

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 4
Atlanta, Georgia

Prevention of Significant Deterioration Permit
For Greenhouse Gas Emissions
Permit PSD-EPA-R4010

In accordance with the provisions of the Clean Air Act (CAA), Subchapter I, Part C, 42 U.S.C. § 7470, and the implementing Prevention of Significant Deterioration (PSD) of Air Quality Regulations at the Code of Federal Regulations (CFR) Title 40, Section 52.21 (40 CFR § 52.21), the United States Environmental Protection Agency Region 4 hereby authorizes

Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL 33408

to construct and operate Greenhouse Gas air emissions units as a modification to the existing Port Everglades Plant located at 8100 Eisenhower Boulevard within the City of Hollywood, in Broward County, Florida.

This modification to the Port Everglades facility shall be constructed and operated in accordance with the terms and conditions set forth in this permit.

This permit becomes effective on **DECEMBER 25, 2013**

This permit shall not relieve the owner or operator of the responsibility to comply fully with all applicable provisions of federal and state law.

11/25/13

/signed/

Date Signed

Jeanne M. Gettle
Acting Director
Air, Pesticides, and Toxics
Management Division

AUTHORITY

The United States Environmental Protection Agency (EPA) issues this permit pursuant to Subchapter I, Part C, of the Clean Air Act (CAA), 42 U.S.C. § 7470, and the implementing PSD Regulations at 40 CFR § 52.21. This permit is based upon application materials submitted to EPA by Florida Power & Light Company (FPL), dated January 23, 2012, May 8, 2012, August 31, 2012, November 2, 2012, and November 16, 2012, supplemental submittals in the administrative record for this permit action, and upon the technical analysis performed by EPA.

APPLICANT

Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL 33408

PROJECT LOCATION

FPL's project will be located at the existing Port Everglades Plant located at 8100 Eisenhower Boulevard within the City of Hollywood, in Broward County, Florida.

PROJECT DESCRIPTION

Florida Power & Light Company (FPL) will result in modernization of the existing Port Everglades Plant into a higher efficiency, lower emission, clean energy center using combined cycle technology (Project). This Prevention of Significant Deterioration (PSD) permit requires the retirement and replacement of four existing oil-fired units with one nominal 1,250 MW 3-on-1 combined cycle unit, which will use natural gas.

FPL's existing facility consists of two nominal 200 MW fossil fuel-fired steam generating units (FFFSGU) (Units 1 and 2), two nominal 400 MW FFFSGU (Units 3 and 4), and 12 simple cycle natural gas turbines (GT1 - GT12). Units 1 through 4 are authorized to operate pursuant to Florida Department of Environmental Protection (FDEP) Final Title V Permit No. 0110036-009-AV. Existing Units 1 through 4 will be retired and replaced with one nominal 1,250 MW 3-on-1 combined cycle unit. This Project includes the construction and operation of the 3-on-1 unit that consists of three nominal 250 MW advanced combustion turbines (CTs) and three heat recovery steam generators (HRSGs), which will utilize the waste heat from the CTs to produce steam to be utilized in a single nominal 500 MW steam turbine generator. The Project also includes the construction and operation of additional equipment, including an auxiliary boiler, emergency generators, gas compressors, fire pump engine, ultra low sulfur diesel (ULSD) storage tank, circuit breakers, and temporary construction boilers.

This PSD permit for the Project requires the use of Best Available Control Technology (BACT) to limit emissions of greenhouse gases (GHGs), to the greatest extent feasible.

EQUIPMENT LIST

The following devices and activities are subject to this PSD permit:

Unit ID	Description
CTs/HRSGs (3)	<ul style="list-style-type: none">1,250 MW (gross) 3-on-1 combined cycle combustion turbine generator (CT), with a maximum combined heat input rate of 3,034 MMBtu/hr (HHV)
Auxiliary Boiler (1)	<ul style="list-style-type: none">99.8 MMBtu/hr (HHV) firing natural gas
Emergency Generators (2)	<ul style="list-style-type: none">2,250 kilowatt (kw) each firing ULSD
Gas Compressors (2)	<ul style="list-style-type: none">Three Solar Centaur 50 compressor sets, or equivalent, each including a natural gas turbine and natural gas compressor (only 2 compressor sets will operate at a time)
Fire Pump Engine (1)	<ul style="list-style-type: none">300 horsepower (hp) firing ULSD
ULSD Storage Tank (1)	<ul style="list-style-type: none">vertical fixed roof designrated storage capacity of 7 million gallons (165,000 barrels)
Circuit Breakers (2)	<ul style="list-style-type: none">Enclosed-pressure SF₆ Circuit Breakers0.5 % per year (by weight) annual leakage rateleak detection system
Temporary Construction Boilers (2)	<ul style="list-style-type: none">150 MMBtu/hr (HHV) each firing natural gas

PERMIT CONDITIONS

I. PERMIT EXPIRATION

As provided in 40 CFR § 52.21(r), this PSD Permit shall become invalid if construction:

- A. is not commenced (as defined in 40 CFR § 52.21(b)(9)) within 18 months after the approval takes effect; or
- B. is discontinued for a period of 18 months or more; or
- C. is not completed within a reasonable time.

II. PERMIT NOTIFICATION REQUIREMENTS

Pursuant to Condition IX, Permittee shall notify EPA Region 4 of the:

- A. date construction is commenced, postmarked within 30 days of such date;

- B. actual date of initial startup, as defined in 40 CFR § 60.2, postmarked within 15 days of such date;
- C. date upon which initial performance tests will commence, in accordance with the provisions of Condition IX.G, postmarked not less than 30 days prior to such date. Notification may be provided with the submittal of the performance test protocol required pursuant to Condition IX.G; and
- D. date upon which initial performance evaluation of the continuous emissions monitoring system (CEMS) will commence in accordance with 40 CFR § 60.13(c), postmarked not less than 30 days prior to such date. Notification may be provided with the submittal of the CEMS performance test protocol required pursuant to Condition IX.F.

III. FACILITY OPERATION

- A. At all times, including periods of startup, shutdown, shakedown, and malfunction, Permittee shall, to the extent practicable, maintain and operate the facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to EPA, which may include, but is not limited to, monitoring results, opacity observations, review of operating maintenance procedures and inspection of the facility.
- B. The Permittee shall operate and maintain the CTs and associated components in a manner consistent with good engineering practices for its full utilization.
- C. As soon as practicable following initial startup of the CTs (as defined in 40 CFR § 60.2) but prior to commencement of commercial operation (as defined in 40 CFR § 72.2), and thereafter, the Permittee shall develop and implement an operation and maintenance plan for the facility, consistent with Condition III.B above. At a minimum, the plan shall identify measures for assessing the performance of the facility, the acceptable range of the plant performance measures for achieving the design electrical output, the methods for monitoring the plant performance measures, and the routine procedures for maintaining the facility in good operating condition.

IV. MALFUNCTION REPORTING

- A. Permittee shall notify EPA Region 4 via the contact information provided in Condition X within two (2) calendar days following the discovery of any failure of air pollution control equipment or process equipment, or failure of a process to operate in a normal manner, which results in an increase in emissions above the allowable emission limits stated in Condition IX of this permit.

- B. In addition, pursuant to Condition X, Permittee shall provide written notification to EPA within fifteen (15) calendar days of any such failure described under Condition IV.A. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial malfunction, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in Condition IX, and the methods utilized to mitigate emissions and restore normal operations.
- C. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or any law or regulation such malfunction may cause.

V. RIGHT OF ENTRY

The EPA Regional Administrator, and/or an authorized representative, upon the presentation of credentials, shall be permitted:

- A. to enter the premises where the facility is located or where any records are required to be kept under the terms and conditions of this PSD Permit;
- B. during normal business hours, to have access to and to copy any records required to be kept under the terms and conditions of this PSD Permit;
- C. to inspect any equipment, operation, or method subject to requirements in this PSD Permit; and
- D. to sample materials and emissions from the source(s).

VI. TRANSFER OF OWNERSHIP

In the event of any changes in control or ownership of the facility, this PSD Permit shall be binding on all subsequent owners and operators. Within 14 days of any such change in control or ownership, Permittee shall notify the succeeding owner and operator of the existence of this PSD Permit and its conditions by letter. Permittee shall send a copy of this letter pursuant to Condition X to EPA Region 4 within thirty (30) days of its issuance.

VII. SEVERABILITY

The provisions of this PSD Permit are severable, and, if any provision of the PSD Permit is held invalid, the remainder of this PSD Permit shall not be affected.

VIII. ADHERENCE TO APPLICATION AND COMPLIANCE WITH OTHER ENVIRONMENTAL LAWS

Permittee shall construct the Project in compliance with this PSD permit, the application on which this permit is based, and all other applicable federal, state, and local air quality regulations. This PSD permit does not release the Permittee from any liability for compliance with other applicable federal, state and local environmental laws and regulations, including the Clean Air Act.

IX. SPECIAL CONDITIONS

A. Endangered Species Act

In accordance with Section 7 of the Endangered Species Act, Permittee shall adhere to conditions set forth in the Biological Opinion issued for the Project on September 16, 2013 by the National Oceanic and Atmospheric Administration National Marine Fisheries Service. *See Section XI* of this permit for specific Terms and Conditions.

B. Air Pollution Control Equipment and Operation

Permittee shall perform any necessary operations to minimize emissions so that emissions are at or below the emission limits specified in this permit.

C. Combustion Turbine (CT) Emission Limits

1. Except as noted below under Condition IX.J (shakedown), on and after the date of initial startup, Permittee shall not discharge or cause the discharge of emissions from the CT Unit into the atmosphere in excess of the following:

	Emission Limit (per CT) (natural gas firing)	Emission Limit (per CT) (ULSD burning)
GHG Limit (as CO₂e)	830 lb CO ₂ e/MWh net output (12-month rolling average)	1,248 lb CO ₂ e/MWh net output (12-month rolling average)

*Compliance with the above limits shall be demonstrated in accordance with **Condition IX.F.10**.

2. The three CTs associated with PEEC shall not operate firing Ultra Low Sulfur Diesel (ULSD) more than an aggregate of 3,000 hours/year on a 12-month rolling total. The Permittee shall monitor and record the number of hours each CT operates on ULSD to be recorded monthly and totalled every month for the previous 12 months.

D. Reserved

E. Auxiliary Equipment Emission and Operating Limits and Work Practices

1. At all times, including equipment startup and shutdown, Permittee shall not discharge or cause the discharge of emissions from each unit into the atmosphere in excess of the following, and shall otherwise comply with the following specifications on a 12-month rolling total:

Unit ID (description)	GHG Limit (as CO₂e)
Auxiliary Boiler (1) 99.8 MMBtu/hr (HHV)	11,670 TPY
Emergency Generators (2) 2,250 kW per engine	344 TPY
Gas Compressors (2) 5,514 hp per engine	55,313 TPY
Fire Pump Engine (1) 300 hp firewater pump	15.2 TPY
Circuit Breakers (2) SF ₆ Circuit Breakers	Work Practice Standards
Temporary Construction Boilers (2) 150 MMBtu/hr per boiler	18,350 TPY

*Compliance with the above limits shall be demonstrated in accordance with **Condition IX.H.3.**

2. The Auxiliary Boiler shall not operate during normal operations of the CT, except during periods of, or immediately following, startup. The Auxiliary Boiler shall be shut down as soon as practicable after the completion of any startup process as defined in Condition IX.D.1. Annual hours of operation for the Auxiliary Boiler shall not exceed 2,000 hours per 12-month rolling total.
3. The Auxiliary Boiler shall undergo annual tune-ups and meet the associated requirements as follows (if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup):
 - a. Inspect the burner, and clean or replace any components of the burner as necessary (permittee may delay the burner inspection until the next scheduled unit shutdown, but must inspect each burner at least once every 18 months).

- b. Inspect the flame pattern, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications.
 - c. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly.
4. The Emergency Generators shall be limited to operation as an “emergency stationary RICE” as defined in 40 CFR Part 63 Subpart ZZZZ. Annual hours of operation for Emergency Generators shall not exceed 100 hours per 12-month rolling total for each generator.
 5. The Gas Compressors shall be used to increase pressure from the existing natural gas pipeline to the CTs. Except during an emergency, only two of the three compressors will operate at any given time. Records of operation shall be kept in accordance with Condition IX.I.
 6. The Fire Pump Engine shall be limited to operation as an “emergency stationary RICE” as defined in 40 CFR Part 63 Subpart ZZZZ. Annual hours of operation for the Fire Pump Engine shall not exceed 24 hours per 12-month rolling total.
 7. Circuit Breakers shall be equipped with low pressure alarms. In addition, Permittee shall implement a maintenance program that maintains the integrity of the breakers and minimizes SF₆ emissions. Records of inspection shall be kept in accordance with Condition IX.I.
 8. The Temporary Construction Boilers shall be limited to use only during the Project construction period to provide steam during construction activities that includes but is not limited to HRSG cleaning and associated steam blows. Annual hours of operation for the two boilers shall not exceed an aggregate of 3,000 hours per 12-month rolling total. The Temporary Construction Boilers will be permanently shut down and removed from the facility once commercial operation of the Project begins.

F. Continuous Monitoring of CO₂ for CTs

1. Permittee shall install, certify, operate and maintain monitoring systems for quantifying CO₂ emissions from each CT in accordance with the applicable requirements of 40 CFR part 75. Consistent with 40 CFR § 75.4(b), all applicable certification tests shall be completed within 180 calendar days after the date the unit commences commercial operation (as defined in 40 CFR § 72.2).
2. Following initial certification, the CO₂ continuous monitoring systems shall be quality assured in accordance with the applicable requirements of 40 CFR part 75.
3. The CO₂ continuous monitoring systems shall be capable of producing hourly determinations of CO₂ mass emissions in tons per hour (tons/hr).

4. In accordance with 40 CFR § 75.62, an initial monitoring plan shall be submitted identifying the methodology for which CO₂ mass emissions will be continuously monitored. The initial monitoring plan shall be submitted no later than 21 days prior to the initial certification tests.
5. Permittee shall provide notifications as specified in 40 CFR § 75.61 for any event related to the continuous measurement of CO₂.
6. Permittee shall measure and record, for each CT, the actual heat input (Btu) on an hourly basis in accordance with 40 CFR part 75.
7. Permittee shall measure and record, for each CT, the following on an hourly basis:
 - a. Net energy output rate (MW);
 - b. CO₂ mass emission rate (tons CO₂/hr);
 - c. Heat input rate (MMBtu/hr);
 - d. Unit operating time, as described in 40 CFR § 75.57(b)(2);
 - e. The type of fuel (natural gas or ULSD fuel oil) burned;
8. Permittee shall calculate and record, for each CT, the following on a monthly basis:
 - a. Monthly average CO₂ emission rate (lb CO₂/MWh) calculated as the sum of each hourly CO₂ mass emission rate times the unit operating time for the hour divided by the sum of the recorded net energy output rates times the unit operating time for the hour for all hours of operation in each month. If more than one fuel is utilized in a month, a separate average CO₂ emissions rate shall be calculated for each fuel.
 - b. Monthly average heat rate (Btu/kWh) calculated as the sum of each hourly heat input rate times the unit operating time for the hour divided by the sum of the recorded energy output rates times the unit operating time for the hour for all hours of operation in each month times 1000. If more than one fuel is utilized in a month, a separate average heat input rate shall be calculated for each fuel.
9. Permittee shall calculate and record, for each CT, the following on an annual basis:
 - a. The 12-month rolling average CO₂ emission rate (lb CO₂/MWh), for each fuel combusted in the previous 12 months, shall be calculated as the sum of each monthly average value times the monthly net energy output (MWh) divided by the sum of the net energy output (MWh) generated during the 12-month period.
 - b. The 12-month rolling average heat rate (Btu/kWh), for each fuel combusted in the previous 12 months, shall be calculated as the sum of each monthly average heat rate

value times the monthly energy output (kWh) divided by the sum of the energy output (kWh) generated during the 12-month period.

G. Compliance for Combustion Turbines

For demonstrating compliance with the limits specified in **Condition IX.C.1**, Permittee shall use the procedures set forth in 40 CFR parts 75 and 98 to determine resulting GHG emissions (as CO₂e) based on the combination of measured CO₂ emissions (from continuous monitoring system) and calculated CO₂e of other GHG pollutants [as specified in **Condition K**]. Permittee shall keep adequate records of these GHG emission calculations according to requirements in **Condition IX.I.1**.

H. Monitoring and Compliance for Auxiliary Equipment

1. Permittee shall install and maintain fuel measurement equipment, including but not limited to ULSD tank gauges and fuel receipts, an operational totalizing mass or volumetric flow meter to measure fuel use for the 99.8 MMBtu/hr boiler (Auxiliary Boiler), the 2,250 kW emergency use engines (Emergency Generators), and the 300 hp emergency-use firewater pump (Fire Pump Engine), and the 150 MMBtu/hr boilers (Temporary Construction Boilers). Fuel use shall be recorded monthly and totalled every month for the previous 12 months.
2. Permittee shall install and maintain an operational non-resettable elapsed time meter for the 99.8 MMBtu/hr boiler (Auxiliary Boiler), the 2,250 kW emergency use engines (Emergency Generators), the 300 hp emergency-use firewater pump (Fire Pump Engine), and the 150 MMBtu/hr boilers (Temporary Construction Boilers) to be recorded monthly and totalled every month for the previous 12 months.
3. Permittee shall use the data recorded in Conditions IX.H.1 and IX.H.2 as well as the appropriate emission factors from 40 CFR Part 98, Subpart C, Table C-2 and the Global Warming Potential factors in Condition IX.K to calculate and record CO₂e emissions from the 99.8 MMBtu/hr boiler (Auxiliary Boiler), the 2,250 kW emergency use engines (Emergency Generators), the 300 hp emergency-use firewater pump (Fire Pump Engines), and the 150 MMBtu/hr boilers (Temporary Construction Boilers).

I. Recordkeeping and Reporting

1. Permittee shall maintain a file of all records, data, measurements, reports, and documents related to the operation of the facility, including, but not limited to, the following: all records or reports pertaining to adjustments and/or maintenance performed on any system or device at the facility; all records relating to performance tests and monitoring of auxiliary combustion equipment; and all other information required by this permit recorded in a permanent form suitable for inspection.
2. Permittee shall maintain CEMS records that include the following: the occurrence and duration of any startup, shutdown, shakedown, or malfunction, performance testing,

evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and corresponding emission measurements.

3. Permittee shall maintain records of all source tests and monitoring and compliance information required by this permit.
4. Permittee shall maintain records and submit a written report of all excess emissions to EPA semi-annually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. The report is due on September 30th and March 31st and shall include the following:
 - a. Time intervals, data and magnitude of the excess emissions, the nature and cause (if known), corrective actions taken and preventive measures adopted;
 - b. Applicable time and date of each period during which the CEMS was inoperative (monitor down-time), except for zero and span checks, and the nature of CEMS repairs or adjustments;
 - c. A statement in the report of a negative declaration; that is, a statement when no excess emissions occurred or when the CEMS has not been inoperative, repaired, or adjusted;
 - d. Any failure to conduct any required source testing, monitoring, or other compliance activities; and
 - e. Any violation of limitations on operation, including but not limited to restrictions on hours of operation.
5. Excess emissions shall be defined as any period in which the facility emissions exceed the maximum emission limits set forth in this permit.
6. A period of monitor down-time shall be any unit operating clock hour in which sufficient data are not obtained by the CEMS to validate the hour for CO₂ according to 40 CFR Part 75.
7. Excess emissions indicated by the CEM system, source testing, or compliance monitoring shall be considered violations of the applicable emission limit for the purpose of this permit.
8. Permittee shall record the pounds of dielectric fluid added to the circuit breakers each month.
9. The Permittee shall maintain a copy of the current operation and maintenance plan for the facility, and shall keep a copy of all prior versions of the plan for a minimum of five

years. The Permittee shall also keep records of the monitoring data for each of the facility performance measures and all maintenance activities; the Permittee shall maintain such records for a minimum of five years following the date they are created

10. Unless otherwise specified herein, all records required by this PSD Permit shall be retained for not less than five years following the date of such measurements, maintenance, reports, and/or records. These records shall be made available for review upon request by the Agency or authorized representative during the course of an inspection.

J. Shakedown Periods

The combustion turbine and auxiliary equipment emission limits and requirements in Conditions IX.C and IX.E shall not apply during combustion shakedown periods. Shakedown is defined as the period beginning with initial startup and ending no later than initial performance testing, during which the Permittee conducts operational and contractual testing and tuning to ensure the safe, efficient and reliable operation of the plant. The shakedown period shall not exceed 180 days. The requirements of Section III of this permit shall apply at all times.

K. Global Warming Potential (GWP)

For the purposes of showing compliance with any GHG emission limit in this permit, the GWP factors listed in 40 CFR Part 98 Subpart A, Table A-1 as of the issuance date of this permit shall be used. The current GWP factors are listed below:

GHG Pollutant	GWP Factor
CO₂	1
CH₄	21
N₂O	310
SF₆	23,900

X. AGENCY NOTIFICATIONS

All notifications, reporting or other communications relating to this permit shall be submitted to:

Chief
Air & EPCRA Enforcement Branch
Air, Pesticides and Toxics Management Division
U.S. EPA Region 4
61 Forsyth Street, SW
Atlanta, GA 30303

In addition, electronic copies of the above-referenced notifications and communications shall be submitted to the following individuals at their corresponding email address:

<u>Name</u>	<u>Email</u>	<u>Phone</u>
Jason Dressler	dressler.jason@epa.gov	404-562-9208
Katy R. Forney	forney.kathleen@epa.gov	404-562-9130
Heather Ceron	ceron.heather@epa.gov	404-562-9185

XI. BIOLOGICAL OPINION “TERMS & CONDITIONS”

In order to be exempt from the prohibitions of Section 9 of the ESA, the permittee must comply with the following Terms and Conditions that implement the Reasonable and Prudent Measure required under Section 9.4 of the Biological Opinion issued by the National Marine Fisheries Service on September 16, 2013. These Terms and Conditions are designed to minimize the effects of take on loggerhead, green, and hawksbill sea turtles.

1. FPL shall submit an annual report summarizing the number of takes, by species and life stage. Annual reports shall contain information on the date of the turtle encounter, the condition of the turtle (include photographs, if available), problems encountered, mitigative actions taken (*e.g.*, the animal was transported to a rehabilitation facility or was released alive and uninjured), and any other information the EPA and FPL deem relevant. This report must be provided to NMFS’s PRD at the address provided in the RPM above and notification of take shall be provided to NMFS at the following e-mail address within 24 hours, referencing the present opinion by NMFS identifier number (SER-2012-657), title, and date: takereport.nmfsser@noaa.gov.
2. FPL shall monitor the intake wells six times in a 24-hour period (every four hours) for the presence of sea turtles. In the event a sea turtle is found in the intake wells, FPL shall:
 - a. Observe the turtle to determine if it has any injuries or appears stressed or unhealthy.
 - b. Determine the turtle species.
 - c. Complete the Endangered Species Response Form, which includes taking photos of the turtle in the intake well (Appendix 1 of this opinion).
 - d. Enter the event in FPL’s Endangered Species Log.

- e. For healthy turtles, FPL shall follow the procedure in Term and Condition #2.
- f. For sick or injured turtles, FPL shall follow the procedure in Term and Condition #3.
- g. For dead turtles, FPL shall follow the procedure in Term and Condition #4.
- h. For required documentation, FPL shall follow Term and Condition #5.

3. HEALTHY SEA TURTLES: If an apparently healthy turtle is seen in the intake well, FPL shall:

- a. Close the covers to the intake well. The animal should be able swim out of the area on its own with the assistance of sunlight entering the well through the entrance.
- b. If after one hour the turtle has not left the well, reduce load as necessary and, if safe to do so, turn off one of the cooling water pumps to reduce the current in the well.
- c. Contact all personnel listed in Appendix 2 of this opinion to notify them of the situation.
 - i. Classify the call as an environmental emergency.
 - ii. Be prepared to answer the questions found on the Endangered Species Response Form (Appendix 1 of the Biological Opinion dated September 16, 2013).
 - iii. Provide the Fleet Performance Diagnostic Center (FPDC) with information regarding the animal's condition, approximate size, and apparent injuries (if any).
- d. An FWC-approved Marine Turtle Permit Holder, or their designee, should arrive at PEEC within three hours of notification.
- e. Continue to monitor the intake well every 15 minutes to determine if the turtle has left the well.
- f. If the turtle exits the well, another call should be made to the Marine Turtle Permit Holder. At this time, FPL personnel shall continue routine inspection of the intake wells every four hours.
- g. If the turtle remains in the well, the Marine Turtle Permit Holder will handle the animal as required by state and federal regulations. It may be necessary for plant personnel to work closely with the Marine Turtle Permit Holder in order to retrieve the animal.
- h. Only plant personnel shall operate plant equipment (intake rakes, etc).
 - i. All normal safety precautions and equipment shall be used.
- j. Depending on the water level and size of the turtle, employ one of the following methods to remove the turtle from the well. Use caution when handling the turtle, so as not to injure it.
- k. For small turtles that can fit on the rake, carefully lift the turtle ensuring it is situated on the rake in such a manner that it cannot fall off. If needed and feasible, utilize the dip net with a long extension to assist the rake and keep the turtle from coming off the rake.
- l. For larger turtles, unbolt and remove the intake well covers and deploy the Sea Turtle Retrieval Device lowering it with the intake crane. After ensuring the turtle is secure in the device, lift the device with the crane's assistance.
- m. After removing the turtle, place it in an appropriate container located in an area that complies with FWC's Marine Turtle Conservation Guidelines. Ambient air temperature will determine the holding location of the container.
- n. The Marine Turtle Permit Holder will complete a full assessment. All data will be collected and recorded on either the FWC Tagging Form or the Sea Turtle Stranding and Salvage Network (STSSN) – Stranding Report and the Fibropapilloma Documentation Form (if applicable).
- o. If the turtle is not tagged, the Marine Turtle Permit Holder will properly tag the animal with Passive Integrated Transponder (PIT) tags and flipper tags and complete a Tagging Form.
- p. If the Marine Turtle Permit Holder deems the turtle healthy and all data have been collected, the Marine Turtle Permit Holder will release the turtle into the discharge canal at the first bend.

- 4. SICK OR INJURED SEA TURTLES:** If a sick or injured sea turtle is seen in the intake well, FPL shall:
- a. Immediately contact all personnel listed in Appendix 2 of the Biological Opinion dated September 16, 2013, to notify them of the situation.
 - i. Classify the call as an environmental emergency.
 - ii. Be prepared to answer the questions found on the Endangered Species Response Form (Appendix 1).
 - iii. Provide the FPDC with information regarding the animal's condition, approximate size, and apparent injuries (if any).
 - b. The Marine Turtle Permit Holder should arrive at PEEC within three hours of notification.
 - c. Continue to monitor the intake well every 15 minutes or less.
 - d. The Marine Turtle Permit Holder will handle the animal as required by state and federal regulations. It may be necessary for plant personnel to work closely with the Marine Turtle Permit Holder in order to retrieve the animal.
 - e. Only plant personnel shall operate plant equipment (intake rakes, etc).
 - f. All normal safety precautions and equipment shall be used.
 - g. Depending on the water level and size of the turtle, employ one of the following methods to remove the turtle from the well. Use caution when handling the turtle, so as not to injure it.
 - h. For small turtles that can fit on the rack, carefully lift the turtle ensuring it is situated on the rake in such a manner that it cannot fall off. If needed and feasible, utilize the dip net with a long extension to assist the rake and keep the turtle from coming off the rake.
 - i. For larger turtles, unbolt and remove the intake well covers and deploy the Sea Turtle Retrieval Device lowering it with the intake crane. After ensuring the turtle is secure in the device, lift the device with the crane's assistance.
 - j. After removing the turtle, place it in an appropriate container located in an area that complies with FWC's Marine Turtle Conservation Guidelines. Ambient air temperature will determine the holding location of the container.
 - k. The Marine Turtle Permit Holder will complete a full assessment. All data will be collected and recorded on either the FWC Tagging Form or the STSSN – Stranding Report and the Fibropapilloma Documentation Form (if applicable). If the turtle is not tagged, the Marine Turtle Permit Holder will properly tag the animal with PIT tags and flipper tags and complete a Tagging Form.
 - l. The Marine Turtle Permit Holder notifies FWC via the E-mail Stranding Pager: **seaturtlestranding@myfwc.com**. If there is no response, the Marine Turtle Permit Holder will call the FWC Hotline at 1-888-404-3922.
 - m. In consultation with FWC, the Marine Turtle Permit Holder determines if the turtle needs to be transported to a rehabilitation facility or released.
 - n. If the Marine Turtle Permit Holder deems the turtle healthy and all data have been collected, the Marine Turtle Permit Holder will release the turtle into the discharge canal at the first bend.
 - o. If rehabilitation is required, the Marine Turtle Permit Holder will transport the animal to the FWC-designated rehabilitation facility.
- 5. DEAD SEA TURTLES:** If a dead sea turtle is seen in the intake well, FPL shall:
- a. Immediately contact all personnel listed in Appendix 2 to notify them of the situation.
 - i. Classify the call as an environmental emergency.
 - ii. Be prepared to answer the questions found on the Endangered Species Response Form (Appendix 1).

- iii. Provide the FPDC with information regarding the animal's condition, approximate size, etc.
- b. The Marine Turtle Permit Holder should arrive at PEEC within three hours of notification.
- c. Continue to monitor the intake well every 15 minutes.
- d. The Marine Turtle Permit Holder will handle the animal as required by state and federal regulations. It may be necessary for plant personnel to work closely with the Marine Turtle Permit Holder in order to retrieve the animal.
- e. Only plant personnel shall operate plant equipment (intake rakes, etc).
- f. All normal safety precautions and equipment shall be used.
- g. Depending on the water level and size of the turtle, employ one of the following methods to remove the turtle from the well. Use caution when handling the turtle, so as not to cause post-mortem injuries.
- h. For small turtles that can fit on the rake, carefully lift the turtle ensuring it is situated on the rake in such a manner that it cannot fall off. If needed and feasible, utilize the dip net with a long extension to assist the rake and keep the turtle from coming off the rake.
- i. For larger turtles, unbolt and remove the intake well covers and deploy the Sea Turtle Retrieval Device lowering it with the intake crane. After ensuring the turtle is secure in the device, lift the device with the crane's assistance.
- j. After removing the turtle, place it in an appropriate container provided by the Marine Turtle Permit Holder.
- k. The Marine Turtle Permit Holder will complete a full assessment. All data will be collected and recorded on the STSSN – Stranding Report and the Fibropapilloma Documentation Form (if applicable).
- l. The Marine Turtle Permit Holder notifies FWC via the E-mail Stranding Pager: **seaturtlestranding@myfwc.com**. If there is no response, the Marine Turtle Permit Holder will call the FWC Hotline at 1-888-404-3922.
- m. In consultation with FWC, the Marine Turtle Permit Holder decides if a necropsy is required to determine the cause of death and if the mortality was causal to plant operation or due to another factor that occurred outside of the intake canal. If a necropsy is required, the Marine Turtle Permit Holder will transport or ship the animal to the FWC-designated veterinarian.
- n. The Marine Turtle Permit Holder would be responsible for handling all of the sea turtles at PEEC, unless the immediate removal is essential to the safety of employees or the turtle or reliability of the electric power system. In order for FPL personnel to remove the turtle from the intake well, they must have completed the training provided by the Marine Turtle Permit Holder. If trained, the FPL employee may remove the turtle from the rake and place it in an appropriate container provided by the Marine Turtle Permit Holder. Ambient air temperature will determine the holding location of the container. If outside temperatures stay above 70°F, cover the turtle with a wet towel.
- o. If the ambient temperature is below 70°F but above 60°F, place a dry towel over the turtle.
- p. If ambient temperature is below 60°F, move it indoors.
- q. Once the Marine Turtle Permit Holder arrives at PEEC, the procedures written above will be followed.

6. DOCUMENTATION

- a. The original STSSN – Stranding Report and Fibropapilloma Documentation Form must be mailed to FWC at:
 - Florida STSSN Coordinator
 - Florida Fish and Wildlife Conservation Commission
 - Fish and Wildlife Research Institute

19100 SE Federal Highway
Tequesta, FL 33469

- b. E-mail the Stranding Report to STSSNForm@myfwc.com
- c. If a tagging form is completed in the place of the STSSN – Stranding Report, it must be mailed to FWC at the address provided above.
- d. Make four copies of both the STSSN – Stranding Report, the Tagging Form and the Fibropapilloma Documentation Form. One copy goes to each:
 - i. FPL Juno Environmental Service (JES)
 - ii. FPL PEEC
 - iii. Receiving facility
 - iv. Stranding folder with fax/email confirmation attached (held by the Marine Turtle Permit Holder).
- e. A scanned copy of the Endangered Species Response Form and any photos shall be entered into FPL’s Endangered Species Log. The hard copy shall be returned to the Environmental Lead at PEEC.