and authority, the ongoing sea turtle nesting programs and public service turtle walks.

10) Routine Reports

a) Copies of monthly reports covering sea turtle entrapment, capture, rehabilitation, turtle moralities, and any pertinent, unusual events shall be furnished to NMFS.

b) A discussion of the topics specified in ITS condition 10) a), the inspection and maintenance of the barrier nets, and the operation of the Taprogge condenser tube cleaning system including any associated sponge ball loss shall be included in the Annual Environmental Operating Report required by Section 5.4.1. A copy of this annual report shall be furnished by NMFS.

c) ~~A meeting shall be convened between FPL, NRC, and NMFS to discuss endangered and threatened species information and developments at the St. Lucie Plant approximately every two years beginning January 2000.~~

4.2.3 Light Screen to Minimize Turtle Disorientation

Suitable plants (i.e., native vegetation such as live oak, native figs, wild tamarind, and others) shall be planted and maintained as a light screen along the beach dune line bordering the plant property to minimize turtle disorientation. In addition, FPL owner controlled area lighting shall be shielded so that none of the light is diverted skyward.

4.3 General Exceptions

The environmental conditions of the EPP Section 4 are contingent upon licensee or its contractors being able to obtain the necessary FDEP endangered species permits to take, handle, and experiment with sea turtles. If licensee is unable to obtain the necessary permits, then NRC shall be notified of alternatives by the licensee.