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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

PATRICIA Q. WEST

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 110007-EI

AUGUST 1, 2011

**Q. Please state your name and business address.**

A. My name is Patricia Q. West. My business address is 299 First Avenue North, St. Petersburg, FL 33701.

**Q. By whom are you employed and in what capacity?**

A. I am employed by the Environmental Services Section of Progress Energy Florida ("Progress Energy" or "Company") as Manager of Environmental Services / Power Generation Florida.

**Q. What are your responsibilities in that position?**

A. I am responsible for ensuring that environmental technical and regulatory support is provided to the implementation of compliance strategies associated with the environmental requirements for power generation facilities in Florida.

COM 5  
APA 1  
ECR 6  
GCL 1  
RAD 1  
SSC      
ADM      
OPC      
CLK CRPR

1 **Q. Have you previously filed testimony before this Commission in connection**  
2 **with Progress Energy Florida's Environmental Cost Recovery Clause**  
3 **(ECRC)?**

4 A. Yes, I have.

5

6 **Q. Have your duties and responsibilities remained the same since you last filed**  
7 **testimony in this proceeding?**

8 A. Yes.

9

10 **Q. What is the purpose of your testimony?**

11 A. The purpose of my testimony is to explain material variances between the  
12 Estimated/Actual project expenditures and the original cost projections for  
13 environmental compliance costs associated with Above Ground Storage Tank,  
14 Arsenic Groundwater Standard Project, Thermal Discharge Permanent Cooling  
15 Tower Project, Greenhouse Gas Inventory and Reporting Program, and Mercury  
16 Total Maximum Daily Load (TMDL) Project, National Pollutant Discharge  
17 Elimination System (NPDES) Program, and the Maximum Achievable Control  
18 Technology (MACT) Program for the period January 2011 through December  
19 2011. I will also describe the new Cross State Air Pollution Rule (CSAPR)  
20 finalized by the EPA on July 6, 2011.

21

22 **Q. What current PSC-approved projects are you responsible for?**

23 A. I am responsible for Pipeline Integrity Management (Project No. 3);  
24 Aboveground Storage Tank Secondary Containment (Project No. 4), Phase II

1 Cooling Water Intake (Project No. 6), CAIR/CAMR Peaking - Demand (Project  
2 No. 7.2), Arsenic Groundwater Standard (Project No. 8), Underground Storage  
3 Tanks (Project 10), Modular Cooling Towers (Project No. 11), Thermal  
4 Discharge Permanent Cooling Tower (Project No. 11.1), Greenhouse Gas  
5 Inventory and Reporting (Project No. 12), Mercury TMDL (Project No. 13),  
6 Hazardous Air Pollutants (HAPs) ICR Program (Project No. 14), Effluent  
7 Limitation Guidelines Information Collection Request (ICR) Program (Project  
8 No. 15), NPDES Program (Project No.16), and the MACT Program (Project 17).

9

10 **Q. Are you sponsoring any exhibits with your testimony?**

11 A. Yes. I am sponsoring the following exhibits:

- 12 • Exhibit No. \_\_ (PQW-1), which includes a verified Petition for Approval  
13 of Cost Recovery for New Environmental Program and associated  
14 exhibits that PEF filed in this docket on March 11, 2011; and
- 15 • Exhibit No. \_\_ (PQW-2), which includes a verified Petition to Modify  
16 Scope of Existing Environmental Program that PEF filed in this docket  
17 on May 24, 2011.

18

19 **Q. Please explain the variance between the Estimated/Actual project**  
20 **expenditures and the original projections for the Aboveground Storage**  
21 **Tank (AST) Program (Project No. 4) for the period January 2011 to**  
22 **December 2011.**

23 A. PEF is estimating capital expenditures to be \$1,710,094. No expenditures were  
24 originally projected for this program. This variance is primarily driven by the

1 decision to double-bottom an additional existing AST at the DeBary combustion  
2 turbine site. Initially, PEF had planned to only double-bottom only one of the  
3 two tanks at the DeBary site. However, with additional operating experience,  
4 PEF has concluded that it is necessary to keep the second tank operational,  
5 requiring it to be double-bottomed under DEP rules. FPSC Order No. PSC-  
6 1348-FOFO-EI states: "PEF should be allowed to recover costs through the  
7 ECRC for the installation of or upgrades to secondary containment for field-  
8 erected above ground storage tank systems as required by the 1998 amendments  
9 incorporated into Rule 62-761.510 (Table AST, Keynotes W and U), Florida  
10 Administrative Code." These costs are specifically to bring an existing AST up  
11 to the standards indicated above.

12

13 **Q. Please explain the variance between the Estimated/Actual project**  
14 **expenditures and the original projections for the Arsenic Groundwater**  
15 **Standard (Project No. 8) for the period January 2011 to December 2011.**

16 A. PEF is not expecting to spend any dollars on this project in 2011. This is a  
17 reduction from the projected expenditures of \$15,000. This variance is mainly  
18 attributable to the status of PEF's work on this program. Analytical data has  
19 been submitted to FDEP and we are awaiting determination of next steps  
20 associated with assessing groundwater quality at the Crystal River Energy  
21 Complex.

22

23 **Q. Please explain the variance between the Estimated / Actual project**  
24 **expenditures and the original projections for the Thermal Discharge**

1           **Permanent Cooling Tower (Project 11.1) for the period January 2011 and**  
2           **December 2011.**

3    A.    For informational purposes in this filing, PEF has estimated 2011 capital  
4           expenditures of \$14.4 million which is 53% lower than originally projected.  
5           This variance is attributable to the project being on hold due to pending  
6           environmental regulations and the potential impacts they may have on the need  
7           for the new tower. These estimates may be impacted by both the final form of  
8           new environmental regulations, and the repair plan and timing of completing  
9           Crystal River Unit 3 delamination work. Please see Witness Foster's testimony  
10          for further discussion of these costs.

11  
12   **Q.    Please explain the variance between the Estimated / Actual project**  
13          **expenditures and the original projection for the Greenhouse Gas (GHG)**  
14          **Inventory and Reporting Program (Project No. 12).**

15    A.    PEF is expecting O&M expenditures to be \$4,500 or 100% lower for this project  
16          than originally projected. PEF had anticipated the need for contractor support  
17          during the first year of reporting under the EPA's GHG rule due to uncertainty  
18          about use of the required data entry system. The beta version of the data entry  
19          system is now available and PEF no longer expects to need external support.

20  
21   **Q.    Please explain the variance between the Estimated / Actual project**  
22          **expenditures and the original projections for the Mercury TMDL (Project**  
23          **13) for the period January 2011 and December 2011.**

1 A. PEF is projecting O&M expenditures to be \$ 11,663 or 31% higher for this  
2 project in 2011 than originally forecast. This variance is due to the need for  
3 increased contractor support for technical data assessments, primarily additional  
4 air and sediment receptor modeling, as well as additional meetings with the  
5 FDEP.

6  
7 **Q. Is PEF requesting recovery of 2011 costs for any new or modified**  
8 **environmental programs?**

9 A. Yes. Earlier this year, PEF submitted petitions in this docket requesting  
10 Commission approval to recover costs associated with new requirements of  
11 NPDES renewal permits for PEF facilities and PEF's costs related to EPA's new  
12 MACT standard for coal-fired power plants.

13  
14 **Q. Please explain PEF's request for recovery of costs associated with NPDES**  
15 **renewal permit requirements.**

16 A. The Federal Clean Water Act requires all point source discharges to navigable  
17 waters from industrial facilities obtain permits under the NPDES Program. The  
18 Florida Department of Environmental Protection (FDEP) administers the  
19 NPDES program in Florida. PEF's Anclote and Bartow NPDES permits were  
20 issued on January 19, 2011 and February 14, 2011, respectively. Crystal River  
21 South, Crystal River North, and Suwannee plants are all in the process of  
22 renewal in 2011 and will be required to meet new permitting conditions. On  
23 March 11, 2011 PEF petitioned the Commission for approval to recover costs  
24 associated with new requirements included or expected to be included in the

1 new renewal permits. As detailed in the verified Petition, which is provided as  
2 Exhibit No. \_\_\_\_ (PQW-1) to my testimony, the new activities include: thermal  
3 studies, aquatic organism return studies and implementation, whole effluent  
4 toxicity testing, dissolved oxygen studies (Bartow only), and freeboard  
5 limitation related studies (Bartow only).

6

7 **Q. Has the Company projected the costs it will incur for the new programs in**  
8 **2011?**

9 A. Yes. PEF projects \$648,334 of O&M costs in 2011 to perform studies and  
10 evaluation to comply with new permit requirements. This estimate is \$411,666  
11 or approximately 37% less than the estimate provided in PEF's Petition. The  
12 variance is due to the timing of permit issuance being later than originally  
13 expected. In addition, the FDEP has suspended the organism return requirements  
14 contained in the Anclote and Bartow recently-issued NPDES permits until 2012  
15 to allow time for the development of the EPA 316(b) regulation and ensure that  
16 state requirements are consistent with federal requirements.

17

18 **Q. Please explain PEF's request for recovery of costs associated with EPA's**  
19 **new MACT Standards.**

20 A. On May 24, 2011 PEF petitioned the Commission to modify the scope of its  
21 previously approved Integrated Clean Air Compliance Plan following EPA's  
22 May 3, 2011 publication of the Electric Generating Unit (EGU) National  
23 Emission Standards for Hazardous Air Pollutants (NESHAPs) that define  
24 MACT for control of hazardous air pollutant emissions. Adoption of this new

1 rule is expected in early 2012, and will require PEF to modify its Integrated  
2 Clean Air Plan to ensure compliance with new emissions standards.

3

4 As explained in PEF's Petition, which is provided as Exhibit No. \_\_ (PQW-2) to  
5 my testimony, the new requirements of the proposed NESHAP and other  
6 ongoing rulemakings present significant challenges to the utility industry,  
7 requiring substantial analysis and planning to develop and implement cost-  
8 effective compliance measures. As explained in the Petition, PEF plans to  
9 conduct has conducted diagnostic stack testing in order to help inform  
10 development of comments on the proposed rule and the development of  
11 compliance strategies. Upon issuance of the final rule, PEF expects to incur  
12 additional costs in 2012 for detailed engineering and other analyses necessary to  
13 develop compliance strategies for inclusion in an updated Integrated Clean Air  
14 Compliance Plan.

15

16 **Q. Has the Company projected the costs it will incur associated with the**  
17 **MACT rulemaking in 2011?**

18 A. Yes. As stated in its Petition, PEF projects that it will incur \$85,000 of O&M  
19 costs in 2011 on the EGU MACT program to perform air emissions stack  
20 testing.

21

22 **Q. Do the new costs for which PEF seeks recovery qualify for recovery**  
23 **through the ECRC?**



1 A. Yes. As explained in the Petitions included as exhibits to my testimony, costs  
2 for the new costs for which PEF's seeks recovery meet the requirements for  
3 ECRC recovery previously established by the Commission. Specifically, the  
4 expenditures are being prudently incurred after April 13, 1993; the activities are  
5 legally required to comply with a governmentally imposed environmental  
6 requirement which was created, or whose effect was triggered, after the  
7 minimum filing requirements (MFRs) were submitted in PEF's last rate case  
8 (Docket No. 090079-EI); and none of the costs of the new program are being  
9 recovered through base rates or any other cost recovery mechanism.

10

11 **Q. Has the Commission previously approved recovery of costs for similar**  
12 **activities associated with development of environmental compliance**  
13 **measures?**

14 A. Yes.

15

16 **Q. Can you provide an overview of the Cross State Air Pollution Rule**  
17 **(CSAPR) issued by the EPA on July 6, 2011?**

18 A. Yes, I can provide an overview of the Rule and the known impacts. Because  
19 this rule was just issued and is voluminous, PEF is still evaluating its full  
20 impact. CSAPR was created as a replacement for the Clean Air Interstate Rule  
21 (CAIR) due to the Court's decision that found flaws in CAIR but kept CAIR in  
22 place while directing the EPA to issue a replacement rule. On July 6, 2011, the  
23 EPA issued CSAPR which serves as this replacement rule. There are two  
24 known significant impacts of the new rule as described further below.

1 First, CSAPR significantly alters the SO<sub>2</sub> and NO<sub>x</sub> allowance programs. Under  
2 CAIR, Florida was required to comply with the requirements related to annual  
3 emissions of SO<sub>2</sub> and NO<sub>x</sub>, as well as separate requirements regulating NO<sub>x</sub>  
4 emissions during the ozone season. Under CSAPR, Florida is no longer  
5 included in the group of states required to comply with annual emissions  
6 requirements, it is only covered by the ozone season portions of the rule.

7  
8 Second, EPA had previously made the determination that compliance with the  
9 CAIR program equaled compliance with EPA's Best Available Retrofit  
10 Technology (BART) rule requirements for SO<sub>2</sub> and NO<sub>x</sub> at BART affected  
11 utility units. Now that Florida is no longer covered by the annual SO<sub>2</sub> and NO<sub>x</sub>  
12 requirements under CSAPR, compliance with the separate requirements of  
13 BART program will need to be re-evaluated for affected units. The PEF BART  
14 units are Crystal River Units 1 and 2 and Anclote Units 1 and 2.

15

16 **Q. When does compliance with CSAPR become effective for Florida?**

17 A. CSAPR replaces CAIR starting January 1, 2012; the effective compliance start  
18 date for Florida is May 1, 2012 (beginning of ozone season).

19

20 **Q. Can emissions allowances previously issued to utility companies under**  
21 **CAIR and / or the Acid Rain Program be used to comply with CSAPR**  
22 **requirements?**

23 A. No. EPA established that the Acid Rain Program is a separate program with  
24 separate compliance requirements and that CSAPR is a replacement of the

1 current CAIR program. As of January 1, 2012, the emissions allowances under  
2 CAIR will have no value.

3

4 **Q. Are the number of emission allowances allocated to Florida's emission units**  
5 **under CSAPR similar to the number of allowances anticipated based on the**  
6 **proposed version of the Rule?**

7 A. No. The emissions allowances provided to Florida under the final CSAPR are  
8 about one-half of the amounts previously allocated. This may cause challenges  
9 in meeting the compliance levels required, particularly in the early years of the  
10 program. However, the air pollution projects completed at Crystal River Units 4  
11 & 5 under the CAIR, via PEF's Integrated Clean Air Compliance Plan, and the  
12 conversion of the Bartow Units to natural gas are expected to provide some  
13 benefit in addressing these challenges.

14

15 **Q. Does this conclude your testimony?**

16 A. Yes it does.

**BEFORE THE PUBLIC SERVICE COMMISSION**

In re: Environmental Cost Recovery Clause

DOCKET NO. 110007-EI

FILED: MARCH 11, 2011

**PETITION OF PROGRESS ENERGY FLORIDA, INC.  
FOR APPROVAL OF COST RECOVERY FOR  
NEW ENVIRONMENTAL PROGRAM**

Progress Energy Florida, Inc. ("PEF" or "Company"), pursuant to Section 366.8255, Florida Statutes, and Florida Public Service Commission ("Commission") Order Nos. PSC-94-0044-FOF-EI and PSC-99-2513-FOF-EI, hereby petitions the Commission for approval for recovery through the Environmental Cost Recovery Clause ("ECRC") of costs associated with new conditions in the Florida Department of Environmental Protection's ("FDEP's") renewals of National Pollutant Discharge Elimination System ("NPDES) permits for PEF's Anclote, Bartow, Crystal River and Suwannee Plants. In support, PEF states:

**Introduction**

1. **Petitioner.** PEF is a public utility subject to the regulatory jurisdiction of the Commission under Chapter 366, Florida Statutes. The Company's principal offices are located at 299 First Avenue North, St. Petersburg, Florida.
2. **Service.** All notices, pleadings and other communications required to be served on the petitioner should be directed to:

Gary V. Perko  
Hopping Green & Sams, P.A.  
119 S. Monroe St., Suite 300  
P.O. Box 6526 (32314)  
Tallahassee, FL 32301

John T. Burnett  
Associate General Counsel  
Progress Energy Services Co., LLC  
299 First Avenue North, PEF-151  
St. Petersburg, FL 33701

DOCUMENT NUMBER-DATE  
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FPSC-COMMISSION CLERK

3. Cost Recovery Eligibility. PEF will incur costs to comply with new environmental requirements included in renewed NPDES permits issued or to be issued for PEF's Anclote, Bartow, Crystal River and Suwannee Plants. As detailed below, the compliance activities meet the criteria for cost recovery established by the Commission in Order No. PSC-94-0044-FOF-EI in that:

- (a) all expenditures will be prudently incurred after April 13, 1993;
- (b) the activities are legally required to comply with a governmentally imposed environmental regulation that was created, became effective, or whose effect was triggered after the company's last test year upon which rates are based; and
- (c) none of the expenditures are being recovered through some other cost recovery mechanism or through base rates.

The information provided below for each program satisfies the minimum filing requirements established in Part VI of Order No. PSC-99-2513-FOF-EI.

4. Regulatory Requirements & Activities (All Plants). The Federal Clean Water Act requires all point source discharges to navigable waters from industrial facilities require permits under the NPDES program. See 33 U.S.C. § 1342. Pursuant to the U.S. Environmental Protection Agency's ("EPA's") approval, the Florida Department of Environmental Protection ("FDEP") implements the NPDES permitting program in Florida. Affected facilities are required to apply for renewed NPDES permits every five years. Several of PEF's facilities have either just completed or are about to complete the permit renewal process, which involves three steps: (i) issuance of a "Draft" Permit, (ii) followed by issuance of a "Proposed Permit," (iii) followed by issuance of a "Final Permit." At this point, the FDEP has issued a "Final Permit" and associated Administrative Order for PEF's Bartow Plant (Copy attached as Exhibit "A") and

a “Final Permit” for PEF’s Anclote Plant (Copy provided as Exhibit “B”). PEF expects that permit renewal process for its Crystal River and Suwannee Plants will be completed sometime in calendar year 2011. Based on discussions with the FDEP, PEF understands that the following new requirements included in the Bartow and Anclote permits will also be included in the permits for Crystal River and Suwannee Plants:<sup>1</sup>

a. Thermal Studies: The thermal components of PEF’s wastewater discharges are subject to state and federal water quality standards that prohibit “increase in the temperature of the RBW (receiving body of water) so as to cause substantial damage or harm to the aquatic life or vegetation therein or interfere with the beneficial uses assigned to the RBW.” Rule 62-302.520(1)(a), F.A.C. Both the Bartow and Anclote Final Permits include a new condition requiring PEF to conduct a biological assessment of each plant’s thermal plume to monitor compliance with the thermal water quality standard. Biological assessment activities will involve thermal plume delineations and multi-year biological sampling and analysis in the area of the plant discharges. Site-specific monitoring plans of the study will be divided into two phases. Phase I involves monitoring and mapping the extent of the thermal plume for one year. Phase II involves the monitoring of various biological components (seagrass, fish/invertebrates, hard-bottom and soft-bottom sediment habitats) within the thermally impacted areas over 2 more years. See Exhibit “A”, Final Permit, at p.17, Item VI.4 (Bartow); and Exhibit “B”, Final Permit, at p.14, Item VI.4 (Anclote). The FDEP has

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<sup>1</sup> In at least one prior case, the Commission approved recovery of costs for new requirements that a utility expected to be included in a pending NPDES renewal permit. See Order No. PSC-98-1764-FOF-EI, at p. 10, issued in Docket No. 980007-EI, In re: Environmental Cost Recovery Clause (Dec. 31, 1998). In that case, the Commission approved recovery subject to refund if the final permit did not include the expected new requirements. Id.

indicated that similar requirements will be included in the renewed permits for PEF's Crystal River and Suwannee plants.

b. Aquatic Organism Return Studies & Implementation: Section 316(b) of the Clean Water Act, 33 U.S.C. § 1326(b), requires implementation of best technology available (BTA) to protect aquatic organisms from, among other things, impingement of aquatic organisms associated with cooling water intake structures. In 2004, the EPA published its "Phase II" rules for the establishment of BTA for cooling water intake structures at existing power plants. On January 25, 2007, the U.S. Court of Appeals for the Second Circuit struck down several substantive portions of the Phase II rules. In response to the Court's decision, the EPA suspended the relevant parts of the Phase II rules and instructed State permitting authorities that they must establish permit conditions implementing Section 316(b) based on Best Professional Judgment (BPJ). See 72 Fed. Reg. 37107, 37108 (July 9, 2007). Pursuant to that directive, the FDEP included new conditions in both the Bartow and Anclote Final Permits requiring PEF to develop and implement a plan to minimize the impact of cooling tower intake impingement by helping return live fish, shellfish and other aquatic organisms collected on the intake screens to their natural habitat. The plan must be submitted within 12 months of final permit issuance and then implemented within 24 months after FDEP approval of the plan. Development of the plan will involve a biological and engineering evaluation. Implementation may involve significant capital improvements and modification of the cooling water intake structures. See Exhibit "A", Final Permit, at p.4, Condition I.A.10 and p. 17, Condition VI.3 (Bartow); and Exhibit "B", Final Permit, at p.8, Condition I.A.9 and p.14, Condition VI.3 (Anclote). The FDEP has indicated that similar

requirements will be included in the renewed permits for PEF's Crystal River and Suwannee plants.

c. Whole Effluent Toxicity Testing: Since issuance of the prior round of PEF's NPDES permits, the FDEP adopted a new rule establishing limits for chronic whole effluent toxicity ("WET"). See Rule 62-4.241, F.A.C. In accordance with this new regulatory requirement, both the Bartow and Anclote Final Permits include a new condition requiring PEF to conduct quarterly chronic WET testing to evaluate the effects of each plant's effluent on certain aquatic organisms. The requirement to conduct chronic WET testing, which is more stringent than existing acute WET testing requirements, involves laboratory evaluation of the survival and growth of representative fish and shrimp species when exposed to effluent water samples for a determined period of time. See Exhibit "A", Final Permit, at pp. 5-7, Condition I.A.11 (Bartow); and Exhibit "B", Final Permit, at pp. 5-7, Condition I.A.5 (Anclote). The FDEP has indicated that similar requirements will be included in the renewed permits for PEF's Crystal River and Suwannee plants.

5. Additional Regulatory Requirements and Activities (Bartow Plant only): The Final Permit and an associated Administrative Order for PEF's Bartow Plant include the following additional new requirements for which PEF will incur environmental compliance costs:

a. Dissolved Oxygen Study: PEF is required to develop and implement a study of dissolved oxygen ("DO") levels in the Bartow Plant's discharge to ensure compliance with the water quality standard for dissolved oxygen. The study includes at least two years of DO monitoring during the warmer months and various report



submittals. Monitoring will be conducted from boats as well as in situ automated monitoring probes. See Exhibit "A", Final Permit, at p.17, Condition VI.5.

b. Freeboard Limitation and Related Studies: The Final Permit for the Bartow Plant includes new limitations on the freeboard capacity of the facility's percolation basins. See Exhibit "A", Final Permit, at p.15, Condition IV.2. In conjunction with the Final Permit, the FDEP issued an Administrative Order that would provide a compliance schedule to allow the facility time to meet the new freeboard limitations. See Exhibit "A", Administrative Order. The Administrative Order requires PEF to conduct studies to evaluate whether the new freeboard limitations can be met under the existing design and to conduct additional feasibility studies if it is determined that the new limits cannot be met with the existing design . Id. at p.2.

6. No Base Rates Recovery of Program Costs. PEF seeks approval to recover through the ECRC incremental costs incurred to comply with the new requirements of the various NPDES renewal permits and related administrative order(s). None of the costs for which PEF seeks recovery were included in the MFRs that PEF filed in its last ratemaking proceeding in Docket No. 090079-EI. Therefore, the costs are not recovered in PEF's base rates.

7. Cost Estimates. PEF estimates that the total costs complying with the new NPDES permit requirements are approximately \$1,110,000 for the remainder of 2011 and approximately \$430,000 for the 2012. A cost breakdown for the various activities is provided in Confidential Exhibit "C."<sup>2</sup> Costs for the chronic WET testing will recur annually. Costs for

---

<sup>2</sup> As explained in the Request for Confidential Classification submitted contemporaneously with this Petition, projected costs for the specific activities are considered confidential pending completion of competitive bidding and contract negotiations with selected vendors.

implementing the various studies cannot be estimated at this time, but will be submitted for Commission review and approval at the appropriate time in future ECRC filings.

8. Prudence of Expenditures. In order to ensure that the costs incurred to comply with the new NPDES permit requirements are prudent and reasonable, PEF will identify qualified contractors and, when appropriate, will use competitive bidding.

9. No Change in Current ECRC Factors. PEF does not seek to change the ECRC factors currently in effect for 2011. The Company proposes to include in its estimated true-up filing for 2011 estimated program costs incurred subsequent to the filing of this petition through the end of 2011. The Company will include estimated program costs projected for 2012 and beyond in the appropriate projection filings. PEF expects that all of these costs will be subject to audit by the Commission and that the appropriate allocation of program costs will be addressed in connection with the annual ECRC filings.

10. No Material Facts in Dispute. PEF is not aware of any dispute regarding any of the material facts contained in this petition. The information provided in this petition demonstrates that the programs for which approval is requested meets the requirements of Section 366.8255 and applicable Commission orders for recovery through the ECRC.

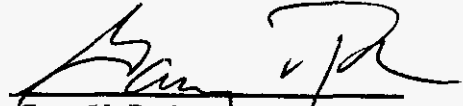
WHEREFORE, Progress Energy Florida, Inc., requests that the Commission approve for recovery through the ECRC all costs reasonably and prudently incurred after the date of this petition in connection with the new NPDES permit requirements described more fully above.

RESPECTFULLY SUBMITTED this 11<sup>th</sup> day of March, 2011.

John T. Burnett  
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PROGRESS ENERGY SERVICE  
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Attorneys for PROGRESS ENERGY FLORIDA, INC.



**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via hand-delivery (\*) or regular U.S. mail this 11<sup>th</sup> day of March, 2011.

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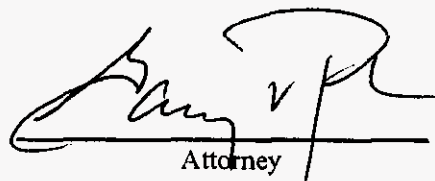
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# Florida Department of Environmental Protection

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2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Rick Scott  
Governor

Jennifer Carroll  
Lt. Governor

Herschel T. Vinyard, Jr.  
Secretary

## NOTICE OF PERMIT

RECEIVED

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

FFR 14 2011

Environmental Services

In the Matter of an  
Application for Permit by:

Progress Energy Florida  
Mr. Thomas Callaghan  
1601 Weedon Island Drive  
St. Petersburg, Florida 33702

PA File No. FL0000132-007-IW1S  
Pinellas County  
Paul L. Bartow Power Plant  
NPDES Permit No. FL0000132

Enclosed is Permit Number FL0000132 to operate the Paul L. Bartow Power Plant, issued under Chapter 403, Florida Statutes.

Monitoring requirements under this permit are effective on the first day of the second month following permit issuance. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any.

Any party to this order (permit) has the right to seek judicial review of the permit action under Section 120.68, Florida Statutes, by the filing of a notice of appeal under Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date when this document is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

Director  
Division of Water Resource Management  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400  
(850) 245-8336

Docket No. 110007-EI  
Progress Energy Florida  
Witness: Patricia Q. West  
Exhibit No. \_\_ (PQW-1)  
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[www.dep.state.fl.us](http://www.dep.state.fl.us)

**EXHIBIT A**



2<sup>nd</sup> AMENDMENT TO THE FACT SHEET  
AT THE TIME OF PERMIT ISSUANCE

DATE: February 2, 2011

PERMIT NUMBER: FL0000132

PERMITTEE: Progress Energy Florida  
Paul L. Bartow Power Plant

**1. Changes to the Proposed Permit**

The following changes include the permittee's requests to revise the Proposed Permit. The permittee requested the changes through correspondence dated January 26, 2011 and February 2, 2011.

Permit:

- a. Page 4, I.A.3. The permittee requested that the description of the monitoring location "EFF-1" be revised to provide a better description of the monitoring location. The Department concurred and the permit was updated to reflect the change.
- b. Page 4, I.A.3. The permittee requested an extension of time for the construction of the dock at the end of the discharge canal and installation of the temperature probes at the end of the dock. The permittee requested an extension of 60 days after receiving the Army Corps of Engineers (ACOE) permit for the installation of the probes and an additional 30 days after the dock installation period to commence monitoring at the new location. The ACOE permit, applied for on November 22, 2010, is required to construct the walkway at the end of the discharge canal and the probes will be installed on the walkway. The Department concurred with the request and included the installation schedule in Section VI of the permit.
- c. Page 4, I.A.5. The permittee requested that the condition be updated to include the approval use restrictions for Spectrus CT1300. The Department concurred and updated the condition to reflect the change.
- d. Page 6, I.A.16. The permittee requested that this condition be deleted as it is duplicative of permit condition I.A.9. The Department concurred and the permit was updated to reflect the change.
- e. Page 10, I.C.7. The permittee requested that because disposal will be handled in accordance with 40 CFR Part 761, and certification is not a requirement of the regulatory provision, that the disposal certification at the end of the condition be removed from the permit. The Department concurred and updated the condition to reflect the change.
- f. Page 15, IV.3. The permittee requested that because Section III.11 of the Administrative Order accompanying the permit already includes the language, that the condition be removed from the permit. The Department concurred that the language was more appropriate in the time frame of the AO and the permit was updated to reflect the change.
- g. Page 16, V.D.1. The permittee requested that the inspection date for 2011 be changed from February 28 to March 31 as there is insufficient time between the issuance date of the permit and the inspection date



in the permit condition to schedule an inspection. The Department concurred and updated the condition to reflect the change.

- h. Page 17, VI.2. The permittee requested that the schedule be changed so that within 45 days of issuance of the permit, the permittee will submit documentation of the location of the staff gauges to the Southwest District Office instead of receiving approval in 45 days. The Department concurred with the request and updated the permit to reflect the change.

Fact Sheet:

Changes as described above to the draft renewal permit are hereby noted as corresponding changes to the fact sheet where applicable.

**2. Comments by USEPA Region IV Requesting Changes to the Draft Permit and Fact Sheet**

No comments were received from EPA regarding the draft permit and fact sheet.

**3. Other Comments**

- a. Page 4, I.A.12. The Southwest District Office requested that the condition be updated to specify that the permittee will collect samples for their multi-sector generic storm water permit (MSGP) prior to commingling with the intake screen wash water. The Department concurred with the request and updated the permit to reflect the change.

**STATE OF FLORIDA  
INDUSTRIAL WASTEWATER FACILITY PERMIT**

**PERMITTEE:**  
Progress Energy Florida

**PERMIT NUMBER:** FL0000132 (Major)  
**FILE NUMBER:** FL0000132-009-IW1S  
**ISSUANCE DATE:** February 4, 2011  
**EXPIRATION DATE:** February 3, 2016

**RESPONSIBLE OFFICIAL:**

Mr. Thomas Callaghan  
Plant Manager

**FACILITY:**

Paul L. Bartow Power Plant  
1601 Weedon Island Drive  
St. Petersburg, FL 33702  
Pinellas County

Latitude: 30° 27' 3.2" N Longitude: 84° 23' 58.92" W

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and applicable rules of the Florida Administrative Code (F.A.C.), and constitutes authorization to discharge to waters of the state under the National Pollutant Discharge Elimination System. This permit is accompanied by an Administrative Order pursuant to paragraphs 403.088(2) (e) and (f), Florida Statutes (F.S.). Compliance with Administrative Order AO-021-TL is a specific requirement of this permit. This permit does not constitute authorization to discharge wastewater other than as expressly stated in this permit. The above named permittee is hereby authorized to operate the facilities in accordance with the documents attached hereto and specifically described as follows:

**FACILITY DESCRIPTION:**

The facility is an electric generating plant with a total nameplate rating of 1504 megawatts (MW). The existing facility consists of a combined cycle unit system, designated as Unit 4, and four simple cycle combustion turbine peaking units. Unit 4 consists of four ("4-on-1") Siemens SGT6-501F gas turbine-electrical generator set. Exhaust from each gas turbine passes through a separate supplementary gas fired heat recovery steam generator (HRSG). Steam from each HRSG is delivered to a single steam turbine-electrical generator. All units are capable of burning a variable combination of natural gas and No. 2 fuel oil.

In addition, the facility has a boiler, referred to as the Bartow-Anclote Pipeline Heating Boiler, to heat fuel oil being transferred from Progress Energy's Bartow Power Plant to its Anclote Power Plant. The boiler is capable of burning a variable combination of natural gas and No. 2 fuel oil.

The facility has a once-through condenser cooling water system that uses water from Old Tampa Bay, a Class II marine water and Outstanding Florida Water (OFW). The once-through condenser cooling water system has a maximum design intake flow of 562 MGD. Once-through and auxiliary equipment cooling water discharges to the discharge canal and then to Tampa Bay.

**WASTEWATER TREATMENT:**

Wastewater from the facility consists of once-through cooling water (OTCW), intake screen wash water, metal cleaning wastes (MCW), and low volume wastes (LVW) which includes boiler blowdown, surface and equipment wash down waste, demineralizer regeneration waste, and reverse osmosis reject. Storm water is discharged from plant areas and diked petroleum storage areas. OTCW, intake screen wash water, and storm water discharge to Old Tampa Bay, a Class II marine water and Outstanding Florida Water (OFW). MCW and LVW are treated by neutralization and oil separation, as necessary, and discharged to ground water via the onsite percolation basin system.

The facility produces demineralized water onsite for heat recovery steam generators (HRSG) feedwater make-up, injection into the combustion turbines for nitrogen oxide emission control when operating with fuel oil, power augmentation when requested, and compressor cleaning as needed. The permittee rents or leases demineralizing trailers to treat raw water supplied to the site by the City of St. Petersburg municipal water treatment plant. The treatment process includes reverse osmosis (RO) equipment and a mixed bed polisher. The produced demineralized water is stored in two storage tanks prior to

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FACILITY: Paul L. Bartow Power Plant

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EXPIRATION DATE: February 3, 2016

use. The RO reject commingles with the HRSG blowdown prior to discharging into the existing onsite percolation basin system. On average, flows range from 20 to 250 gallons per minute, depending on facility operations and demineralized water requirements.

**EFFLUENT DISPOSAL:**

**Storm Water Discharges:** Storm water discharges from Outfalls D-009, D-100, D-200, D-300, D-400, D-500, and D-600 are authorized under a separate Department-issued Multi-Sector General Permit, permit number FLR05G904-001 et seq.

**Surface Water Discharge D-001:** An existing discharge of once-through cooling water and auxiliary equipment cooling water to Tampa Bay, Class II Waters (WBID 1656). The point of discharge is located approximately at latitude 27° 51' 52.7" N, longitude 82° 36' 36.9" W.

**Surface Water Discharge D-009:** Existing discharges consisting of storm water and intake screen wash water to Tampa Bay, Class II Waters (WBID 1656). The point of discharge is located approximately at latitude 27° 51' 31" N, longitude 82° 3' 55.9" W.

**Land Application G-001:** An existing land application system consisting of a percolation basins located approximately at latitude 27° 51' 30.8" N, longitude 82° 36' 7.8" W

**IN ACCORDANCE WITH:** The limitations, monitoring requirements and other conditions set forth in this Cover Sheet and Part I through Part IX on pages 1 through 26 of this permit.

Docket No. 110007-EI  
Progress Energy Florida  
Witness: Patricia Q. West  
Exhibit No.\_\_(PQW-1)  
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**I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

**A. Surface Water Discharges**

1. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge once-through non-contact cooling water and auxiliary equipment cooling water from **Outfall D-001** to Tampa Bay. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.C.3.

Parameter	Units	Max/Min	Effluent Limitations		Monitoring Requirements			Notes
			Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	
Flow	MGD	Max Max	Report Report	Daily Maximum Monthly Average	Continuous	Pump timer & Curves	FLW-1	
Temperature, Water	Deg F	Max Max	Report Report	Monthly Average Daily Maximum	Continuous	Recorder <sup>1</sup>	EFF-1	
Temperature, Water (Intake)	Deg F	Max Max	Report Report	Monthly Average Daily Maximum	Continuous	Recorder <sup>1</sup>	INT-1	
Temperature Rise (ΔT), Water	Deg F	Max Max	Report Report	Monthly Average Daily Maximum	Continuous	Calculated	EFF-1	
Turbidity	NTU	Max Max	Report Report	Monthly Average Daily Maximum	Quarterly	Grab	EFF-1	See I.A.3
Turbidity (Background)	NTU	Max Max	Report Report	Monthly Average Daily Maximum	Quarterly	Grab	INT-1	See I.A.3
pH	s.u.	Max Min	8.5 6.0	Daily Maximum Daily Minimum	Quarterly	Grab	EFF-1	See I.A.8
		Max	Report	Single Sample	Quarterly	Grab	INT-1	
Temperature, Water	Deg C	Max Max	Report Report	Single Sample Single Sample	Quarterly	Grab	EFF-1 INT-1	See I.A.8
Nitrogen, Ammonia, Total (as N)	mg/L	Max Max	Report Report	Single Sample Single Sample	Quarterly	Grab	EFF-1 INT-1	See I.A.8
Ammonia, Total Unionized (as NH <sub>3</sub> )	mg/L	Max Max	Report Report	Single Sample Single Sample	Quarterly	Calculated	EFF-1 INT-1	See I.A.8
Nitrogen, Kjeldahl, Total (as N)	mg/L	Max Max	Report Report	Single Sample Single Sample	Quarterly	Grab	EFF-1 INT-1	
Nitrite plus Nitrate, Total (det. as N)	mg/L	Max Max	Report Report	Single Sample Single Sample	Quarterly	Grab	EFF-1 INT-1	
Nitrogen, Total	mg/L	Max Max	Report Report	Single Sample Single Sample	Quarterly	Grab	EFF-1 INT-1	
Phosphorus, Total (as P)	mg/L	Max Max	Report Report	Single Sample Single Sample	Quarterly	Grab	EFF-1 INT-1	
Phosphate, Ortho (as PO <sub>4</sub> )	mg/L	Max Max	Report Report	Single Sample Single Sample	Quarterly	Grab	EFF-1 INT-1	
Chronic Whole Effluent Toxicity, 7-Day IC25 (Mysidopsis Bahia)	percent	Min	100	Single Sample	Quarterly	24-hr Composite	EFF-1	See I.A.11
Chronic Whole Effluent Toxicity, 7-Day IC25 (Mendia beryllina)	percent	Min	100	Single Sample	Quarterly	24-hr Composite	EFF-1	See I.A.11

2. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.A.1. and as described below:

<sup>1</sup> Flow meters and thermometers shall be calibrated at least once a year in accordance with the manufacturer recommendations. Calibration records shall be maintained on-site in accordance with Section V.A of this permit.

Monitoring Site Number	Description of Monitoring Site
FLW-1	Flow calculation for Outfall D-001
EFF-1	Condenser outlet of once-through cooling water system (pre-construction of the new dock); new dock at the end of discharge canal (post-construction of the new dock see Permit Condition VI.2).
INT-1	After the debris filter and prior to the water box inlet.

3. The limit for "Turbidity" shall be calculated as follows:

$$\text{Limit} = \text{Background Turbidity} + 29 \text{ NTU}$$

The measured effluent value shall be recorded on the DMR in the parameter row for "Turbidity (effluent)." The measured background value shall be recorded on the DMR in the parameter row for "Turbidity (background)." The calculated effluent limit shall be recorded on the DMR in the parameter row for "Turbidity (calculated limit)." Compliance with the effluent limitation is determined by calculating the difference between the measured effluent value and the calculated. The compliance value shall be recorded on the DMR in the parameter row for "Turbidity (effluent minus calculated limit)." The compliance value shall not exceed 0.00.

[62-302.530(69)]

4. The permittee is authorized to add FoamTrol AF3561, at a maximum dosing rate of 1.0 mg/L, to the once-through cooling water. The permittee shall maintain records onsite for each application in accordance with Section V.A of this permit.
5. The permittee is authorized to discharge Spectrus CT1300 from the once-through cooling water system for not more than six hours in any one day and not more frequently than once every four days. No more than one condenser shall discharge Spectrus CT1300 at any given time. At a minimum, an equal number of pumps on the non-treated condenser as the treated condenser shall be operated during treatment with Spectrus CT1300. The dosage rate shall not exceed 3.0 mg/L and the effluent concentration at monitoring location EFF-1 shall be non-detect. The permittee shall maintain records onsite for each application in accordance with Section V.A of this permit.
6. The permittee shall not add chlorine or bromine-based products to either the once-through or the auxiliary equipment cooling water without Department approval.
7. The permittee shall not add nitrogen or phosphorous containing products to either the once-through or the auxiliary equipment cooling water without Department approval.
8. Samples for pH and temperature (grab) shall be taken simultaneously with each total ammonia grab sample. Un-ionized ammonia shall be calculated in accordance with the procedure provided by the Department (refer to the website [www.dep.state.fl.us/labs/library/index.htm](http://www.dep.state.fl.us/labs/library/index.htm)). All measured values for pH, temperature, and total ammonia used to calculate an un-ionized ammonia value shall be reported as an attachment to the Discharge Monitoring Report (DMR). All calculated un-ionized ammonia values shall be reported on the attachment. The daily maximum and monthly average values for un-ionized ammonia for each reporting period shall be reported on the DMR.
9. The permittee shall maintain the current intake through-screen velocity such that the existing maximum velocity is not exceeded.
10. The permittee shall develop a plan in accordance with the schedule in Condition VI.3 to help return live fish, shellfish, and other aquatic organisms collected or trapped on the intake screens to their natural habitat. Other material shall be removed from the intake screens and disposed of in accordance with all existing Federal, State and/or Local laws and regulations that apply to waste disposal. Such material shall not be returned to the receiving waters.

PERMITTEE: Progress Energy Florida  
FACILITY: Paul L. Bartow Power Plant

PERMIT NUMBER: FL0000132 (Major)  
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11. The permittee shall comply with the following requirements to evaluate chronic whole effluent toxicity of the discharge from Outfall D-001 when a chemical additive (see Permit Conditions I.A.4 and 5) is present.
- a. Effluent Limitation
- (1) In any routine or additional follow-up test for chronic whole effluent toxicity, the 25 percent inhibition concentration (IC25) shall not be less than 100% effluent. [Rules 62-302.530(61) and 62-4.241(1)(b), F.A.C.]
  - (2) For acute whole effluent toxicity, the 96-hour LC50 shall not be less than 100% effluent in any test. [Rules 62-302.500(1)(a)4. and 62-4.241(1)(a), F.A.C.]
- b. Monitoring Frequency
- (1) Routine toxicity tests shall be conducted once every three months, the first starting within 60 days of the issuance date of this permit and lasting for the duration of this permit.
  - (2) Upon completion of four consecutive, valid routine tests that demonstrate compliance with the effluent limitation in 11.a.(1) above, the permittee may submit a written request to the Department for a reduction in monitoring frequency to once every six months. The request shall include a summary of the data and the complete bioassay laboratory reports for each test used to demonstrate compliance. The Department shall act on the request within 45 days of receipt. Reductions in monitoring shall only become effective upon the Department's written confirmation that the facility has completed four consecutive valid routine tests that demonstrate compliance with the effluent limitation in 11.a.(1) above.
  - (3) If a test within the sequence of the four is deemed invalid based on the acceptance criteria in EPA-821-R-02-014, but is replaced by a repeat valid test initiated within 21 days after the last day of the invalid test, the invalid test will not be counted against the requirement for four consecutive valid tests for the purpose of evaluating the reduction of monitoring frequency.
- c. Sampling Requirements
- (1) For each routine test or additional follow-up test conducted, a total of three 24-hour composite samples of final effluent shall be collected and used in accordance with the sampling protocol discussed in EPA-821-R-02-014, Section 8.
  - (2) The first sample shall be used to initiate the test. The remaining two samples shall be collected according to the protocol and used as renewal solutions on Day 3 (48 hours) and Day 5 (96 hours) of the test.
  - (3) Samples for routine and additional follow-up tests shall not be collected on the same day.
- d. Test Requirements
- (1) Routine Tests: All routine tests shall be conducted using a control (0% effluent) and a minimum of five test dilutions: 100%, 50%, 25%, 12.5%, and 6.25% final effluent.
  - (2) The permittee shall conduct 7-day survival and growth chronic toxicity tests with a mysid shrimp, *Americamysis bahia*, Method 1007.0, and an inland silverside, *Menidia beryllina*, Method 1006.0, concurrently.
  - (3) All test species, procedures and quality assurance criteria used shall be in accordance with Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, 3rd Edition, EPA-821-R-02-014. Any deviation of the bioassay procedures outlined herein shall be submitted in writing to the Department for review and approval prior to use. In the event the above method is revised, the permittee shall conduct chronic toxicity testing in accordance with the revised method.
  - (4) The control water and dilution water used shall be artificial sea salts as described in EPA-821-R-02-014, Section 7.2. The test salinity shall be determined as follows:
    - (a) For the *Americamysis bahia* bioassays, the effluent shall be adjusted to a salinity of 20 parts per thousand (ppt) with artificial sea salts. The salinity of the control/dilution water (0% effluent) shall be 20 ppt. If the salinity of the effluent is greater than 20 ppt, no salinity adjustment shall be made to the effluent and the test shall be run at the effluent salinity. The salinity of the control/dilution water shall match the salinity of the effluent.
    - (b) For the *Menidia beryllina* bioassays, if the effluent salinity is less than 5ppt, the salinity shall be adjusted to 5 ppt with artificial sea salts. The salinity of the control/dilution water (0% effluent) shall be 5 ppt. If the salinity of the effluent is greater than 5 ppt, no salinity adjustment shall be made to the effluent and the test shall be run at the effluent salinity. The salinity of the control/dilution water shall match the salinity of the effluent.

PERMITTEE: Progress Energy Florida  
FACILITY: Paul L. Bartow Power Plant

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- (c) If the salinity of the effluent requires adjustment, a salinity adjustment control should be prepared and included with each bioassay. The salinity adjustment control is intended to identify toxicity resulting from adjusting the effluent salinity with artificial sea salts. To prepare the salinity adjustment control, dilute the control/dilution water to the salinity of the effluent and adjust the salinity of the salinity adjustment control at the same time and to the same salinity that the salinity of the effluent is adjusted using the same artificial sea salts.
- e. Quality Assurance Requirements
- (1) A standard reference toxicant (SRT) quality assurance (QA) chronic toxicity test shall be conducted with each species used in the required toxicity tests either concurrently or initiated no more than 30 days before the date of each routine or additional follow-up test conducted. Additionally, the SRT test must be conducted concurrently if the test organisms are obtained from outside the test laboratory unless the test organism supplier provides control chart data from at least the last five monthly chronic toxicity tests using the same reference toxicant and test conditions. If the organism supplier provides the required SRT data, the organism supplier's SRT data and the test laboratory's monthly SRT-QA data shall be included in the reports for each companion routine or additional follow-up test required.
  - (2) If the mortality in the control (0% effluent) exceeds 20% for either species in any test or any test does not meet "test acceptability criteria", the test for that species (including the control) shall be invalidated and the test repeated. Test acceptability criteria for each species are defined in EPA-821-R-02-014, Section 14.12 (*Americamysis bahia*) and Section 13.12 (*Menidia beryllina*). The repeat test shall begin within 21 days after the last day of the invalid test.
  - (3) If 100% mortality occurs in all effluent concentrations for either species prior to the end of any test and the control mortality is less than 20% at that time, the test (including the control) for that species shall be terminated with the conclusion that the test fails and constitutes non-compliance.
  - (4) Routine and additional follow-up tests shall be evaluated for acceptability based on the observed dose-response relationship as required by EPA-821-R-02-014, Section 10.2.6., and the evaluation shall be included with the bioassay laboratory reports.
- f. Reporting Requirements
- (1) Results from all required tests shall be reported on the Discharge Monitoring Report (DMR) as follows:
    - (a) Routine and Additional Follow-up Test Results: The calculated IC25 for each test species shall be entered on the DMR.
  - (2) A bioassay laboratory report for each routine test shall be prepared according to EPA-821-R-02-014, Section 10, Report Preparation and Test Review, and mailed to the Department at the address below within 30 days after the last day of the test.
  - (3) For additional follow-up tests, a single bioassay laboratory report shall be prepared according to EPA-821-R-02-014, Section 10, and mailed within 30 days after the last day of the second valid additional follow-up test.
  - (4) Data for invalid tests shall be included in the bioassay laboratory report for the repeat test.
  - (5) The same bioassay data shall not be reported as the results of more than one test.
  - (6) All bioassay laboratory reports shall be sent to:

Florida Department of Environmental Protection  
Southwest District  
13051 N. Telecom Parkway  
Temple Terrace, Florida 33637
- g. Test Failures
- (1) A test fails when the test results do not meet the limits in 11.a.(1).
  - (2) Additional Follow-up Tests:
    - (a) If a routine test does not meet the chronic toxicity limitation in 11.a.(1) above, the permittee shall notify the Department at the address above within 21 days after the last day of the failed routine test and conduct two additional follow-up tests on each species that failed the test in accordance with 11.d.
    - (b) The first test shall be initiated within 28 days after the last day of the failed routine test. The remaining additional follow-up tests shall be conducted weekly thereafter until a total of two valid additional follow-up tests are completed.

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- (c) The first additional follow-up test shall be conducted using a control (0% effluent) and a minimum of five dilutions: 100%, 50%, 25%, 12.5%, and 6.25% effluent. The permittee may modify the dilution series in the second additional follow-up test to more accurately bracket the toxicity such that at least two dilutions above and two dilutions below the target concentration and a control (0% effluent) are run. All test results shall be analyzed according to the procedures in EPA-821-R-02-014.
- (3) In the event of three valid test failures (whether routine or additional follow-up tests) within a 12-month period, the permittee shall notify the Department within 21 days after the last day of the third test failure.
- (a) The permittee shall submit a plan for correction of the effluent toxicity within 60 days after the last day of the third test failure.
- (b) The Department shall review and approve the plan before initiation.
- (c) The plan shall be initiated within 30 days following the Department's written approval of the plan.
- (d) Progress reports shall be submitted quarterly to the Department at the address above.
- (e) During the implementation of the plan, the permittee shall conduct quarterly routine whole effluent toxicity tests in accordance with 11.d. Additional follow-up tests are not required while the plan is in progress. Following completion or termination of the plan, the frequency of monitoring for routine and additional follow-up tests shall return to the schedule established in 11.b.(1). If a routine test is invalid according to the acceptance criteria in EPA-821-R-02-014, a repeat test shall be initiated within 21 days after the last day of the invalid routine test.
- (f) Upon completion of four consecutive quarterly valid routine tests that demonstrate compliance with the effluent limitation in 11.a.(1) above, the permittee may submit a written request to the Department to terminate the plan. The plan shall be terminated upon written verification by the Department that the facility has passed at least four consecutive quarterly valid routine whole effluent toxicity tests. If a test within the sequence of the four is deemed invalid, but is replaced by a repeat valid test initiated within 21 days after the last day of the invalid test, the invalid test will not be counted against the requirement for four consecutive quarterly valid routine tests for the purpose of terminating the plan.
- (4) If chronic toxicity test results indicate greater than 50% mortality within 96 hours in an effluent concentration equal to or less than the effluent concentration specified as the acute toxicity limit in 11.(a)(2), the Department may revise this permit to require acute definitive whole effluent toxicity testing.
- (5) The additional follow-up testing and the plan do not preclude the Department taking enforcement action for acute or chronic whole effluent toxicity failures.

*[62-4.241, 62-620.620(3)]*

12. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge storm water and intake screen wash water from Outfall D-009. Discharge of intake screen wash water and storm water is permitted without monitoring requirements provided the permittee collects samples for storm water as required under storm water MSGP Permit number FLR05G904-001 et seq. prior to comingling with the intake screen wash water.
13. The permittee shall not add any chemicals to the intake screen wash water.
14. No surface water discharge from this facility shall contain components that settle to form putrescent deposits or float as debris, scum, oil, or other matter. *[62-302.500(1)(a)]*

#### **B. Land Application Systems**

1. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge low volume wastes (including boiler blowdown, reverse osmosis reject water, surface and equipment wash down waste, and demineralizer regeneration waste) and metal cleaning wastewater to Land Application System G-001. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.C.3.



Parameter	Units	Max/ Min	Effluent Limitations		Monitoring Requirements			Notes
			Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	
Flow	MGD	Max Max	Report Report	Monthly Average Daily Maximum	Continuous	Meter <sup>2</sup>	FLW-7	
Temperature, Water	Deg F	Max	Report	Daily Maximum	Quarterly	Grab	EFF-7	
pH	s.u.	Max Min	Report Report	Daily Maximum Daily Minimum	Quarterly	In-situ	EFF-7	
Solids, Total Suspended	mg/L	Max	Report	Daily Maximum	Quarterly	24-hr TPC	EFF-7	
Specific Conductance	umhos/cm	Max	Report	Daily Maximum	Quarterly	In-situ	EFF-7	
Aluminum, Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	24-hr TPC	EFF-7	
Arsenic, Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	24-hr TPC	EFF-7	
Chromium, Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	24-hr TPC	EFF-7	
Iron, Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	24-hr TPC	EFF-7	
Magnesium, Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	24-hr TPC	EFF-7	
Nickel, Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	24-hr TPC	EFF-7	
Sodium, Total Recoverable	mg/L	Max	Report	Daily Maximum	Quarterly	24-hr TPC	EFF-7	
Alpha, Gross Particle Activity	pCi/L	Max	Report	Daily Maximum	Quarterly	24-hr TPC	EFF-7	
Radium 226 + Radium 228, Total	pCi/L	Max	Report	Daily Maximum	Quarterly	24-hr TPC	EFF-7	

2. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.B.1 and as described below:

Monitoring Site Number	Description of Monitoring Site
FLW-7	At the flow meters.
EFF-7	Effluent prior to discharge into the pond.

**C. Other Limitations and Monitoring and Reporting Requirements**

1. The sample collection, analytical test methods, and method detection limits (MDLs) applicable to this permit shall be conducted using a sufficiently sensitive method to ensure compliance with applicable water quality standards and effluent limitations and shall be in accordance with Rule 62-4.246, Chapters 62-160 and 62-601, F.A.C., and 40 CFR 136, as appropriate. The list of Department established analytical methods, and corresponding MDLs (method detection limits) and PQLs (practical quantitation limits), which is titled "FAC 62-4 MDL/PQL Table (April 26, 2006)" is available at <http://www.dep.state.fl.us/labs/library/index.htm>. The MDLs and PQLs as described in this list shall constitute the minimum acceptable MDL/PQL values and the Department shall not accept results for which the laboratory's MDLs or PQLs are greater than those described above unless alternate MDLs and/or PQLs have been specifically approved by the Department for this permit. Any method included in the list may be used for reporting as long as it meets the following requirements:
  - a. The laboratory's reported MDL and PQL values for the particular method must be equal or less than the corresponding method values specified in the Department's approved MDL and PQL list;
  - b. The laboratory reported MDL for the specific parameter is less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Parameters that are listed as "report only" in the permit shall use methods that provide an MDL, which is equal to or less than the applicable water quality criteria stated in 62-302, F.A.C.; and
  - c. If the MDLs for all methods available in the approved list are above the stated permit limit or applicable water quality criteria for that parameter, then the method with the lowest stated MDL shall be used.

<sup>2</sup> Flow meters shall be calibrated at least once a year in accordance with the manufacturer recommendations. Calibration records shall be maintained on-site in accordance with Condition V.A.2 of this permit.

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When the analytical results are below method detection or practical quantitation limits, the permittee shall report the actual laboratory MDL and/or PQL values for the analyses that were performed following the instructions on the applicable discharge monitoring report.

Where necessary, the permittee may request approval of alternate methods or for alternative MDLs or PQLs for any approved analytical method. Approval of alternate laboratory MDLs or PQLs are not necessary if the laboratory reported MDLs and PQLs are less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Approval of an analytical method not included in the above-referenced list is not necessary if the analytical method is approved in accordance with 40 CFR 136 or deemed acceptable by the Department. [62-4.246, 62-160]

2. The permittee shall provide safe access points for obtaining representative influent and effluent samples which are required by this permit. [62-620.320(6)]
3. Monitoring requirements under this permit are effective on the first day of the second month following permit issuance. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any. During the period of operation authorized by this permit, the permittee shall complete and submit to the Department Discharge Monitoring Reports (DMRs) in accordance with the frequencies specified by the REPORT type (i.e. monthly, toxicity, quarterly, semiannual, annual, etc.) indicated on the DMR forms attached to this permit. Monitoring results for each monitoring period shall be submitted in accordance with the associated DMR due dates below.

REPORT Type on DMR	Monitoring Period	Due Date
Monthly or Toxicity	first day of month - last day of month	28 <sup>th</sup> day of following month
Quarterly	January 1 - March 31	April 28
	April 1 - June 30	July 28
	July 1 - September 30	October 28
	October 1 - December 31	January 28
Semiannual	January 1 - June 30	July 28
	July 1 - December 30	January 28
Annual	January 1 - December 31	January 28

DMRs shall be submitted for each required monitoring period including months of no discharge. The permittee may submit either paper or electronic DMR form(s). If submitting paper DMR form(s), the permittee shall make copies of the attached DMR form(s). If submitting electronic DMR form(s), the permittee shall use a Department-approved electronic DMR system.

The electronic submission of DMR forms shall be accepted only if approved in writing by the Department. For purposes of determining compliance with this permit, data submitted in electronic format is legally equivalent to data submitted on signed and certified DMR forms.

The permittee shall submit the completed DMR form(s) to the Department by the twenty-eighth (28th) of the month following the month of operation at the addresses specified below:

Florida Department of Environmental Protection  
Wastewater Compliance Evaluation Section, Mail Station 3551  
Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

And

Florida Department of Environmental Protection  
Southwest District  
13051 N. Telecom Parkway  
Temple Terrace, Florida 33637

[62-620.610(18)]

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4. Unless specified otherwise in this permit, all reports and other information required by this permit, including 24-hour notifications, shall be submitted to or reported to, as appropriate, the Department's Southwest District Office at the address specified below:

Florida Department of Environmental Protection  
Southwest District  
13051 N. Telecom Parkway  
Temple Terrace, Florida 33637

Phone Number - (813) 632-7600

FAX Number - (813) 632-7665 (All FAX copies and e-mails shall be followed by original copies.)

[62-620.305]

5. All reports and other information shall be signed in accordance with the requirements of Rule 62-620.305, F.A.C. [62-620.305]
6. If there is no discharge from the facility on a day when the facility would normally sample, the sample shall be collected on the day of the next discharge. [62-620.320(6)]
7. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid. The permittee shall dispose of all known PCB equipment, articles, and wastes in accordance with 40 CFR 761.
8. Discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which ultimately may be released to waters of the State is prohibited unless specifically authorized elsewhere in this permit. This requirement is not applicable to products used for lawn and agricultural purposes or to the use of herbicides if used in accordance with labeled instructions and any applicable State permit.

A permit revision from the Department shall be required prior to the use of any biocide or chemical additive used in the cooling system or any other portion of the treatment system which may be toxic to aquatic life. The permit revision request shall include:

- a. Name and general composition of biocide or chemical
- b. Frequencies of use
- c. Quantities to be used
- d. Proposed effluent concentrations
- e. Acute and/or chronic toxicity data (laboratory reports shall be prepared according to Section 12 of EPA document no. EPA-821-R-02-012 EP entitled, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters for Freshwater and Marine Organisms, or most current addition.)
- f. Product data sheet
- g. Product label

The Department shall review the above information to determine if a major or minor permit revision is necessary. Discharge associated with the use of such biocide or chemical is not authorized without a permit revision by the Department. Permit revisions shall be processed in accordance with the requirements of Chapter 62-620, F.A.C.

9. The permittee shall report the following each month for each application of all Department-approved biocides and chemical additives used in the cooling system or any other portion of the treatment system which may be toxic to aquatic life:
- a. the date of each application;
  - b. the quantity added to each cooling system or any other portion of the treatment system; and
  - c. the number of applications each week.

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10. Discharge of any waste resulting from the combustion of toxic, hazardous, or metal cleaning wastes to any waste stream which ultimately discharges to waters of the State is prohibited, unless specifically authorized elsewhere in this permit.
11. The permittee shall not store coal, soil, or other similar erodible materials in a manner in which runoff is uncontrolled, or conduct construction activities in a manner which produces uncontrolled runoff.
12. Unless otherwise specifically permitted in this permit, there shall be no point source discharges of any wastes to waters of the State, or to any waste stream which enters such waters. The permittee shall operate and maintain loading and unloading facilities in such a manner in order to preclude spillage of coal, chemicals, etc., used at the facility, and shall take all actions necessary to clean-up and control any such spill which may occur.
13. Any water drained from the fuel oil storage tanks or other water which meets the definition of "Petroleum Contact Water" as defined in Rule 62-740.030(1), F.A.C., shall be disposed at a Department-approved facility in accordance with Chapter 62-740, F.A.C.
14. The permittee shall develop a Plan of Study (POS) pursuant to the schedule in Permit Condition VI.5., including implementation schedule, to evaluate the concentrations of dissolved oxygen (DO) in the cooling water intake and discharge. The POS shall incorporate quarterly summary reports.

## II. SLUDGE MANAGEMENT REQUIREMENTS

1. The permittee shall be responsible for proper treatment, management, use, and disposal of its sludges. *[62-620.320(6)]*
2. Storage, transportation, and disposal of sludge/solids characterized as hazardous waste shall be in accordance with requirements of Chapter 62-730, F.A.C. *[62-730]*
3. Vegetation and materials removed from intake screens and vegetation, sediments and sludge excavated from the settling basins and percolation basins must be properly stored onsite until they are disposed in accordance with requirements in Chapter 62-701, F.A.C., and other applicable State and Federal requirements.

## III. GROUND WATER REQUIREMENTS

### A. Decommission Requirements

1. Ground water monitoring wells designated as MW-1, MW-2, MW-5, MW-7 and MW 8 shall be removed from the Ground Water Monitoring Plan (GWMP). Within 45 days of permit issuance, the permittee shall properly plug and abandon these monitoring wells in accordance with Rule 62-532.500(4), F.A.C.
2. Within 30 days of plugging ground water monitor wells, the Department requests that the permittee submit the following information for each monitor well:
  - a. A copy of the Florida Water Management District (WMD), State of Florida Permit Application to Construct, Repair, Modify or Abandon a Well, Form LEG-R.040.00, and
  - b. Any other applicable WMD documentation

*[62-532.600(6)(k)]*

### B. Construction Requirements

1. The permittee shall construct a replacement ground water monitoring well for MWC-6 (replacement for MW-6) as depicted in the Groundwater Monitoring Plan dated October 27, 2010. The following requirements apply to the construction of the well:
  - a. New monitoring well (MWC-6) shall be located adjacent to the existing MW-6; and
  - b. screen depth shall be no deeper than necessary to intercept the seasonal low ground water table; and

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- c. screen interval shall be no greater than 10 feet in length; and
  - d. the bottom of the monitoring well shall be above the highest tide elevation; and
  - e. original MW-6 shall be properly plugged and abandoned in accordance with Rule 62-532.500(4), F.A.C.
2. The permittee shall construct ground water monitoring well MWC-9 as described in the Groundwater Monitoring Plan dated October 27, 2010. The following requirements apply to the construction of the well:
    - a. screen depth shall be no deeper than necessary to intercept the seasonal low ground water table; and
    - b. screen interval shall be no greater than 10 feet in length; and
    - c. the bottom of the monitoring well shall be above the highest tide elevation.
  3. The permittee shall give at least 72-hours notice to the Department's Southwest District Office, prior to the installation of any monitoring wells detailed in this permit. *[62-620.320(6) and 62-520.600(6)(h)]*
  4. Prior to construction of new ground water monitoring wells, a soil boring shall be made at each new monitoring well location in order to establish the well depth and screen interval. *[62-520.900(3)]*
  5. Within 30 days after installation of a monitoring well, the permittee shall submit to the Department's Southwest District Office detailed information on the well's location and construction on the attached DEP Form(s) 62-520.900(3), Monitor Well Completion Report. *[62-520.600(6)(j)]*
  6. Within 60 days after completion of construction of the ground water monitoring wells, a properly scaled figure depicting monitor well locations (active and abandoned) with identification numbers shall be submitted. The figure shall also include (or attach) the monitoring well, top of casing, and ground surface elevations referenced to National Geodetic Vertical Datum (NGVD) of 1929 to the nearest 0.01 foot, along with monitor well location latitude and longitude to the nearest 0.1 second. *[62-520.600(6)(i)]*
  7. In Districts where applicable, within 30 days of completion of construction of new ground water monitor wells, the Department requests that the permittee submit the following information for each monitor well:
    - a. A copy of the Florida Water Management District (WMD), State of Florida Permit Application to Construct, Repair, Modify or Abandon a Well, Form LEG-R.040.00, and
    - b. A copy of the WMD Well Completion Report, Form LEG-R.005.01*[62-520.600(6)(j)]*
  8. Within 30 days of installation of all new wells, the permittee shall sample all new ground water monitoring wells for the Primary and Secondary Drinking Water parameters included in Rule 62-550, Florida Administrative Code, Public Drinking Water Systems (excluding asbestos, acrylamide, Dioxin, butachlor, epichlorohydrin, pesticides, and PCBs, unless reasonably expected to be a constituent of the discharge or an artifact of the site). In addition, volatile organics and extractable semivolatile organics shall be analyzed. Results of this sampling shall be submitted to the Department within 60 days after sampling. *[62-520.600]*

### C. Operational Requirements

1. During the period of operation authorized by this permit, the permittee shall continue to sample ground water at the existing monitoring wells identified in item III.C.2 below, in accordance with this permit and the approved ground water monitoring plan prepared in accordance with Rule 62-520.600, F.A.C. Within 90 days of placing the new or modified wastewater facility into operation, or installation of new monitoring wells, whichever occurs sooner, the permittee shall begin sampling ground water at the new monitoring wells identified in item III.C.2 below in accordance with this permit and the approved ground water monitoring plan. *[62-520.600]*
2. The following monitoring wells shall be sampled for Groundwater Monitoring Plan:

Monitoring Well ID	Alternate Well Name and/or Description of Monitoring Location	Depth (Feet)	Aquifer Monitored	New or Existing
MWB-3 (Former MW-3)	Background Well located at northern end of the site	20.0	Surficial	Existing
MWI-4 (Former MW-4A)	Intermediate Well located west of Pond 1C (aka Pond 2N)	22.0	Surficial	Existing
MWC-6 (replacement for MW-6)	Compliance Well to be located south of Pond 2 (aka Pond 2S)		Surficial	New
MWC-9	Compliance Well to be located along eastern edge of the ZOD		Surficial	New

MWB = Background; MWI = Intermediate; MWC = Compliance; MWP = Piezometer  
 \*Piezometers shall be sampled for water level only

[62-520.600]

3. The monitor wells specified in Condition III.C.2 shall be sampled for the parameters listed below:

Parameter Name	Compliance Well Limit	Units	Sample Type	Monitoring Frequency
Arsenic, Total Recoverable	10	UG/L	Grab	Quarterly
Manganese, Total Recoverable	50	UG/L	Grab	Quarterly
Toluene	1.0	MG/L	Grab	Quarterly
Solids, Total Dissolved (TDS)	500	MG/L	Grab	Quarterly
Turbidity <sup>3</sup>	Report	NTU	In-situ	Quarterly
Water Level Relative to NGVD	Report	FEET	In-situ	Quarterly
pH <sup>3</sup>	6.5-8.5	SU	In-situ	Quarterly
Temperature (F), Water <sup>3</sup>	Report	DEG.F	In-situ	Quarterly
Oxygen, Dissolved (DO) <sup>3</sup>	Report	MG/L	In-situ	Quarterly
Chloride (as Cl)	250	MG/L	Grab	Quarterly
Specific Conductance <sup>3</sup>	Report	UMHO/CM	In-situ	Quarterly
Nitrogen, Total	Report	MG/L	Grab	Quarterly
Nitrogen, Nitrate, Total (as N)	10.0	MG/L	Grab	Quarterly
Nitrogen, Nitrite, Total (as N)	1.0	MG/L	Grab	Quarterly
Phosphorus, Total (as P)	Report	MG/L	Grab	Quarterly
Alpha, Gross Particle Activity	15	pCi/L	Grab	Quarterly
Radium 226 + Radium 228, Total	5	pCi/L	Grab	Quarterly
Magnesium, Total Recoverable	Report	MG/L	Grab	Quarterly
Mercury, Total Recoverable	2	UG/L	Grab	Quarterly
Cadmium, Total Recoverable	5	UG/L	Grab	Quarterly
Lead, Total Recoverable	15	UG/L	Grab	Quarterly
Aluminum, Total Recoverable	0.2	MG/L	Grab	Quarterly
Nickel, Total Recoverable	100	UG/L	Grab	Quarterly
Chromium, Total Recoverable	100	UG/L	Grab	Quarterly
Sodium, Total Recoverable	160	MG/L	Grab	Quarterly

[62-520.600(1)(b)]

<sup>3</sup> The field parameters shall be sampled per DEP-SOP-001/01, FS 2200 Groundwater Sampling, Figure FS 2200-2 Groundwater Purging Procedure and recorded on Form FD 9000-24, Groundwater Sampling Log (both documents attached to this permit). The sampling logs shall be submitted with each groundwater Part D DMR. The field parameters to be reported on Part D of GW DMR shall be the last sample recorded on FD 9000-24.

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4. All ground water quality criteria specified in Chapter 62-520, F.A.C., shall be met at the edge of the zone of discharge. The zone of discharge for this project shall extend horizontally along the ground surface 100 feet from the edge of the pollution source or to the permittee's property boundary, whichever is less, and vertically to the base of the surficial aquifer. [62-520.200(26)] [62-520.465]
5. The permittee's discharge to ground water shall not cause a violation of water quality standards for ground waters at the boundary of the zone of discharge in accordance with Rules 62-520.400 and 62-520.420, F.A.C.
6. The permittee's discharge to ground water shall not cause a violation of the minimum criteria for ground water specified in Rule 62-520.400, F.A.C., within the zone of discharge. [62-520.400 and 62-520.420(4)]
7. If the concentration for any constituent listed in Permit Condition III.C.3 in the natural background quality of the ground water is greater than the stated maximum, or in the case of pH is also less than the minimum, the representative background quality shall be the prevailing standard. [62-520.420(2)]
8. Water levels shall be recorded prior to evacuating the well for sample collection. Elevation references shall include the top of the well casing and land surface at each well site (NGVD allowable) at a precision of plus or minus 0.01 feet. [62-520.600(11)(c)]
9. Ground water monitoring wells shall be purged prior to sampling to obtain a representative sample. [62-160.210]
10. Analyses shall be conducted on un-filtered samples, unless filtered samples have been approved by the Department as being more representative of ground water conditions. [62-520.310(5)]
11. If any monitoring well becomes inoperable or damaged to the extent that sampling or well integrity may be affected, the permittee shall notify the Department's office that issued the permit within two business days from discovery, and a detailed written report shall follow within ten days after notification to the Department. The written report shall detail what problem has occurred and remedial measures that have been taken to prevent recurrence or request approval for replacement of the monitoring well. All monitoring well design and replacement shall be approved by the Department before installation. [62-520.600(6)(1)]
12. With the application for permit renewal, the permittee shall submit, to the Southwest District Office, the results of sampling all four (4) monitoring wells specified in the Department-approved monitoring plan for the Primary and Secondary drinking water parameters included in Chapter 62-550, F.A.C., (excluding asbestos, acrylamide, Dioxin, butachlor, epichlorohydrin, pesticides, and PCBs, unless reasonably expected to be a constituent of the discharge or an artifact of the site). Sampling shall occur no sooner than 180 days before submittal of the renewal application. [62-520.600]
13. All piezometers and monitoring wells not part of the approved ground water monitoring plan are to be plugged and abandoned in accordance with Rule 62-532.500(4), F.A.C., unless there is intent for their future use. [62-532.500(4)]
14. Ground water monitoring test results shall be submitted on Part D of DEP Form 62-620.910(10) (attached) and shall be submitted to the address specified in I.C.3. Results shall be submitted with the DMR for each month listed in the following schedule.

SAMPLE PERIOD	REPORT DUE DATE
January - March	April 28
April - June	July 28
July - September	October 28
October - December	January 28

[62-520.600(11)(b)]

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#### IV. ADDITIONAL LAND APPLICATION REQUIREMENTS

1. The bottoms for the settling basins and percolation basins shall be cleaned out periodically, or when necessary, to remove the excess buildup of sediments, and to ensure continuous percolation capability for the percolation basins. Materials removed from the basins shall be managed as required in Section II "Sludge Management Requirements" of this permit. Routine weed control and regular maintenance of basin embankments and access areas are required.
2. The freeboard of the percolation basins shall be a minimum of three feet.<sup>4</sup>
3. The permittee shall not discharge water from the percolation basins to surface waters of the State.
4. Water levels in the percolation basins shall be recorded weekly on Part B of the Discharge Monitoring Reports. Part B of the Discharge Monitoring Reports shall be submitted quarterly in accordance with the schedule in Condition I.C.3.

#### V. DESIGN, CONSTRUCTION, OPERATION AND MAINTENANCE REQUIREMENTS

##### A. General Operation and Maintenance Requirements

1. During the period of operation authorized by this permit, the wastewater facilities shall be operated under the supervision of a person who is qualified by formal training and/or practical experience in the field of water pollution control. [62-620.320(6)]
2. The permittee shall maintain the following records and make them available for inspection on the site of the permitted facility.
  - a. Records of all compliance monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, including, if applicable, a copy of the laboratory certification showing the certification number of the laboratory, for at least three years from the date the sample or measurement was taken;
  - b. Copies of all reports required by the permit for at least three years from the date the report was prepared;
  - c. Records of all data, including reports and documents, used to complete the application for the permit for at least three years from the date the application was filed;
  - d. Records of all offsite disposal of vegetation and materials removed from intake screens and vegetation, sediments and sludge removed from wastewater and stormwater basins
  - e. A copy of the current permit;
  - f. A copy of any required record drawings; and
  - g. Copies of the logs and schedules showing plant operations and equipment maintenance for three years from the date of the logs or schedules.

[62-620.350]

##### B. Storm Water Requirements

1. The discharge of storm water runoff from this facility to surface waters of the state is authorized under the Florida Storm Water Multi-Sector General Permit for Industrial Activities (MSGP), Permit Number FLR05G904-001 et seq.

##### C. Impoundment Operation and Maintenance

1. All impoundments (including percolation basins and dredge spoils areas) used to hold or treat wastewater and other associated wastes shall be operated and maintained to prevent the discharge of pollutants to waters of the State, except as authorized under this permit and MSGP Permit Number FLR05G904-001 et seq.

<sup>4</sup> Administrative Order A0-021-TL establishes an interim freeboard limitation of 1 foot, pursuant to the conditions of the order.



2. Operation and maintenance of any impoundment shall be in accordance with all applicable State regulations. When practicable, piezometers or other instrumentation shall be used as a means to aid monitoring of impoundment integrity.

**D. Impoundment Integrity Inspections**

1. No later than March 31, 2011, and annually thereafter, all impoundments shall be inspected by qualified personnel with knowledge and training in impoundment integrity. Annual inspections shall include observations of dike and toe areas for erosion, cracks or bulges, seepage, wet or soft soil, changes in geometry, the depth and elevation of the impounded water, sediment or slurry, freeboard, changes in vegetation such as overly lush, dead or unnaturally tilted vegetation, and any other changes which may indicate a potential compromise to impoundment integrity.
2. Within 30 days after the annual inspection, a qualified, responsible officer shall certify to the Department that no breaches or structural defects resulting in the discharges to surface waters of the State and that no changes were observed which may indicate a potential compromise to impoundment integrity during the previous calendar year.

The certification shall also include a statement that the impoundments provides the necessary minimum wet weather detention volume to contain the combined volume for all direct rainfall and all rainfall runoff to the pond resulting from the 10-year, 24-hour rainfall event and maximum dry weather plant waste flows which could occur during a 24-hour period.

3. The permittee shall conduct follow-up inspections within 7 days after large or extended rain events (i.e., 25-year, 24-hour precipitation event).
4. In the event that the impoundment integrity is compromised and may result in a potential discharge to surface waters of the State, the permittee shall notify the Department within twenty-four (24) hours of becoming aware of the situation and provide a proposed course of corrective action and implementation schedule within fifteen (15) days after notifying the Department. Observed changes such as significant increases in seepage or seepage carrying sediment may be signs of imminent impoundment failure and should be addressed immediately.

**E. Reporting and Recordkeeping Requirements for Impoundments**

1. The summarized findings of all monitoring activities, inspections, and corrective actions pertaining to the impoundment integrity, and operation and maintenance of all impoundments shall be documented and kept on-site in accordance with Permit Condition V.A.2, and made available to Department inspectors upon request.
2. Starting with the issuance of this permit, all pertinent impoundment permits, design, construction, operation, and maintenance information, including but not limited to: plans, geotechnical and structural integrity studies, copies of permits, associated certifications by qualified, Florida-registered professional engineer, and regulatory approvals, shall be kept on site in accordance with Permit Condition V.A.2 and made available to Department inspectors upon request.

**VI. SCHEDULES**

1. The summarized findings of all monitoring activities, inspections, and corrective actions pertaining to the impoundment integrity, and operation and maintenance of all impoundments shall be documented and kept on-site in accordance with permit Condition V.A.2, and made available to Department inspectors upon request.

Improvement Action	Completion Date
1. BMP3 Progress/Update Reports	Issuance date of permit plus 1 year, and continuing annually
2. Continue implementing the existing BMP3 Plan	Issuance date of permit

[62-620.320(6)]

2. The following implementation steps shall be completed in accordance with the following schedule:

	Implementation Steps	Scheduled Completion Date
1.	Permittee shall submit documentation for the location of the staff gauges in percolation basins to the Department's Southwest District Office.	Within 45 days from permit issuance
2.	Notify the Department when installation of the staff gauges is completed.	Within 30 days after installation
3.	Installation of proposed MWC-6 (MW-6) as required in Permit Condition III.B.1	Within 90 days from permit issuance
4.	Permittee shall notify Department's Southwest District Office that Army Corps of Engineers permit has been received.	Within 7 days after receiving the Army Corps of Engineers permit.
5.	Permittee shall complete the construction of the new dock in the discharge canal	Within 60 days after receiving the Army Corps of Engineers permit.
6.	Permittee shall commence monitoring at the new dock in the discharge canal for those parameters listed in Permit Condition I.A.1 with monitoring location EFF-1; and discontinue monitoring for those parameters at the once-through cooling water system condenser outlet	Within 30 days after completion of item 5 above.

3. Within six months of the effective date of this permit, the permittee shall schedule a meeting with the Department to discuss the contents of the aquatic organism return plan in accordance with Condition I.A.10 and shall submit the plan to the Department within 12 months of the effective date of this permit. The plan shall be implemented within 24 months subsequent to approval by the Department.
4. No later than 60 days after issuance of the permit, the permittee shall prepare and submit for the Department's review a plan of study with schedule for Phase II Monitoring for evaluation of the biological impact from the thermal plume at Paul L. Bartow Power Plant. The results of the Phase II evaluation shall be submitted in a report to the Department for review and approval no later than 180 days prior to the permit expiration date.
5. No later than 60 days after issuance of the permit, the Permittee shall prepare and submit for the Department's review an updated schedule for the approved dissolved oxygen plan of study at Paul L. Bartow Power Plant. The permittee shall conduct at least two years of monitoring during the months of May through September, which shall commence in May 2011. Annually, within 60 days of completing the monitoring for each year, the permittee shall submit a report summarizing the results.
6. In accordance with sections 403.088(2)(e) and (f), Florida Status (F.S.), a compliance schedule for this facility is contained in Administrative Order AO-021-TL which is hereby incorporated by reference.
7. No later than 14 calendar days following a date identified in the above schedule(s) of compliance, the Permittee shall submit either a report of progress or, in the case of specific actions being required by an identified date, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

**VII. BEST MANAGEMENT PRACTICES**

1. General Conditions

In accordance with Section 304(e) and 402(a)(2) of the Clean Water Act (CWA) as amended, 33 U.S.C. §§ 1251 et seq., and the Pollution Prevention Act of 1990, 42 U.S.C. §§ 13101-13109, the permittee must develop and implement a plan for utilizing practices incorporating pollution prevention measures. References to be considered in developing the plan are "Criteria and Standards for Best Management Practices Authorized Under Section 304(e) of the Act," found at 40 CFR 122.44 Subpart K and the Storm Water Management Industrial Activities Guidance Manual, EPA/833-R92-002 and other EPA documents relating to Best Management Practice guidance.

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a. Definitions

- (1) The term "pollutants" refers to conventional, non-conventional and toxic pollutants.
- (2) Conventional pollutants are: biochemical oxygen demand (BOD), suspended solids, pH, fecal coliform bacteria and oil & grease.
- (3) Non-conventional pollutants are those which are not defined as conventional or toxic.
- (4) Toxic pollutants include, but are not limited to: (a) any toxic substance listed in Section 307(a)(1) of the CWA, any hazardous substance listed in Section 311 of the CWA, or chemical listed in Section 313(c) of the Superfund Amendments and Reauthorization Act of 1986; and (b) any substance (that is not also a conventional or non-conventional pollutant except ammonia) for which EPA has published an acute or chronic toxicity criterion.
- (5) "Significant Materials" is defined as raw materials; fuels; materials such as solvents and detergents; hazardous substances designated under Section 101(14) of CERCLA; and any chemical the facility is required to report pursuant to EPCRA, Section 313; fertilizers; pesticides; and waste products such as ashes, slag and sludge.
- (6) "Pollution prevention" and "waste minimization" refer to the first two categories of EPA's preferred hazardous waste management strategy: first, source reduction and then, recycling.
- (7) "Recycle/Reuse" is defined as the minimization of waste generation by recovering and reprocessing usable products that might otherwise become waste; or the reuse or reprocessing of usable waste products in place of the original stock, or for other purposes such as material recovery, material regeneration or energy production.
- (8) "Source reduction" means any practice which: (a) reduces the amount of any pollutant entering a waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment or disposal; and (b) reduces the hazards to public health and the environment associated with the release of such pollutant. The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. It does not include any practice which alters the physical, chemical, or biological characteristics or the volume of a pollutant through a process or activity which itself is not integral to, or previously considered necessary for, the production of a product or the providing of a service.
- (9) "BMP3" means a Best Management Practices Pollution Prevention Plan incorporating the requirements of 40 CFR § 125, Subpart K, plus pollution prevention techniques, except where other existing programs are deemed equivalent by the permittee. The permittee shall certify the equivalency of the other referenced programs.
- (10) The term "material" refers to chemicals or chemical products used in any plant operation (i.e., caustic soda, hydrazine, degreasing agents, paint solvents, etc.). It does not include lumber, boxes, packing materials, etc.

2. Best Management Practices/Pollution Prevention Plan

The permittee shall develop and implement a BMP3 plan for the facility, which is the source of wastewater and storm water discharges, covered by this permit. The plan shall be directed toward reducing those pollutants of concern which discharge to surface waters and shall be prepared in accordance with good engineering and good housekeeping practices. For the purposes of this permit, pollutants of concern shall be limited to toxic pollutants, as defined above, known to the discharger. The plan shall address all activities which could or do contribute these pollutants to the surface water discharge, including process, treatment, and ancillary activities.

a. Signatory Authority & Management Responsibilities

The BMP3 plan shall be signed by permittee or their duly authorized representative in accordance with rule 62-620.305(2)(a) and (b). The BMP3 plan shall be reviewed by plant environmental/engineering staff and plant manager. Where required by Chapter 471-(P.E.) or Chapter 492 (P.G.) Florida Statutes, applicable portions of the BMP3 plan shall be signed and sealed by the professional(s) who prepared them.

A copy of the plan shall be retained at the facility and shall be made available to the permit issuing authority upon request.

The BMP3 plan shall contain a written statement from corporate or plant management indicating management's commitment to the goals of the BMP3 program. Such statements shall be publicized or made known to all facility employees. Management shall also provide training for the individuals responsible for implementing the BMP3 plan.

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b. BMP3 Plan Requirements

- (1) Name & description of facility, a map illustrating the location of the facility & adjacent receiving waters, and other maps, plot plans or drawings, as necessary;
- (2) Overall objectives (both short-term and long-term) and scope of the plan, specific reduction goals for pollutants, anticipated dates of achievement of reduction, and a description of means for achieving each reduction goal;
- (3) A description of procedures relative to spill prevention, control & countermeasures and a description of measures employed to prevent storm water contamination;
- (4) A description of practices involving preventive maintenance, housekeeping, recordkeeping, inspections, and plant security; and
- (5) The description of a waste minimization assessment performed in accordance with the conditions outlined in condition c below, results of the assessment, and a schedule for implementation of specific waste reduction practices.

c. Waste Minimization Assessment

The permittee is encouraged but not required to conduct a waste minimization assessment (WMA) for this facility to determine actions that could be taken to reduce waste loading and chemical losses to all wastewater and/or storm water streams as described in this permit.

If the permittee elects to develop and implement a WMA, information on plan components can be obtained from the Department's Industrial Wastewater website, or from:

Florida Department of Environmental Protection  
Industrial Wastewater Section, Mail Station 3545  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
(850) 245-8589  
(850) 245-8669 – Fax

d. Best Management Practices & Pollution Prevention Committee Recommended:

A Best Management Practices Committee (Committee) should be established to direct or assist in the implementation of the BMP3 plan. The Committee should be comprised of individuals within the plant organization who are responsible for developing the BMP3 plan and assisting the plant manager in its implementation, monitoring of success, and revision. The activities and responsibilities of the Committee should address all aspects of the facility's BMP3 plan. The scope of responsibilities of the Committee should be described in the plan.

e. Employee Training

Employee training programs shall inform personnel at all levels of responsibility of the components & goals of the BMP3 plan and shall describe employee responsibilities for implementing the plan. Training shall address topics such as good housekeeping, materials management, record keeping & reporting, spill prevention & response, as well as specific waste reduction practices to be employed. Training should also disclose how individual employees may contribute suggestions concerning the BMP3 plan or suggestions regarding Pollution Prevention. The plan shall identify periodic dates for such training.

f. Plan Development & Implementation

The BMP3 plan shall be developed and implemented 6 months after the effective date of this permit, unless any later dates are specified in this permit. Any portion of the WMA which is ongoing at the time of development or implementation shall be described in the plan. Any waste reduction practice which is recommended for implementation over a period of time shall be identified in the plan, including a schedule for its implementation.

g. Submission of Plan Summary & Progress/Update Reports

- (1) Plan Summary: Not later than 2 years after the effective date of the permit, a summary of the BMP3 plan shall be developed and maintained at the facility and made available to the permit issuing authority upon request. The summary should include the following: a brief description of the plan, its implementation process, schedules for implementing identified waste reduction practices, and a list of all waste reduction

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practices being employed at the facility. The results of waste minimization assessment studies already completed as well as any scheduled or ongoing WMA studies shall be discussed.

- (2) Progress/Update Reports: Annually thereafter for the duration of the permit progress/update reports documenting implementation of the plan shall be maintained at the facility and made available to the permit issuing authority upon request. The reports shall discuss whether or not implementation schedules were met and revise any schedules, as necessary. The plan shall also be updated as necessary and the attainment or progress made toward specific pollutant reduction targets documented. Results of any ongoing WMA studies as well as any additional schedules for implementation of waste reduction practices shall be included.
- (3) A timetable for the various plan requirements follows:

Timetable for BMP3 Plan Requirements:

<u>REQUIREMENT</u>	<u>TIME FROM EFFECTIVE DATE OF THIS PERMIT</u>
Progress/Update Reports	3 years, and then annually thereafter

The permittee shall maintain the plan and subsequent reports at the facility and shall make the plan available to the Department upon request.

h. Plan Review & Modification

If following review by the Department, the BMP3 plan is determined insufficient, the permittee will be notified that the BMP3 plan does not meet one or more of the minimum requirements of this Part. Upon such notification from the Department, the permittee shall amend the plan and shall submit to the Department a written certification that the requested changes have been made. Unless otherwise provided by the Department, the permittee shall have 30 days after such notification to make the changes necessary.

3. The permittee shall modify the BMP3 plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to waters of the State or if the plan proves to be ineffective in achieving the general objectives of reducing pollutants in wastewater or storm water discharges. Modifications to the plan may be reviewed by the Department in the same manner as described above.

VIII. OTHER SPECIFIC CONDITIONS

A. General Operation and Maintenance Requirements

1. Where required by Chapter 471 or Chapter 492, F.S., applicable portions of reports that must be submitted under this permit shall be signed and sealed by a professional engineer or a professional geologist, as appropriate. *[62-620.310(4)]*
2. Drawings, plans, documents or specifications submitted by the permittee, not attached hereto, but retained on file at the Department's Southwest District Office, are made a part hereof.
3. This permit satisfies Industrial Wastewater program permitting requirements only and does not authorize operation of this facility prior to obtaining any other permits required by local, state or federal agencies.
4. The permittee shall provide verbal notice to the Department's Southwest District Office as soon as practical after discovery of a sinkhole or other karst feature within an area for the management or application of wastewater, or wastewater sludges. The permittee shall immediately implement measures appropriate to control the entry of contaminants, and shall detail these measures to the Department's Southwest District Office in a written report within 7 days of the sinkhole discovery. *[62-620.320(6)]*

B. Specific Conditions Related to Existing Manufacturing, Commercial, Mining, and Silviculture Wastewater Facilities or Activities

1. Existing manufacturing, commercial, mining, and silvicultural wastewater facilities or activities that discharge into surface waters shall notify the Department as soon as they know or have reason to believe:

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- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels;
  - (1) One hundred micrograms per liter,
  - (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2, 4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter for antimony, or
  - (3) Five times the maximum concentration value reported for that pollutant in the permit application; or
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels;
  - (1) Five hundred micrograms per liter,
  - (2) One milligram per liter for antimony, or
  - (3) Ten times the maximum concentration value reported for that pollutant in the permit application.

[62-620.625(1)]

#### C. Duty to Reapply

1. The permittee is not authorized to discharge to waters of the State after the expiration date of this permit, unless:
  - a. the permittee has applied for renewal of this permit at least 180 days before the expiration date (August 7, 2015) using the appropriate forms listed in Rule 62-620.910, F.A.C., and in the manner established in the Department of Environmental Protection Guide to Permitting Wastewater Facilities or Activities Under Chapter 62-620, F.A.C., including submittal of the appropriate processing fee set forth in Rule 62-4.050, F.A.C.; or
  - b. the permittee has made complete the application for renewal of this permit before the permit expiration date.
2. When publishing Notice of Draft and Notice of Intent in accordance with Rules 62-110.106 and 62-620.550, F.A.C., the permittee shall publish the notice at its expense in a newspaper of general circulation in the county or counties in which the activity is to take place either:
  - a. Within thirty days after the permittee has received a notice; or
  - b. Within thirty days after final agency action.

Failure to publish a notice is a violation of this permit.

#### D. Reopener Clauses

1. The permit shall be revised, or alternatively, revoked and reissued in accordance with the provisions contained in Rules 62-620.325 and 62-620.345 F.A.C., if applicable, or to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2) and 307(a)(2) of the Clean Water Act (the Act), as amended, if the effluent standards, limitations, or water quality standards so issued or approved:
  - a. Contains different conditions or is otherwise more stringent than any condition in the permit/or;
  - b. Controls any pollutant not addressed in the permit.The permit as revised or reissued under this paragraph shall contain any other requirements then applicable.
2. The permit may be reopened to adjust effluent limitations or monitoring requirements should future Water Quality Based Effluent Limitation determinations, water quality studies, DEP approved changes in water quality standards, EPA established Total Maximum Daily Loads (TMDLs), or other information show a need for a different limitation or monitoring requirement.

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3. The Department or EPA may develop a TMDL during the life of the permit. Once a TMDL has been established and adopted by rule, the Department shall revise this permit to incorporate the final findings of the TMDL.
4. The permit shall be reopened for revision as appropriate to address new information that was not available at the time of this permit issuance or to comply with requirements of new regulations, standards, or judicial decisions relating to CWA 316(b).

#### IX. GENERAL CONDITIONS

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit are binding and enforceable pursuant to Chapter 403, Florida Statutes. Any permit noncompliance constitutes a violation of Chapter 403, Florida Statutes, and is grounds for enforcement action, permit termination, permit revocation and reissuance, or permit revision. *[62-620.610(1)]*
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications or conditions of this permit constitutes grounds for revocation and enforcement action by the Department. *[62-620.610(2)]*
3. As provided in Subsection 403.087(7), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor authorize any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit or authorization that may be required for other aspects of the total project which are not addressed in this permit. *[62-620.610(3)]*
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. *[62-620.610(4)]*
5. This permit does not relieve the permittee from liability and penalties for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted source; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. The permittee shall take all reasonable steps to minimize or prevent any discharge, reuse of reclaimed water, or residuals use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. *[62-620.610(5)]*
6. If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee shall apply for and obtain a new permit. *[62-620.610(6)]*
7. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control, and related appurtenances, that are installed and used by the permittee to achieve compliance with the conditions of this permit. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to maintain or achieve compliance with the conditions of the permit. *[62-620.610(7)]*
8. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. *[62-620.610(8)]*
9. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, including an authorized representative of the Department and authorized EPA personnel, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to:
  - a. Enter upon the permittee's premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under the conditions of this permit;

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- b. Have access to and copy any records that shall be kept under the conditions of this permit;
- c. Inspect the facilities, equipment, practices, or operations regulated or required under this permit; and
- d. Sample or monitor any substances or parameters at any location necessary to assure compliance with this permit or Department rules.

*[62-620.610(9)]*

10. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data, and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except as such use is proscribed by Section 403.111, F.S., or Rule 62-620.302, F.A.C. Such evidence shall only be used to the extent that it is consistent with the Florida Rules of Civil Procedure and applicable evidentiary rules. *[62-620.610(10)]*
11. When requested by the Department, the permittee shall within a reasonable time provide any information required by law which is needed to determine whether there is cause for revising, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also provide to the Department upon request copies of records required by this permit to be kept. If the permittee becomes aware of relevant facts that were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted or corrections promptly reported to the Department. *[62-620.610(11)]*
12. Unless specifically stated otherwise in Department rules, the permittee, in accepting this permit, agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-620.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard. *[62-620.610(12)]*
13. The permittee, in accepting this permit, agrees to pay the applicable regulatory program and surveillance fee in accordance with Rule 62-4.052, F.A.C. *[62-620.610(13)]*
14. This permit is transferable only upon Department approval in accordance with Rule 62-620.340, F.A.C. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department. *[62-620.610(14)]*
15. The permittee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility or activity and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment. *[62-620.610(15)]*
16. The permittee shall apply for a revision to the Department permit in accordance with Rules 62-620.300, F.A.C., and the Department of Environmental Protection Guide to Permitting Wastewater Facilities or Activities Under Chapter 62-620, F.A.C., at least 90 days before construction of any planned substantial modifications to the permitted facility is to commence or with Rule 62-620.325(2), F.A.C., for minor modifications to the permitted facility. A revised permit shall be obtained before construction begins except as provided in Rule 62-620.300, F.A.C. *[62-620.610(16)]*
17. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The permittee shall be responsible for any and all damages which may result from the changes and may be subject to enforcement action by the Department for penalties or revocation of this permit. The notice shall include the following information:
  - a. A description of the anticipated noncompliance;
  - b. The period of the anticipated noncompliance, including dates and times; and
  - c. Steps being taken to prevent future occurrence of the noncompliance.

*[62-620.610(17)]*



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18. Sampling and monitoring data shall be collected and analyzed in accordance with Rule 62-4.246 and Chapters 62-160, 62-601, and 62-610, F.A.C., and 40 CFR 136, as appropriate.
- Monitoring results shall be reported at the intervals specified elsewhere in this permit and shall be reported on a Discharge Monitoring Report (DMR), DEP Form 62-620.910(10), or as specified elsewhere in the permit.
  - If the permittee monitors any contaminant more frequently than required by the permit, using Department approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
  - Calculations for all limitations which require averaging of measurements shall use an arithmetic mean unless otherwise specified in this permit.
  - Except as specifically provided in Rule 62-160.300, F.A.C., any laboratory test required by this permit shall be performed by a laboratory that has been certified by the Department of Health Environmental Laboratory Certification Program (DOH ELCP). Such certification shall be for the matrix, test method and analyte(s) being measured to comply with this permit. For domestic wastewater facilities, testing for parameters listed in Rule 62-160.300(4), F.A.C., shall be conducted under the direction of a certified operator.
  - Field activities including on-site tests and sample collection shall follow the applicable standard operating procedures described in DEP-SOP-001/01 adopted by reference in Chapter 62-160, F.A.C.
  - Alternate field procedures and laboratory methods may be used where they have been approved in accordance with Rules 62-160.220, and 62-160.330, F.A.C.

*[62-620.610(18)]*

19. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in this permit shall be submitted no later than 14 days following each schedule date. *[62-620.610(19)]*

20. The permittee shall report to the Department's Southwest District Office any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance including exact dates and time, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

- The following shall be included as information which must be reported within 24 hours under this condition:
  - Any unanticipated bypass which causes any reclaimed water or effluent to exceed any permit limitation or results in an unpermitted discharge,
  - Any upset which causes any reclaimed water or the effluent to exceed any limitation in the permit,
  - Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice, and
  - Any unauthorized discharge to surface or ground waters.
- Oral reports as required by this subsection shall be provided as follows:
  - For unauthorized releases or spills of treated or untreated wastewater reported pursuant to subparagraph 20(a).4. that are in excess of 1,000 gallons per incident, or where information indicates that public health or the environment will be endangered, oral reports shall be provided to the STATE WARNING POINT TOLL FREE NUMBER (800) 320-0519, as soon as practical, but no later than 24 hours from the time the permittee becomes aware of the discharge. The permittee, to the extent known, shall provide the following information to the State Warning Point:
    - Name, address, and telephone number of person reporting;
    - Name, address, and telephone number of permittee or responsible person for the discharge;
    - Date and time of the discharge and status of discharge (ongoing or ceased);
    - Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater);
    - Estimated amount of the discharge;
    - Location or address of the discharge;
    - Source and cause of the discharge;

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- (h) Whether the discharge was contained on-site, and cleanup actions taken to date;
  - (i) Description of area affected by the discharge, including name of water body affected, if any; and
  - (j) Other persons or agencies contacted.
- (2) Oral reports, not otherwise required to be provided pursuant to subparagraph 20.b.1 above, shall be provided to the Department's Southwest District Office within 24 hours from the time the permittee becomes aware of the circumstances.
- c. If the oral report has been received within 24 hours, the noncompliance has been corrected, and the noncompliance did not endanger health or the environment, the Department's Southwest District Office shall waive the written report.

[62-620.610(20)]

21. The permittee shall report all instances of noncompliance not reported under Permit Conditions IX. 17, 18 or 19 of this permit at the time monitoring reports are submitted. This report shall contain the same information required by Permit Condition IX.20 of this permit. [62-620.610(21)]

22. Bypass Provisions.

- a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment works.
- b. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless the permittee affirmatively demonstrates that:
- (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
  - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
  - (3) The permittee submitted notices as required under Permit Condition VIII.22.b. of this permit.
- c. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as required in Permit Condition VIII.20. of this permit. A notice shall include a description of the bypass and its cause; the period of the bypass, including exact dates and times; if the bypass has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.
- d. The Department shall approve an anticipated bypass, after considering its adverse effect, if the permittee demonstrates that it will meet the three conditions listed in Permit Condition IX. 22.b.1 through 3 of this permit.
- e. A permittee may allow any bypass to occur which does not cause reclaimed water or effluent limitations to be exceeded if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Permit Condition IX.22.b. through d. of this permit.

[62-620.610(22)]

23. Upset Provisions.


- a. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee.
- (1) An upset does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, careless or improper operation.
  - (2) An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of upset provisions of Rule 62-620.610, F.A.C., are met.
- b. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
- (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
  - (2) The permitted facility was at the time being properly operated;
  - (3) The permittee submitted notice of the upset as required in Permit Condition IX.5. of this permit; and
  - (4) The permittee complied with any remedial measures required under Permit Condition IX.5. of this permit.

- c. In any enforcement proceeding, the burden of proof for establishing the occurrence of an upset rests with the permittee.
- d. Before an enforcement proceeding is instituted, no representation made during the Department review of a claim that noncompliance was caused by an upset is final agency action subject to judicial review.

[62-620.610(23)]

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

  
\_\_\_\_\_  
Director  
Division of Water Resource Management  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
(850) 245-8336

Attachment(s):  
Administrative Order  
Discharge Monitoring Report

BEFORE THE STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN THE MATTER OF:

Progress Energy Florida, Inc.  
1601 Weedon Island Drive  
St. Petersburg, Florida 33702

Administrative Order No. AO021TL

Paul L. Bartow Power Plant  
DEP Permit No: FL0000132

**ADMINISTRATIVE ORDER**

**I. STATUTORY AUTHORITY**

The Department of Environmental Protection (Department) issues this Administrative Order under the authority of Section 403.088(2)(f), Florida Statutes (F.S.). The Secretary of the Department has delegated this authority to the Director of the Division of Water Resources Management, who issues this order and makes the following findings of fact.

**II. FINDINGS OF FACT**

1. Progress Energy Florida (PEF or Permittee) is a "person" as defined under Section 403.031(5), F.S.
2. The Permittee owns and operates a steam electric power generating facility known as Paul L. Bartow power plant ("Facility"). The Facility, located at 1601 Weedon Island Drive, St. Petersburg Pinellas County, Florida 33702, discharges industrial wastewater into waters of the state as defined in Section 403.031(13), F.S.
3. The Permittee has filed a timely application for renewal of NPDES Permit No. FL0000132 (Permit), under Section 403.088(2), F.S.
4. In June 2009, the Permittee began commercial operation of its repowered Facility. The repowered Facility directs all process wastewater, except once-through cooling water which is non-process wastewater, into the existing onsite percolation pond system. On average, flows range from 20 to 250 gallons per minute, depending on facility operations and demineralized water needs.
5. In December 2009, the Permittee notified the Department that the percolation ponds were not operating as originally designed. The contents of the percolation ponds were pumped into the dredge spoil pond to the east of the percolation ponds. A total of 8,316,000 gallons of water was transferred into the dredge spoil pond December 11-16, 2009.
6. Sections 403.088(2)(e) and (f), F.S., allow the Department to issue a permit for the discharge of wastewater into waters of the state, which may not immediately meet all applicable rule requirements, if the permit is accompanied by an order establishing a schedule for achieving compliance with all permit conditions if criteria specified in the order are met.
7. The Department finds that the granting of an operation permit will be in the public interest; and,
8. This order and associated wastewater Permit FL0000132 constitute the Department's authorization to discharge pollutants to waters of the state under the NPDES and state groundwater program, and its determination that the Facility is in compliance with Section 403.088, F.S. This order includes an implementation schedule.

### III. ORDER

Based on the foregoing findings of fact,

#### IT IS ORDERED,

9. The Permittee shall comply with the freeboard limitations in Part IV. of the Permit no later than 30 months from the issuance date of this Order.
10. Until compliance with the freeboard limitations in Part IV. of the Permit is achieved as required in paragraph III.9. of this Order, the Permittee shall comply with an interim limit of 1 foot.
11. When a freeboard of less than 3 feet exists in the percolation pond, the Permittee may transfer water from the percolation basins to the on-site dredge spoil area, contingent upon the following requirements being met:
  - a. The freeboard in the dredge spoil ponds is maintained at a level of 3 feet or more and
  - b. The depth of water in the dredge spoil ponds is maintained at a level less than that in the percolation ponds.

The permittee shall notify the Department's Southwest District Office prior to commencement of a water transfer from the percolation ponds to the dredge spoil ponds.

12. The Permittee shall not discharge from the percolation pond or the dredge pond to surface waters of the State.
13. No later than 30 days after the effective date of this Order, the Permittee shall prepare and submit for the Department's review a Plan of Study (POS) and schedule for the evaluation of the percolation ponds. The POS shall be designed and implemented to demonstrate whether the percolation ponds at the Facility meet the freeboard limitations in Part IV. of the Permit. The results of the evaluation shall be submitted in a report (Report) to the Department for review and approval no later than 60 days after the approved POS completion date.
14. If the Report demonstrates that the percolation ponds at the Facility are unable to meet the freeboard limitations in Part IV. of the Permit, the Permittee shall prepare a feasibility study report (Report) for engineering options to achieve the freeboard limitation. The options shall be ranked based on equal weighting of technical and economic feasibility and environmental impact. In addition, the Report shall include a plan and schedule for implementing the highest ranked option. The schedule shall include milestones and the completion date.

The Report shall be submitted to the Department for review and approval no later than 60 days after the approved POS completion date.

15. The Permittee shall provide a status report demonstrating progress toward compliance with the freeboard limitation every three months following the effective date of this Order, until compliance is achieved pursuant to paragraph III.9 of this Order. The status reports shall document accomplishment of milestones established by the schedule in the approved POS and Report.
18. Monitoring results shall be submitted in accordance with the Permit.
19. The Permittee shall maintain and operate its facilities in compliance with all other conditions of the Permit.
20. This order may be modified through revisions as set forth in Chapter 62-620, F.A.C.
21. Unless otherwise specified herein, reports or other information required by this order shall be sent to: Industrial Wastewater Section, ATTN: Mail Station 3545, Department of Environmental Protection.

2600 Blair Stone Road, Tallahassee, Florida 32399-2400, with a copy sent to: Industrial Wastewater Section, Department of Environmental Protection, Southwest District, 13501 N. Telecom Parkway, Temple Terrace, Florida 33637.

22. This order does not operate as a permit under Section 403.088, F.S. This order shall be incorporated by reference into NPDES Permit No. FL0000132, which shall require compliance by the Permittee with the requirements of this order.
23. Failure to comply with the requirements of this order shall constitute a violation of this order and Permit No. FL0000132, and may subject the Permittee to penalties as provided in Section 403.161, F.S.
24. This order is final when filed with the clerk of the Department, and the Permittee then shall implement this order unless a petition for an administrative proceeding (hearing) is filed in accordance with the notice set forth in the following Section.
25. If any event occurs that causes delay or the reasonable likelihood of delay, in complying with the requirements of this order, the Permittee shall have the burden of demonstrating that the delay was or will be caused by circumstances beyond the reasonable control of the Permittee and could not have been or cannot be overcome by the Permittee's due diligence. Economic circumstances shall not be considered circumstances beyond the reasonable control of the Permittee, nor shall the failure of a contractor, subcontractor, materialman or other agent (collectively referred to as "contractor") to whom responsibility for performance is delegated to meet contractually imposed deadlines be a cause beyond the control of the Permittee, unless the cause of the contractor's late performance was also beyond the contractor's control. Delays in final agency action on an application for a relief mechanism are eligible for consideration under this paragraph, provided that none of those delays were a result of late submission by the Permittee. Upon occurrence of an event causing delay, or upon becoming aware of a potential for delay, the Permittee shall notify the Department orally at: the Department's Southwest District office, (813) 632-7600, within 24 hours or by the next working day and shall, within seven calendar days of oral notification to the Department, notify the Department in writing at: Southwest District office, 13501 N. Telecom Parkway, Temple Terrace, Florida 33637 of the anticipated length and cause of the delay, the measures taken or to be taken to prevent or minimize the delay and the timetable by which Facility intends to implement these measures. If the delay or anticipated delay has been or will be caused by circumstances beyond the reasonable control of the Permittee, the time for performance hereunder shall be extended for a period equal to the delay resulting from such circumstances.

#### IV. NOTICE OF RIGHTS

A person whose substantial interests are affected by the Department's decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57 of the F.S. The petition must contain the information set forth below and must be filed (received by the clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Petitions by the applicant or any of the parties listed below must be filed within twenty-one days of receipt of this written notice. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within twenty-one days of publication of the notice or within twenty-one days of receipt of the written notice, whichever occurs first.

Under Section 120.60(3), F.S., however, any person who has asked the Department for notice of agency action may file a petition within twenty-one days of receipt of such notice, regardless of the date of publication.

The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall

constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

- (a) The name, address, and telephone number of each petitioner; the Department permit identification number and the county in which the subject matter or activity is located;
- (b) A statement of how and when each petitioner received notice of the Department action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department action;
- (d) A statement of the material facts disputed by the petitioner, if any;
- (e) A statement of facts that the petitioner contends warrant reversal or modification of the Department action;
- (f) A statement of which rules or statutes the petitioner contends require reversal or modification of the Department action; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take.

A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation under Section 120.573, F.S., is not available for this proceeding.

This action is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above. Upon the timely filing of a petition this order will not be effective until further order of the Department.

Any party to the order has the right to seek judicial review of the order under Section 120.68, F.S., by the filing of a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date when the final order is filed with the Clerk of the Department.

DONE AND ORDERED on this 2<sup>nd</sup> day of FEBRUARY 2011 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

  
Director

Division of Water Resource Management

02-14-'11 14:41 FROM-  
ADMINISTRATIVE GROUP NO. 000 ) P.E.  
PEF Paul L. Bartow Power P. i  
NPDES Permit No. FL0000132

T-448 P0002/0002 F-897

Docket No. 110007-EI  
Progress Energy Florida  
Witness: Patricia Q. West  
Exhibit No. (PQW-1)  
Page 45 of 85

CLERK STAMP

FILED AND ACKNOWLEDGED on this date, under Section 120.52(7) of the Florida Statutes, with the  
designated Department Clerk, receipt of which is acknowledged.

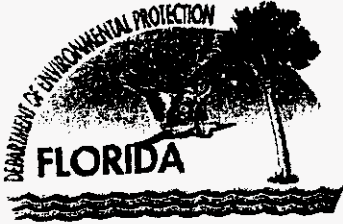
Shirley Shields  
Clerk

02-07-11

Date

Copies furnished to Permit Distribution List





Florida Department of  
Environmental Protection

Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Rick Scott  
Governor

Jennifer Carroll  
Lt. Governor

Mimi A. Drew  
Secretary

NOTICE OF PERMIT

RECEIVED

JAN 19 2011

Environmental Services

CERTIFIED MAIL

In the Matter of an  
Application for Permit by:

Progress Energy Florida, Inc.  
Anclote Power Plant  
1729 Baillies Bluff Road  
Holiday, FL 34691-9753

DEP File # FL0002992-010-IW1S/NR  
Pasco County

Attention: Reginald D. Anderson, Plant Manager

Enclosed is Permit Number FL0002992 to Progress Energy Florida, Inc., Post Office Box 14042, St. Petersburg, FL 33733 to operate wastewater treatment and effluent disposal facilities for Units 1 and 2 of the Anclote Power Plant located at 1729 Baillies Bluff Road in Holiday, Florida 34691, issued under Section 403.0885, Florida Statutes and DEP Rule 62-620, Florida Administrative Code.

Any party to this order (permit) has the right to seek judicial review of the permit under Section 120.68, Florida Statutes, by the filing of a Notice of Appeal under Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000 and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within thirty days after this notice is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

Janet G. Llewellyn  
Division Director  
Division of Water Resource Management  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Docket No. 110007-EI  
Progress Energy Florida  
Witness: Patricia Q. West  
Exhibit No. (PQW-1)  
Page 46 of 85

"More Protection, Less Process"  
[www.dep.state.fl.us](http://www.dep.state.fl.us)

EXHIBIT B

Anlcote Power Plant  
Facility ID Number FL0002992

Page 2 of 2

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 01-14-2011 to the listed persons.

[Clerk Stamp]

FILING AND ACKNOWLEDGMENT

FILED, on this date, under Section 120.52 (9), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Shirley Shields 01-14-2011  
(Clerk) (Date)

Copies furnished by certified mail to:

Mark Nuhfer, NPDES Permitting Section, EPA Region 4, Atlanta, GA  
Chairman, Board of Pasco County Commissioners

Copies furnished by First Class mail to:

Patricia Garner, Progress Energy Florida  
Ron Mezich, Florida Fish and Wildlife Conservation Commission (FW C)  
U.S. Fish & Wildlife Services

Copies furnished by intradepartmental mail to:

Justin Wolfe, Esq., DEP Tallahassee  
Yanisa Angulo, DEP Tampa  
Ilia Balcom, DEP Tampa

SECOND AMENDMENT TO THE FACT SHEET

Date: January 5, 2011

Application No.: FL0002992-IW1S

Permittee: Progress Energy Florida, Inc.  
Anclote Power Plant

The following changes are based on comments from the Permittee in an email to the Department dated January 4, 2011 and previous comments on the draft permit in a letter to the Department dated August 3, 2010. They are intended to correct minor errors in the Proposed Permit, and make non-substantive changes in certain permit conditions as requested by the permittee and as outline below:

**Condition VI.4, Page 13:** The due date for the Phase I Final Report was changed from December 31, 2012 to December 31, 2011.

**Table I.B.9, Page 10:** The requirement for monitoring and reporting oil & grease was removed from the stormwater Outfall D-006 monitoring table. Oil & grease monitoring at Outfall D-006 was not included in the previous permit. Oil & grease was added to the draft renewal permit at the request of the DEP Southwest District office. The facility has pointed out that the current sampling at Outfall D-006 uses an automatic composite sampler that cannot be used to take a grab sample for oil and grease. Outfall D-006 analytical data submitted as part of the permit renewal application indicated an oil & grease level below detection (<1.4 mg/l) and below the State water quality standard of 5.0 mg/l. The DEP Southwest District office as indicated that it has no objection to removing the oil & grease monitoring requirement from the renewal permit.

**Condition I.B.7, page 9:** The facility has requested that the first paragraph of Condition I.B.7 be deleted since sampling and monitoring requirements included in this paragraph are already addressed in General Condition 18 of the permit. The first paragraph of Condition I.B.7 defines what is meant by Total Residual Oxidants (TRO) and specifies allowable analytical testing requirements for TRO. General Condition 18 specifies that sampling and monitoring data shall be collected and analyzed in accordance with Rule 62-4.246 and Chapters 62-160, 62-601, and 62-610, F.A.C., and 40 CFR 136, as appropriate.

The Department concurs with the facility that the TRO testing requirements in the first paragraph of Condition I.B.7 are already covered under General Condition 18. All the requirements for analyzing TRO that are outlined in the first paragraph of Condition I.B.7 are contained in 40 CFR 136. Additional testing requirements are included in appropriate Department laboratory quality assurance SOP's as required in DEP Rule 62-160.

Based on the above the first paragraph of Condition I.B.7 has been removed and replaced with the following wording: "Total Residual Oxidants (TRO) means the value obtained using testing procedures for Total Residual Chlorine (TRC) found in 40 CFR 136.3."



# Florida Department of Environmental Protection

Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Rick Scott  
Governor

Jennifer Carroll  
Lt. Governor

Mimi A. Drew  
Secretary

## STATE OF FLORIDA INDUSTRIAL WASTEWATER FACILITY PERMIT

**PERMITTEE:**  
Progress Energy Florida, Inc.

**RESPONSIBLE OFFICIAL:**  
Reginald D. Anderson  
1729 Baillies Bluff Road  
Holiday, Florida 34691

**FACILITY:**

Progress Energy Florida, Inc.  
Anclote Power Plant  
1729 Baillies Bluff Rd  
Holiday, FL 34691-9753  
Pasco County  
Latitude: 28°11' 1.27" N Longitude: 82°47' 6.29" W

**PERMIT NUMBER:** FL0002992(Major)  
**FILE NUMBER:** FL0002992-010-1W1S  
**ISSUANCE DATE:** January 14, 2011  
**EXPIRATION DATE:** January 13, 2016

RECEIVED

JAN 19 2011

Environmental Services

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and applicable rules of the Florida Administrative Code (F.A.C.) and constitutes authorization to discharge to waters of the state under the National Pollutant Discharge Elimination System. This permit does not constitute authorization to discharge wastewater other than as expressly stated in this permit. The above named permittee is hereby authorized to operate the facilities in accordance with the documents attached hereto and specifically described as follows:

**FACILITY DESCRIPTION:**

The plant consists of two oil-fired steam electric units with a total nameplate rating of 1,112 MW. Once-through condenser cooling water from Units 1 and 2 is passed through bar racks and intake screens, pumped through the condensers to remove excessive heat, and discharged to the plant's discharge canal. Normal debris, such as seagrass, is collected by the raker system and by the travelling screens and sluiced to the discharge canal. Larger debris collected from the intake, such as logs and limbs, is disposed of by landfill and wash water is returned to the plant discharge canal. During certain times of the year, two non-recirculating cooling towers are operated to reduce the plant discharge temperature. The cooling towers receive a portion of the heated water from the condensers where water is cooled and then discharged to the discharge canal. In-line, self cleaning debris filters remove grass and debris from the water prior to the entering cooling tower distribution system. Back flush water used to clean the debris filters is directed to the cooling tower basin where it is recombined with the cooling water that passes through the cooling tower. A biocide is added to the cooling tower intake water for biofouling control and then dehalogenated, if necessary, prior to discharge. In addition, there are four dilution pumps which help provide temperature control by pumping additional water from the intake canal to the discharge canal.

**WASTEWATER TREATMENT:**

All other wastewater generated at this plant is discharged into two on-site percolation/evaporation ponds, without surface water discharge. The discharge to the percolation/evaporation ponds is authorized by separate permit issued by the Department's Southwest District.

**REUSE OR DISPOSAL:**

"More Protection, Less Process"  
[www.dep.state.fl.us](http://www.dep.state.fl.us)

Docket No. 110007-EI  
Progress Energy Florida  
Witness: Patricia Q. West  
Exhibit No. \_\_ (PQW-1)  
Page 49 of 85

PERMITTEE: Progress Energy Florida, Inc  
FACILITY: Anclote Power Plant

PERMIT NUMBER: FL0002992 (Major)  
ISSUANCE DATE: January 14, 2011  
EXPIRATION DATE: January 13, 2016

**Surface Water Discharge D-004:** An existing discharge to Anclote Sound (Gulf of Mexico), Class III Marine Waters, (WBID# 8045C). The point of discharge is located approximately at latitude 28°11' 22" N, longitude 82°47' 13" W.

**Internal Outfall I-001:** An existing discharge of once-through condenser cooling water from Unit 1 to the discharge canal.

**Internal Outfall I-002:** An existing discharge of once-through condenser cooling water from Unit 2 to the discharge canal.

**Internal Outfall I-003:** An existing discharge of once-through dilution water flow from the intake canal to the discharge canal.

**Internal Outfall I-005:** An existing discharge of cooling tower discharge to the discharge canal.

**Stormwater Outfall:** An existing internal discharge of stormwater via Outfall I-006 to the intake canal.

**IN ACCORDANCE WITH:** The limitations, monitoring requirements and other conditions set forth in this Cover Sheet and Part I through Part IX on pages 1 through 25 of this permit.

PERMITTEE: Progress Energy Florida, Inc  
 FACILITY: Anclote Power Plant

PERMIT NUMBER: FL0002992 (Major)  
 ISSUANCE DATE: January 14, 2011  
 EXPIRATION DATE: January 13, 2016

**I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

**A. Surface Water Discharges**

1. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge combined plant discharge from Outfall D-004 to Anclote Sound (Gulf of Mexico). Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.C.3.:

Parameter	Units	Max/Min	Effluent Limitations		Monitoring Requirements			Notes
			Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	
Intake Temperature, Water	Deg F	Max Max Max	Report Report Report	1 Hour Average 3 Hour Average Daily Average	Continuous	Recorder	INT-1	
Discharge Temperature (Primary)	Deg F	Max Max Max	90.0 92.0 Report	1 Hour Average Instantaneous Maximum Daily Average	Continuous	Recorder	EFF-1	
Temperature Rise (Primary)	Deg F	Max Max	Report Report	1 Hour Average Daily Average	Continuous	Recorder	EFF-1	
Discharge Temperature (Alternate) <sup>2</sup>	Deg F	Max Max Max	92.0 95.0 95.5 Report	Daily Average 1 Hour Average Instantaneous Maximum 3 Hour Average	Continuous	Recorder	EFF-1	
Temperature Rise (Alternate) <sup>2</sup>	Deg F	Max Max Max	5.0 Report Report	3 Hour Average 1 Hour Average Daily Average	Continuous	Recorder	EFF-1	
<b>Mode II</b>								
Discharge Temperature (Primary)	Deg F	Max Max Max	92.0 95.0 Report	1 Hour Average Instantaneous Maximum Daily Average	Continuous	Recorder	EFF-1	
Temperature Rise (Primary)	Deg F	Max Max	Report Report	1 Hour Average Daily Average	Continuous	Recorder	EFF-1	
Discharge Temperature (Alternate) <sup>2</sup>	Deg F	Max Max Max	92.0 95.0 95.5 Report	Daily Average 1 Hour Average Instantaneous Maximum 3 Hour Average	Continuous	Recorder	EFF-1	

<sup>1</sup> Mode I temperature limitations are applicable each year beginning on January 1 and lasting until the daily average intake temperature first equals or exceeds 82.0°F in the Spring. Additionally, Mode I limitations are applicable beginning the day after the daily average intake temperature falls below 82.0°F in the fall and lasting through December 31.

<sup>2</sup> Alternate monitoring and limitations are applicable only when the facility is unable to meet primary limitations with three cooling tower pumps and 22 cooling tower fans in operation. If alternate mode thresholds are met and there occurs a non-availability of the minimum number of cooling tower fans and pumps due to equipment malfunction, the permittee may remain in alternate mode. In such case, the permittee shall endeavor to repair or take other necessary measures to return the inoperable fan(s) or pump(s) back into service as soon as possible.

<sup>3</sup> Mode II temperature limitations are applicable each year beginning the day after the daily average intake temperature first equals or exceeds 82.0 °F and lasting through the day on which the daily average temperature first falls below 82.0°F in the Fall.

PERMITTEE: Progress Energy Florida, Inc  
 FACILITY: Anclote Power Plant

PERMIT NUMBER: FL0002992 (Major)  
 ISSUANCE DATE: January 14, 2011  
 EXPIRATION DATE: January 13, 2016

Parameter	Units	Max/Min	Effluent Limitations		Monitoring Requirements			Notes
			Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	
Temperature rise (Alternate) <sup>2</sup>	Deg F	Max Max Max	5.0 Report Report	3 Hour Average 1 Hour Average Daily Average	Continuous	Recorder	EFF-1	
Temperature, Water	Deg C	Max Max	Report Report	Single Sample Single Sample	Quarterly	Grab	EFF-1 INT-1	See I.A.4
pH	su	Max Max	Report Report	Single Sample Single Sample	Quarterly	Grab	EFF-1 INT-1	See I.A.4
Nitrogen, Ammonia, Total (as N)	mg/L	Max Max	Report Report	Single Sample Single Sample	Quarterly	Grab	EFF-1 INT-1	See I.A.4
Ammonia, Total Unionized (as NH <sub>3</sub> )	mg/L	Max Max	Report Report	Single Sample Single Sample	Quarterly	Calculated	EFF-1 INT-1	See I.A.4
Nitrogen, Kjeldahl, Total (as N)	mg/L	Max Max	Report Report	Single Sample Single Sample	Quarterly	Grab	EFF-1 INT-1	
Nitrite plus Nitrate, Total 1 det. (as N)	mg/L	Max Max	Report Report	Single Sample Single Sample	Quarterly	Grab	EFF-1 INT-1	
Nitrogen, Total	mg/L	Max Max	Report Report	Single Sample Single Sample	Quarterly	Grab	EFF-1 INT-1	
Phosphorus, Total (as P)	mg/L	Max Max	Report Report	Single Sample Single Sample	Quarterly	Grab	EFF-1 INT-1	
Phosphate, Ortho (as PO <sub>4</sub> )	mg/L	Max Max	Report Report	Single Sample Single Sample	Quarterly	Grab	EFF-1 INT-1	
Chronic Whole Effluent Toxicity, 7-Day IC25 (Mysidopsis bahia)	percent	Min	100	Single Sample	Quarterly	24-hr TPC	EFF-1	See I.A.5
Chronic Whole Effluent Toxicity, 7-Day IC25 (Menidia beryllina)	percent	Min	100	Single Sample	Quarterly	24-hr TPC	EFF-1	See I.A.5

2. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.A.1. and as described below:

Monitoring Site Number	Description of Monitoring Site
INT-1	Condenser intake waterboxes for Units 1 & 2.
EFF-1	At the combined plant Point of Discharge (POD) at the end of the discharge canal.

3. Any combination of dilution pumps and cooling tower equipment may be operated to achieve the above Mode I and Mode II limitations; however, the facility shall operate the dilution pumps as the primary means of achieving thermal limitations. In the event that excessive amounts of seagrass and/or debris is being drawn into the plant intake canal; dilution pumps use may be discontinued so as to prevent equipment damage as necessary.

Operation of cooling tower pumps and fans shall be minimized to the extent possible in order to meet thermal limitations. However, operation of one dilution pump minimum is required at all times when cooling towers are being operated except in the case of mechanical or electrical failure or in the event that the intake water to the dilution pumps exceeds the discharge temperature from the cooling towers.

PERMITTEE: Progress Energy Florida, Inc  
FACILITY: Anclote Power Plant

PERMIT NUMBER: FL0002992 (Major)  
ISSUANCE DATE: January 14, 2011  
EXPIRATION DATE: January 13, 2016

4. Samples for pH and temperature (grab) shall be taken simultaneously with each total ammonia grab sample. Un-ionized ammonia shall be calculated in accordance with the procedure provided by the Department (refer to the website [www.dep.state.fl.us/labs/library/index.htm](http://www.dep.state.fl.us/labs/library/index.htm)). All measured values for pH, temperature, and total ammonia used to calculate an un-ionized ammonia value shall be reported as an attachment to the Discharge Monitoring Report (DMR). All calculated un-ionized ammonia values shall be reported on the attachment. The daily maximum and monthly average values for un-ionized ammonia for each reporting period shall be reported on the DMR.
5. The permittee shall comply with the following requirements to evaluate chronic whole effluent toxicity of the discharge from outfall D-004.
  - a. Effluent Limitation
    - (1) In any routine or additional follow-up test for chronic whole effluent toxicity, the 25 percent inhibition concentration (IC25) shall not be less than 100% effluent. [Rules 62-302.530(61) and 62-4.241(1)(b), F.A.C.]
    - (2) For acute whole effluent toxicity, the 96-hour LC50 shall not be less than 100% effluent in any test. [Rules 62-302.500(1)(a)4. and 62-4.241(1)(a), F.A.C.]
  - b. Monitoring Frequency
    - (1) Routine toxicity tests shall be conducted once every three months, the first starting within 60 days of the issuance date of this permit and lasting for the duration of this permit.
    - (2) Upon completion of four consecutive, valid routine tests that demonstrate compliance with the effluent limitation in 5.a.(1) above, the permittee may submit a written request to the Department for a reduction in monitoring frequency to once every six months. The request shall include a summary of the data and the complete bioassay laboratory reports for each test used to demonstrate compliance. The Department shall act on the request within 45 days of receipt. Reductions in monitoring shall only become effective upon the Department's written confirmation that the facility has completed four consecutive valid routine tests that demonstrate compliance with the effluent limitation in 5.a.(1) above.
    - (3) If a test within the sequence of the four is deemed invalid based on the acceptance criteria in EPA-821-R-02-014, but is replaced by a repeat valid test initiated within 21 days after the last day of the invalid test, the invalid test will not be counted against the requirement for four consecutive valid tests for the purpose of evaluating the reduction of monitoring frequency.
  - c. Sampling Requirements
    - (1) For each routine test or additional follow-up test conducted, a total of three 24-hour composite samples of final effluent shall be collected and used in accordance with the sampling protocol discussed in EPA-821-R-02-014, Section 8.
    - (2) The first sample shall be used to initiate the test. The remaining two samples shall be collected according to the protocol and used as renewal solutions on Day 3 (48 hours) and Day 5 (96 hours) of the test.
    - (3) Samples for routine and additional follow-up tests shall not be collected on the same day.
  - d. Test Requirements
    - (1) Routine Tests: All routine tests shall be conducted using a control (0% effluent) and a minimum of five test dilutions: 100%, 50%, 25%, 12.5%, and 6.25% final effluent.
    - (2) The permittee shall conduct 7-day survival and growth chronic toxicity tests with a mysid shrimp, *Americamysis (Mysidopsis) bahia*, Method 1007.0, and an inland silverside, *Menidia beryllina*, Method 1006.0, concurrently.
    - (3) All test species, procedures and quality assurance criteria used shall be in accordance with Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, 3rd Edition, EPA-821-R-02-014. Any deviation of the bioassay procedures outlined herein shall be submitted in writing to the Department for review and approval prior to use. In the event the above method is revised, the permittee shall conduct chronic toxicity testing in accordance with the revised method.
    - (4) The control water and dilution water used shall be artificial sea salts as described in EPA-821-R-02-014, Section 7.2. The test salinity shall be determined as follows:

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- (a) For the *Americamysis bahia* bioassays, the effluent shall be adjusted to a salinity of 20 parts per thousand (ppt) with artificial sea salts. The salinity of the control/dilution water (0% effluent) shall be 20 ppt. If the salinity of the effluent is greater than 20 ppt, no salinity adjustment shall be made to the effluent and the test shall be run at the effluent salinity. The salinity of the control/dilution water shall match the salinity of the effluent.
  - (b) For the *Menidia beryllina* bioassays, if the effluent salinity is less than 5ppt, the salinity shall be adjusted to 5 ppt with artificial sea salts. The salinity of the control/dilution water (0% effluent) shall be 5 ppt. If the salinity of the effluent is greater than 5 ppt, no salinity adjustment shall be made to the effluent and the test shall be run at the effluent salinity. The salinity of the control/dilution water shall match the salinity of the effluent.
  - (c) If the salinity of the effluent requires adjustment, a salinity adjustment control should be prepared and included with each bioassay. The salinity adjustment control is intended to identify toxicity resulting from adjusting the effluent salinity with artificial sea salts. To prepare the salinity adjustment control, dilute the control/dilution water to the salinity of the effluent and adjust the salinity of the salinity adjustment control at the same time and to the same salinity that the salinity of the effluent is adjusted using the same artificial sea salts.
- e. Quality Assurance Requirements
- (1) A standard reference toxicant (SRT) quality assurance (QA) chronic toxicity test shall be conducted with each species used in the required toxicity tests either concurrently or initiated no more than 30 days before the date of each routine or additional follow-up test conducted. Additionally, the SRT test must be conducted concurrently if the test organisms are obtained from outside the test laboratory unless the test organism supplier provides control chart data from at least the last five monthly chronic toxicity tests using the same reference toxicant and test conditions. If the organism supplier provides the required SRT data, the organism supplier's SRT data and the test laboratory's monthly SRT-QA data shall be included in the reports for each companion routine or additional follow-up test required.
  - (2) If the mortality in the control (0% effluent) exceeds 20% for either species in any test or any test does not meet "test acceptability criteria", the test for that species (including the control) shall be invalidated and the test repeated. Test acceptability criteria for each species are defined in EPA-821-R-02-014, Section 14.12 (*Americamysis bahia*) and Section 13.12 (*Menidia beryllina*). The repeat test shall begin within 21 days after the last day of the invalid test.
  - (3) If 100% mortality occurs in all effluent concentrations for either species prior to the end of any test and the control mortality is less than 20% at that time, the test (including the control) for that species shall be terminated with the conclusion that the test fails and constitutes non-compliance.
  - (4) Routine and additional follow-up tests shall be evaluated for acceptability based on the observed dose-response relationship as required by EPA-821-R-02-014, Section 10.2.6., and the evaluation shall be included with the bioassay laboratory reports.
- f. Reporting Requirements
- (1) Results from all required tests shall be reported on the Discharge Monitoring Report (DMR) as follows:
    - (a) Routine and Additional Follow-up Test Results: The calculated IC25 for each test species shall be entered on the DMR.
  - (2) A bioassay laboratory report for each routine test shall be prepared according to EPA-821-R-02-014, Section 10, Report Preparation and Test Review, and mailed to the Department at the address below within 30 days after the last day of the test.
  - (3) For additional follow-up tests, a single bioassay laboratory report shall be prepared according to EPA-821-R-02-014, Section 10, and mailed within 30 days after the last day of the second valid additional follow-up test.
  - (4) Data for invalid tests shall be included in the bioassay laboratory report for the repeat test.
  - (5) The same bioassay data shall not be reported as the results of more than one test.
  - (6) All bioassay laboratory reports shall be sent to:  
Florida Department of Environmental Protection  
Tallahassee Office  
2600 Blair Stone Road, M.S. 3545  
Tallahassee, Florida 32399-2400

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g. Test Failures

- (1) A test fails when the test results do not meet the limits in 5.a.(1).
- (2) Additional Follow-up Tests:
  - (a) If a routine test does not meet the chronic toxicity limitation in 5.a.(1) above, the permittee shall notify the Department at the address above within 21 days after the last day of the failed routine test and conduct two additional follow-up tests on each species that failed the test in accordance with 5.d.
  - (b) The first test shall be initiated within 28 days after the last day of the failed routine test. The remaining additional follow-up tests shall be conducted weekly thereafter until a total of two valid additional follow-up tests are completed.
  - (c) The first additional follow-up test shall be conducted using a control (0% effluent) and a minimum of five dilutions: 100%, 50%, 25%, 12.5%, and 6.25% effluent. The permittee may modify the dilution series in the second additional follow-up test to more accurately bracket the toxicity such that at least two dilutions above and two dilutions below the target concentration and a control (0% effluent) are run. All test results shall be analyzed according to the procedures in EPA-821-R-02-014.
- (3) In the event of three valid test failures (whether routine or additional follow-up tests) within a 12-month period, the permittee shall notify the Department within 21 days after the last day of the third test failure.
  - (a) The permittee shall submit a plan for correction of the effluent toxicity within 60 days after the last day of the third test failure.
  - (b) The Department shall review and approve the plan before initiation.
  - (c) The plan shall be initiated within 30 days following the Department's written approval of the plan.
  - (d) Progress reports shall be submitted quarterly to the Department at the address above.
  - (e) During the implementation of the plan, the permittee shall conduct quarterly routine whole effluent toxicity tests in accordance with 5.d. Additional follow-up tests are not required while the plan is in progress. Following completion or termination of the plan, the frequency of monitoring for routine and additional follow-up tests shall return to the schedule established in 5.b.(1). If a routine test is invalid according to the acceptance criteria in EPA-821-R-02-014, a repeat test shall be initiated within 21 days after the last day of the invalid routine test.
  - (f) Upon completion of four consecutive quarterly valid routine tests that demonstrate compliance with the effluent limitation in 5.a.(1) above, the permittee may submit a written request to the Department to terminate the plan. The plan shall be terminated upon written verification by the Department that the facility has passed at least four consecutive quarterly valid routine whole effluent toxicity tests. If a test within the sequence of the four is deemed invalid, but is replaced by a repeat valid test initiated within 21 days after the last day of the invalid test, the invalid test will not be counted against the requirement for four consecutive quarterly valid routine tests for the purpose of terminating the plan.
- (4) If chronic toxicity test results indicate greater than 50% mortality within 96 hours in an effluent concentration equal to or less than the effluent concentration specified as the acute toxicity limit in 5.(a)(2), the Department may revise this permit to require acute definitive whole effluent toxicity testing.
- (5) The additional follow-up testing and the plan do not preclude the Department taking enforcement action for acute or chronic whole effluent toxicity failures.

[62-4.241, 62-620.620(3)]

6. The discharge shall not contain components that settle to form putrescent deposits or float as debris, scum, oil, or other matter. [62-302.500(1)(a)]
7. The permittee shall maintain current intake traveling screen practices so as to assure that the screens are cycled at least once per day or at least twice during a 24 hour period of circulating water pump operation unless precluded by repair or maintenance requirements.

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8. The intake through-screen velocity shall be maintained at current levels such that existing maximum velocity is not exceeded.
9. The permittee shall develop a plan in accordance with the schedule in Condition VI.3 to return live fish, shellfish, and other aquatic organisms collected or trapped on the intake screens to their natural habitat. Other material shall be removed from the intake screens and disposed of in accordance with all existing Federal, State and /or local laws and regulations that apply to waste disposal. Such material shall not be returned to the receiving waters.

**B. Internal Outfalls**

1. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge once-through non-contact cooling water from I-001 and I-002 from Unit 1 and 2, respectively, to the discharge canal. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.C.3.:

Parameter	Units	Max/Min	Effluent Limitations		Monitoring Requirements			Notes
			Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	
Flow (Total Units 1 and 2 OTCW)	MGD	Max	Report	Daily Average	Daily	Pump Logs	FLW-1	

2. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.B.1. and as described below:

Monitoring Site Number	Description of Monitoring Site
FLW-1	Units 1 and 2 OTCW flow measurement location.

3. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge once-through dilution water from I-003 to the discharge canal. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.C.3.:

Parameter	Units	Max/Min	Effluent Limitations		Monitoring Requirements			Notes
			Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	
Flow	MGD	Max	Report	Daily Average	Daily	Pump Logs	FLW-2	
Duration of Discharge	hours/month	Max	Report	Daily Average	Daily	Pump Logs	FLW-2	

4. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.B.3. and as described below:

Monitoring Site Number	Description of Monitoring Site

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Monitoring Site Number	Description of Monitoring Site
FLW-2	dilution pump flow measurement location

5. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge cooling tower blowdown from I-005 to discharge canal. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.C.3.:

Parameter	Units	Max/Min	Effluent Limitations		Monitoring Requirements			Notes
			Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	
TRO-Discharge Time <sup>4</sup>	min/tower/day	Max	120	Instantaneous Maximum	Daily	Calculated	EFF-2	
Dosage Rate <sup>5</sup>	lbs/tower/day	Max	500	Instantaneous Maximum	Daily	Calculated	INT-2	
Oxidants, Total Residual	mg/L	Max	0.01	Instantaneous Maximum	Weekly	Grab <sup>6</sup>	EFF-1	
Oxidants, Total Residual	mg/L	Min	0.05	Instantaneous Minimum	Weekly	Meter	EFF-2	

6. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.B.5. and as described below:

Monitoring Site Number	Description of Monitoring Site
EFF-2	At the point where the cooling tower discharge enters the discharge canal and prior to mixing with the receiving water.
EFF-1	At the combined plant Point of Discharge (POD) at the end of the discharge canal.
INT-2	At the point of addition.

7. Total Residual Oxidants (TRO) means the value obtain using testing procedures for Total Residual Chlorine (TRC) found in 40 CFR 136.3.

Monitoring requirements for TRO are not applicable if an oxidant has not been added to the cooling towers of any electric generating unit during the previous 7 days.

Multiple grabs for TRO shall be defined as once per five minutes during TRO discharge periods of 30 minutes or less and once per 15 minutes for periods exceeding 30 minutes with no less than four analyses during the period of TRO discharge (sampling shall be continued until the end of the TRO discharge).

<sup>4</sup> Not more than one cooling tower shall discharge TRO at any one time.

<sup>5</sup> The limitation is for pounds of available chlorine contained in liquid sodium hypochlorite currently being used by the facility. The facility is authorized to use liquid sodium bromide in conjunction with sodium hypochlorite at a feed rate based on a ratio of 2 moles of sodium hypochlorite to one mole of sodium bromide. Sodium bisulfite is used as needed for dehalogenation in order to meet TRO limitations.

<sup>6</sup> Multiple grabs for TRC shall consist of grab samples collected at approximately the beginning, middle, and end of the period of expected TRO discharge to the sampling point. Monitoring at EFF-1 is required only if the discharge TRO concentration at EFF-2 exceeds 0.01 mg/l

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8. The permittee shall ensure that both cooling towers are maintained in good working order and available for operation when needed.
9. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge stormwater from I-006 to intake canal. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.C.3.:

Parameter	Units	Max/Min	Effluent Limitations		Monitoring Requirements			Notes
			Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	
Flow	MGD	Max	Report	Daily Maximum	Monthly, when discharging	Calculated	EFF-3	
Copper, Total Recoverable	ug/L	Max	Report	Daily Maximum	Monthly, when discharging	Grab	EFF-3	
Iron, Total Recoverable	ug/L	Max	Report	Daily Maximum	Monthly, when discharging	Grab	EFF-3	

10. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.B.9. and as described below:

Monitoring Site Number	Description of Monitoring Site
EFF-3	Prior to discharge to the intake canal or mixing with any other waste stream at sampling location previously identified as "stormdrain AN1"

**C. Other Limitations and Monitoring and Reporting Requirements**

1. The sample collection, analytical test methods, and method detection limits (MDLs) applicable to this permit shall be conducted using a sufficiently sensitive method to ensure compliance with applicable water quality standards and effluent limitations and shall be in accordance with Rule 62-4.246, Chapters 62-160 and 62-601, F.A.C., and 40 CFR 136, as appropriate. The list of Department established analytical methods, and corresponding MDLs (method detection limits) and PQLs (practical quantitation limits), which is titled "FAC 62-4 MDL/PQL Table (April 26, 2006)" is available at <http://www.dep.state.fl.us/labs/library/index.htm>. The MDLs and PQLs as described in this list shall constitute the minimum acceptable MDL/PQL values and the Department shall not accept results for which the laboratory's MDLs or PQLs are greater than those described above unless alternate MDLs and/or PQLs have been specifically approved by the Department for this permit. Any method included in the list may be used for reporting as long as it meets the following requirements:
  - a. The laboratory's reported MDL and PQL values for the particular method must be equal or less than the corresponding method values specified in the Department's approved MDL and PQL list;
  - b. The laboratory reported MDL for the specific parameter is less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Parameters that are listed as "report only" in the permit shall use methods that provide an MDL, which is equal to or less than the applicable water quality criteria stated in 62-302, F.A.C.; and
  - c. If the MDLs for all methods available in the approved list are above the stated permit limit or applicable water quality criteria for that parameter, then the method with the lowest stated MDL shall be used.

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When the analytical results are below method detection or practical quantitation limits, the permittee shall report the actual laboratory MDL and/or PQL values for the analyses that were performed following the instructions on the applicable discharge monitoring report.

Where necessary, the permittee may request approval of alternate methods or for alternative MDLs or PQLs for any approved analytical method. Approval of alternate laboratory MDLs or PQLs are not necessary if the laboratory reported MDLs and PQLs are less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Approval of an analytical method not included in the above-referenced list is not necessary if the analytical method is approved in accordance with 40 CFR 136 or deemed acceptable by the Department. [62-4.246, 62-160]

2. The permittee shall provide safe access points for obtaining representative influent and effluent samples which are required by this permit. [62-620.320(6)]
3. Monitoring requirements under this permit are effective on the first day of the second month following permit issuance. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any. During the period of operation authorized by this permit, the permittee shall complete and submit to the Department Discharge Monitoring Reports (DMRs) in accordance with the frequencies specified by the REPORT type (i.e. monthly, toxicity, quarterly, semiannual, annual, etc.) indicated on the DMR forms attached to this permit. Monitoring results for each monitoring period shall be submitted in accordance with the associated DMR due dates below.

REPORT Type on DMR	Monitoring Period	Due Date
Monthly or Toxicity	first day of month - last day of month	28 <sup>th</sup> day of following month
Quarterly	January 1 - March 31	April 28
	April 1 - June 30	July 28
	July 1 - September 30	October 28
	October 1 - December 31	January 28
Semiannual	January 1 - June 30	July 28
	July 1 - December 30	January 28
Annual	January 1 - December 31	January 28

DMRs shall be submitted for each required monitoring period including months of no discharge. The permittee may submit either paper or electronic DMR form(s). If submitting paper DMR form(s), the permittee shall make copies of the attached DMR form(s). If submitting electronic DMR form(s), the permittee shall use a Department-approved electronic DMR system.

The electronic submission of DMR forms shall be accepted only if approved in writing by the Department. For purposes of determining compliance with this permit, data submitted in electronic format is legally equivalent to data submitted on signed and certified paper DMR forms.

The permittee shall submit the completed DMR form(s) to the Department by the twenty-eighth (28th) of the month following the month of operation at the addresses specified below:

Florida Department of Environmental Protection  
 Wastewater Compliance Evaluation Section, Mail Station 3551  
 Bob Martinez Center  
 2600 Blair Stone Road  
 Tallahassee, Florida 32399-2400

And

Florida Department of Environmental Protection  
 Southwest District

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13051 N. Telecom Parkway  
Temple Terrace, Florida 33637

[62-620.610(18)]

4. The permittee shall not submit DMR forms that alter the original format or content of the attached DMR forms without written approval from the Department's Southwest District Office at the address specified below:

Florida Department of Environmental Protection  
Southwest District  
13051 N. Telecom Parkway  
Temple Terrace, Florida 33637

5. Unless specified otherwise in this permit, all reports and other information required by this permit, including 24-hour notifications, shall be submitted to or reported to, as appropriate, the Department's Southeast District Office at the address specified above.
6. All reports and other information shall be signed in accordance with the requirements of Rule 62-620.305, F.A.C. [62-620.305]
7. If there is no discharge from the facility on a day when the facility would normally sample, the sample shall be collected on the day of the next discharge. [62-620.320(6)]
8. The permittee shall notify the Department in writing no later than six (6) months prior to instituting use of any biocide or chemical (except sodium hypochlorite, sodium bromide, and sodium bisulfite) used in the cooling systems or any other portion of the treatment system which may be toxic to aquatic life. Such notification shall include:
- Name and general composition of biocide or chemical
  - Frequencies of use
  - Quantities to be used
  - Proposed effluent concentrations
  - Acute and/or chronic toxicity data (laboratory reports shall be prepared according to Section 12 of EPA document no. EPA/600/4-90/027 entitled, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters for Freshwater and Marine Organisms, or most current addition.)
  - Product data sheet
  - Product label
9. The Department will review the above information to determine if a major or minor permit revision is necessary. Discharge associated with the use of such biocide or chemical is not authorized without a permit revision by the Department. Permit revisions shall be processed in accordance with the requirements of Chapter 62-620, F.A.C.
10. The Permittee shall continue compliance with the facility's Manatee Protection Plan approved by the Department on May 13, 2002.
11. The permittee is authorized to discharge seal water used for lubrication of the cooling tower pump bearings to the discharge canal without limitations or monitoring requirements.

## II. SLUDGE MANAGEMENT REQUIREMENTS

- The method of sludge disposal by this facility is to a Class I solid waste landfill.
- The permittee shall be responsible for proper treatment, management, use, and land application or disposal of its sludges. [62-620.320(6)]

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3. Storage, transportation, and disposal of sludge/solids characterized as hazardous waste shall be in accordance with requirements of Chapter 62-730, F.A.C. [62-730]

### III. GROUND WATER REQUIREMENTS

Section III is not applicable to this facility.

### IV. ADDITIONAL LAND APPLICATION REQUIREMENTS

Section IV is not applicable to this facility.

### V. OPERATION AND MAINTENANCE REQUIREMENTS

1. During the period of operation authorized by this permit, the wastewater facilities shall be operated under the supervision of a person who is qualified by formal training and/or practical experience in the field of water pollution control. [62-620.320(6)]
2. The permittee shall maintain the following records and make them available for inspection on the site of the permitted facility.
  - a. Records of all compliance monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, including, if applicable, a copy of the laboratory certification showing the certification number of the laboratory, for at least three years from the date the sample or measurement was taken;
  - b. Copies of all reports required by the permit for at least three years from the date the report was prepared;
  - c. Records of all data, including reports and documents, used to complete the application for the permit for at least three years from the date the application was filed;
  - d. A copy of the current permit;
  - e. A copy of any required record drawings; and
  - f. Copies of the logs and schedules showing plant operations and equipment maintenance for three years from the date of the logs or schedules.

[62-620.350]

### VI. SCHEDULES

1. The following improvement actions shall be completed according to the following schedule. The Best Management Practices/Pollution Prevention (BMP3) Plan shall be prepared and implemented in accordance with Part VII of this permit.

Improvement Action	Completion Date
1. Develop and implement SWPPP	18 months from permit issuance
2. Complete Plan Summary	2 years from permit issuance
3. Progress/Update Report	3 years, and then annual thereafter

[62-620.320(6)]

2. If the permittee wishes to continue operation of this wastewater facility after the expiration date of this permit, the permittee shall submit an application for renewal no later than one-hundred and eighty days (180) prior to the expiration date of this permit. Application shall be made using the appropriate forms listed in Rule 62-620.910, F.A.C., including submittal of the appropriate processing fee set forth in Rule 62-4.050, F.A.C. [62-620.333(1) and (2)]

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3. Within 6 months from the issuance date of this permit, the permittee shall schedule a meeting with the Department to discuss the contents of the aquatic organism return plan in accordance with Condition I.A.9 and shall submit the plan to the Department within 12 months thereafter. The plan shall be implemented within 24 months subsequent to approval by the Department.
4. The permittee shall conduct a Thermal Plume Biological Assessment in accordance with the Plan of Study (POS) For A Thermal Plume Assessment dated September 2007 previously submitted to the Department and in accordance with the following schedule:

Phase I (Thermal Plum Delineation) ..... May 2011 through September 2011  
Phase I Final Report ..... No later than December 31, 2011  
Submit Phase II POS (Biological Assessment) ..... No later than January 31, 2012  
Begin Phase II ..... May 2012  
Phase II Final Report ..... No later than 180 days Prior to Permit Expiration

## VII. BEST MANAGEMENT PRACTICES/STORMWATER POLLUTION PREVENTION PLANS

### 1. General Requirements

In accordance with Section 304(e) and 402(a)(2) of the Clean Water Act (CWA) as amended, 33 U.S.C. §§ 1251 et seq., and the Pollution Prevention Act of 1990, 42 U.S.C. §§ 13101-13109, the permittee must develop and implement a plan for utilizing practices incorporating pollution prevention measures. References to be considered in developing the plan are "Criteria and Standards for Best Management Practices Authorized Under Section 304(e) of the Act," found at 40 CFR 122.44 Subpart K and the Storm Water Management Industrial Activities Guidance Manual, EPA/833-R92-002 and other EPA documents relating to Best Management Practice guidance.

#### a. Definitions

- (1) The term "pollutants" refers to conventional, non-conventional and toxic pollutants.
- (2) Conventional pollutants are: biochemical oxygen demand (BOD), suspended solids, pH, fecal coliform bacteria and oil & grease.
- (3) Non-conventional pollutants are those which are not defined as conventional or toxic.
- (4) Toxic pollutants include, but are not limited to: (a) any toxic substance listed in Section 307(a)(1) of the CWA, any hazardous substance listed in Section 311 of the CWA, or chemical listed in Section 313(c) of the Superfund Amendments and Reauthorization Act of 1986; and (b) any substance (that is not also a conventional or non-conventional pollutant except ammonia) for which EPA has published an acute or chronic toxicity criterion.
- (5) "Significant Materials" is defined as raw materials; fuels; materials such as solvents and detergents; hazardous substances designated under Section 101(14) of CERCLA; and any chemical the facility is required to report pursuant to EPCRA, Section 313; fertilizers; pesticides; and waste products such as ashes, slag and sludge.
- (6) "Pollution prevention" and "waste minimization" refer to the first two categories of EPA's preferred hazardous waste management strategy: first, source reduction and then, recycling.
- (7) "Recycle/Reuse" is defined as the minimization of waste generation by recovering and reprocessing usable products that might otherwise become waste; or the reuse or reprocessing of usable waste products in place of the original stock, or for other purposes such as material recovery, material regeneration or energy production.
- (8) "Source reduction" means any practice which: (a) reduces the amount of any pollutant entering a waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment or disposal; and (b) reduces the hazards to public health and the environment associated with the release of such pollutant. The term includes equipment or technology modifications, process or

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procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. It does not include any practice which alters the physical, chemical, or biological characteristics or the volume of a pollutant through a process or activity which itself is not integral to, or previously considered necessary for, the production of a product or the providing of a service.

- (9) "SWPPP" means a Storm Water Pollution Prevention Plan incorporating the requirements of 40 CFR § 125, Subpart K, plus pollution prevention techniques, except where other existing programs are deemed equivalent by the permittee. The permittee shall certify the equivalency of the other referenced programs.
- (10) The term "material" refers to chemicals or chemical products used in any plant operation (i.e., caustic soda, hydrazine, degreasing agents, paint solvents, etc.). It does not include lumber, boxes, packing materials, etc.
- (11) The term "allowable non-storm water discharges" refers to the following discharges that may be discharged through storm water outfalls unless identified by the Department as sources of pollutants:
- Discharges from fire-fighting activities;
  - Fire hydrant flushings;
  - Potable water, including water line flushings;
  - Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
  - Irrigation drainage;
  - Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;
  - Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
  - Routine external building washdown that does not use detergents;
  - Uncontaminated ground water or spring water;
  - Foundation or footing drains where flows are not contaminated with process materials; and
  - Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of your facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

## 2. Storm Water Pollution Prevention Plan

The permittee shall develop and implement a SWPPP for the facility, which is the source of wastewater and storm water discharges, covered by this permit. The plan shall be directed toward reducing those pollutants of concern which discharge to surface waters and shall be prepared in accordance with good engineering and good housekeeping practices. For the purposes of this permit, pollutants of concern shall be limited to toxic pollutants, as defined above, known to the discharger. The plan shall address all activities which could or do contribute these pollutants to the surface water discharge, including process, treatment, and ancillary activities.

### a. Signatory Authority & Management Responsibilities

The SWPPP shall be signed by permittee or their duly authorized representative in accordance with rule 62-620.305(2)(a) and (b). The SWPPP shall be reviewed by plant environmental/engineering staff and plant manager. Where required by Chapter 471-(P.E.) or Chapter 492 (P.G.) Florida Statutes, applicable portions of the SWPPP shall be signed and sealed by the professional(s) who prepared them.

A copy of the plan shall be retained at the facility and shall be made available to the permit issuing authority upon request.

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The SWPPP shall contain a written statement from corporate or plant management indicating management's commitment to the goals of the BMP program. Such statements shall be publicized or made known to all facility employees. Management shall also provide training for the individuals responsible for implementing the SWPPP.

b. SWPPP Requirements

- (1) A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate.
- (2) A site map showing:
  - (a) The storm water conveyance and discharge structures;
  - (b) An outline of the storm water drainage areas for each storm water discharge point;
  - (c) Paved areas and buildings;
  - (d) Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates;
  - (e) Location of existing or future storm water structural control measures/practices (dikes, coverings, detention facilities, etc.);
  - (f) Surface water locations and/or municipal storm drain locations;
  - (g) Areas of existing and potential soil erosion;
  - (h) Vehicle service areas;
  - (i) Material loading, unloading, and access areas;
- (3) A narrative description of the following:
  - (a) The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;
  - (b) Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges;
  - (c) Existing or future structural and non-structural control measures/practices to reduce pollutants in storm water discharges;
  - (d) Industrial storm water discharge treatment facilities;
  - (e) Methods of onsite storage and disposal of significant materials;
  - (f) Overall objectives (both short-term and long-term) and scope of the plan, specific reduction goals for pollutants, anticipated dates of achievement of reduction, and a description of means for achieving each reduction goal;
  - (g) A description of procedures relative to spill prevention, control & countermeasures and a description of measures employed to prevent storm water contamination;
  - (h) A description of practices involving preventive maintenance, housekeeping, recordkeeping, inspections, and plant security; and
  - (i) The description of a waste minimization assessment performed in accordance with the conditions outlined in condition c below, results of the assessment, and a schedule for implementation of specific waste reduction practices.
- (4) A list of the allowable non-storm water discharges that have a reasonable potential to be present in storm water discharges at this facility.
- (5) A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities.
- (6) An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.
- (7) A summary of existing sampling data describing pollutants in storm water discharges.

c. Waste Minimization Assessment

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The permittee is encouraged but not required to conduct a waste minimization assessment (WMA) for this facility to determine actions that could be taken to reduce waste loading and chemical losses to all wastewater and/or storm water streams as described in Part VII.D.2 of this permit.

If the permittee elects to develop and implement a WMA, information on plan components can be obtained from the Department's Industrial Wastewater website, or from:

Florida Department of Environmental Protection  
Industrial Wastewater Section, Mail Station 3545  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
(850) 245-8589  
(850) 245-8669 – Fax

d. Pollution Prevention Committee:

A pollution prevention committee within the plant organization shall be appointed. These members shall be responsible for developing the SWPPP and assisting the plant manager in its implementation, maintenance, and revision.

e. Employee Training

- (1) The permittee shall describe the storm water employee training program for the facility. The description shall include the topics to be covered, such as spill response, good housekeeping and material management practices, and shall identify periodic dates (e.g., every 6 months during the months of July and January) for such training. The permittee shall provide employee training for all employees and contractors that work in areas where industrial materials or activities are exposed to storm water, and for employees that are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance people). The employee training shall inform facility personnel and contractors of the components and goals of the facility SWPPP.
- (2) Each employee and contractor that works in an areas where industrial materials or activities are exposed to storm water, and each employee that is responsible for implementing activities identified in the SWPPP shall undergo training at least once a year. Training records shall include trainee's name, signature, date of training and topics covered. Records shall be retained on-site for a minimum of three years.

f. Plan Development & Implementation

- (1) The SWPPP shall be developed and implemented 18 months after the effective date of this permit, unless any later dates are specified in this permit. Any portion of the SWPPP which is ongoing at the time of development or implementation shall be described in the plan. Any waste reduction practice which is recommended for implementation over a period of time shall be identified in the plan, including a schedule for its implementation.
- (2) The personnel named in the SWPPP shall perform and document a quarterly visual observation of a storm water discharge associated with industrial activity from each outfall. The visual observation shall be made during daylight hours. If no storm event resulted in runoff during daylight hours from the facility during a monitoring quarter, the permittee is excused from the visual observation requirement for that quarter, provided the permittee documents in their records that no runoff occurred. The permittee shall sign and certify the documentation.
- (3) The personnel named in the SWPPP shall conduct visual observations on samples collected as soon as practical, but not to exceed 1 hour of when the runoff begins discharging from the facility. All samples must be collected from a storm event discharge that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously inmeasurable (greater than 0.1 inch rainfall) storm event. The observation shall document: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution.
- (4) The permittee shall maintain visual observation reports onsite with the SWPPP for a minimum of three years. The report must include the observation date and time, inspection personnel, nature of the

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discharge (i.e., runoff), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

- (5) At least once a year the personnel named in the SWPPP shall verify that the description of potential pollutant sources required under this permit is accurate; the site map as required in the SWPPP has been updated or otherwise modified to reflect current conditions; and the controls to reduce pollutants in storm water discharges associated with industrial activity identified in the SWPPP are being implemented and are adequate.

g. Submission of Plan Summary & Progress/Update Reports

- (1) **Plan Summary:** Not later than 2 years after the effective date of the permit, a summary of the SWPPP shall be developed and maintained at the facility and made available to the permit issuing authority upon request. The summary should include the following: a brief description of the plan, its implementation process, schedules for implementing identified waste reduction practices, and a list of all waste reduction practices being employed at the facility. The results of waste minimization assessment studies already completed as well as any scheduled or ongoing WMA studies shall be discussed.
- (2) **Progress/Update Reports:** Annually thereafter for the duration of the permit progress/update reports documenting implementation of the plan shall be maintained at the facility and made available to the permit issuing authority upon request. The reports shall discuss whether or not implementation schedules were met and revise any schedules, as necessary. The plan shall also be updated as necessary and the attainment or progress made toward specific pollutant reduction targets documented. Results of any ongoing WMA studies as well as any additional schedules for implementation of waste reduction practices shall be included.
- (3) A timetable for the various plan requirements follows:

Timetable for SWPPP Requirements:

<u>REQUIREMENT</u>	<u>TIME FROM EFFECTIVE DATE OF THIS PERMIT</u>
Complete SWPPP	18 months
Complete Plan Summary	2 years
Progress/Update Reports	3 years, and then annually thereafter

The permittee shall maintain the plan and subsequent reports at the facility and shall make the plan available to the Department upon request.

h. Plan Review & Modification

If following review by the Department, the SWPPP is determined insufficient, the permittee will be notified that the SWPPP does not meet one or more of the minimum requirements of this Part. Upon such notification from the Department, the permittee shall amend the plan and shall submit to the Department a written certification that the requested changes have been made. Unless otherwise provided by the Department, the permittee shall have 30 days after such notification to make the changes necessary.

The permittee shall modify the SWPPP whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to waters of the State or if the plan proves to be ineffective in achieving the general objectives of reducing pollutants in wastewater or storm water discharges. Modifications to the plan may be reviewed by the Department in the same manner as described above.

The permittee may incorporate applicable portions of plans prepared for other purposes. Plans or portions of plans incorporated into a SWPPP become enforceable requirements of this permit.

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## VIII. OTHER SPECIFIC CONDITIONS

### A. Specific Conditions Applicable to All Permits

1. Where required by Chapter 471 or Chapter 492, F.S., applicable portions of reports that must be submitted under this permit shall be signed and sealed by a professional engineer or a professional geologist, as appropriate. *[62-620.310(4)]*
2. Drawings, plans, documents or specifications submitted by the permittee, not attached hereto, but retained on file at the Department's Southwest District Office, are made a part hereof.
3. This permit satisfies Industrial Wastewater program permitting requirements only and does not authorize operation of this facility prior to obtaining any other permits required by local, state or federal agencies.
4. The permittee shall provide verbal notice to the Department's Southwest District Office as soon as practical after discovery of a sinkhole or other karst feature within an area for the management or application of wastewater, or wastewater sludges. The Permittee shall immediately implement measures appropriate to control the entry of contaminants, and shall detail these measures to the Department's Southwest District Office in a written report within 7 days of the sinkhole discovery. *[62-620.320(6)]*

### B. Specific Conditions Related to Existing Manufacturing, Commercial, Mining, and Silviculture Wastewater Facilities or Activities

1. Existing manufacturing, commercial, mining, and silvicultural wastewater facilities or activities that discharge into surface waters shall notify the Department as soon as they know or have reason to believe:
  - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels;
    - (1) One hundred micrograms per liter,
    - (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2, 4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter for antimony, or
    - (3) Five times the maximum concentration value reported for that pollutant in the permit application; or
  - b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels;
    - (1) Five hundred micrograms per liter,
    - (2) One milligram per liter for antimony, or
    - (3) Ten times the maximum concentration value reported for that pollutant in the permit application.

*[62-620.625(1)]*

### C. Duty to Reapply

1. The permittee is not authorized to discharge to waters of the State after the expiration date of this permit, unless:
  - a. the permittee has applied for renewal of this permit at least 180 days before the expiration date (Month, Day, Year) using the appropriate forms listed in Rule 62-620.910, F.A.C., and in the manner established in the Department of Environmental Protection Guide to Permitting Wastewater Facilities or Activities Under Chapter 62-620, F.A.C., including submittal of the appropriate processing fee set forth in Rule 62-4.050, F.A.C.; or
  - b. the permittee has made complete the application for renewal of this permit before the permit expiration date.

*[62-620.335(1)-(4), F.A.C.]*

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#### D. Reopener Clauses

1. The permit shall be revised, or alternatively, revoked and reissued in accordance with the provisions contained in Rules 62-620.325 and 62-620.345 F.A.C., if applicable, or to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2) and 307(a)(2) of the Clean Water Act (the Act), as amended, if the effluent standards, limitations, or water quality standards so issued or approved:
  - a. Contains different conditions or is otherwise more stringent than any condition in the permit/or;
  - b. Controls any pollutant not addressed in the permit.

The permit as revised or reissued under this paragraph shall contain any other requirements then applicable.

2. The permit may be reopened to adjust effluent limitations or monitoring requirements should future Water Quality Based Effluent Limitation determinations, water quality studies, DEP approved changes in water quality standards, EPA established Total Maximum Daily Loads (TMDLs), or other information show a need for a different limitation, monitoring requirement, or more stringent requirements or any applicable standards pertaining to the operation and maintenance of coal combustion waste impoundments.
3. The Department or EPA may develop a TMDL during the life of the permit. Once a TMDL has been established and adopted by rule, the Department shall revise this permit to incorporate the final findings of the TMDL.
4. The permit shall be reopened for revision as appropriate to address new information that was not available at the time of this permit issuance or to comply with requirements of new regulations, standards, or judicial decisions relating to CWA 316(b).

#### IX. GENERAL CONDITIONS

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit are binding and enforceable pursuant to Chapter 403, Florida Statutes. Any permit noncompliance constitutes a violation of Chapter 403, Florida Statutes, and is grounds for enforcement action, permit termination, permit revocation and reissuance, or permit revision. *[62-620.610(1)]*
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviations from the approved drawings, exhibits, specifications or conditions of this permit constitutes grounds for revocation and enforcement action by the Department. *[62-620.610(2)]*
3. As provided in subsection 403.087(7), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor authorize any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit or authorization that may be required for other aspects of the total project which are not addressed in this permit. *[62-620.610(3)]*
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. *[62-620.610(4)]*
5. This permit does not relieve the permittee from liability and penalties for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted source; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. The permittee shall take all reasonable steps to

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- minimize or prevent any discharge, reuse of reclaimed water, or residuals use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [62-620.610(5)]
6. If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee shall apply for and obtain a new permit. [62-620.610(6)]
  7. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control, and related appurtenances, that are installed and used by the permittee to achieve compliance with the conditions of this permit. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to maintain or achieve compliance with the conditions of the permit. [62-620.610(7)]
  8. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [62-620.610(8)]
  9. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, including an authorized representative of the Department and authorized EPA personnel, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to:
    - a. Enter upon the permittee's premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under the conditions of this permit;
    - b. Have access to and copy any records that shall be kept under the conditions of this permit;
    - c. Inspect the facilities, equipment, practices, or operations regulated or required under this permit; and
    - d. Sample or monitor any substances or parameters at any location necessary to assure compliance with this permit or Department rules.[62-620.610(9)]
  10. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data, and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except as such use is proscribed by Section 403.111, F.S., or Rule 62-620.302, F.A.C. Such evidence shall only be used to the extent that it is consistent with the Florida Rules of Civil Procedure and applicable evidentiary rules. [62-620.610(10)]
  11. When requested by the Department, the permittee shall within a reasonable time provide any information required by law which is needed to determine whether there is cause for revising, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also provide to the Department upon request copies of records required by this permit to be kept. If the permittee becomes aware of relevant facts that were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted or corrections promptly reported to the Department. [62-620.610(11)]
  12. Unless specifically stated otherwise in Department rules, the permittee, in accepting this permit, agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard. [62-620.610(12)]

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13. The permittee, in accepting this permit, agrees to pay the applicable regulatory program and surveillance fee in accordance with Rule 62-4.052, F.A.C. [62-620.610(13)]
14. This permit is transferable only upon Department approval in accordance with Rule 62-620.340, F.A.C. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department. [62-620.610(14)]
15. The permittee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility or activity and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment. [62-620.610(15)]
16. The permittee shall apply for a revision to the Department permit in accordance with Rules 62-620.300, F.A.C., and the Department of Environmental Protection Guide to Permitting Wastewater Facilities or Activities Under Chapter 62-620, F.A.C., at least 90 days before construction of any planned substantial modifications to the permitted facility is to commence or with Rule 62-620.325(2), F.A.C., for minor modifications to the permitted facility. A revised permit shall be obtained before construction begins except as provided in Rule 62-620.300, F.A.C. [62-620.610(16)]
17. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The permittee shall be responsible for any and all damages which may result from the changes and may be subject to enforcement action by the Department for penalties or revocation of this permit. The notice shall include the following information:
  - a. A description of the anticipated noncompliance;
  - b. The period of the anticipated noncompliance, including dates and times; and
  - c. Steps being taken to prevent future occurrence of the noncompliance.[62-620.610(17)]
18. Sampling and monitoring data shall be collected and analyzed in accordance with Rule 62-4.246 and Chapters 62-160, 62-601, and 62-610, F.A.C., and 40 CFR 136, as appropriate.
  - a. Monitoring results shall be reported at the intervals specified elsewhere in this permit and shall be reported on a Discharge Monitoring Report (DMR), DEP Form 62-620.910(10), or as specified elsewhere in the permit.
  - b. If the permittee monitors any contaminant more frequently than required by the permit, using Department approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
  - c. Calculations for all limitations which require averaging of measurements shall use an arithmetic mean unless otherwise specified in this permit.
  - d. Except as specifically provided in Rule 62-160.300, F.A.C., any laboratory test required by this permit shall be performed by a laboratory that has been certified by the Department of Health Environmental Laboratory Certification Program (DOH ELCP). Such certification shall be for the matrix, test method and analyte(s) being measured to comply with this permit. For domestic wastewater facilities, testing for parameters listed in Rule 62-160.300(4), F.A.C., shall be conducted under the direction of a certified operator.
  - e. Field activities including on-site tests and sample collection shall follow the applicable standard operating procedures described in DEP-SOP-001/01 adopted by reference in Chapter 62-160, F.A.C.
  - f. Alternate field procedures and laboratory methods may be used where they have been approved in accordance with Rules 62-160.220, and 62-160.330, F.A.C.

[62-620.610(18)]

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19. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in this permit shall be submitted no later than 14 days following each schedule date. [62-620.610(19)]
20. The permittee shall report to the Department's Tallahassee any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance including exact dates and time, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- a. The following shall be included as information which must be reported within 24 hours under this condition:
- (1) Any unanticipated bypass which causes any reclaimed water or effluent to exceed any permit limitation or results in an unpermitted discharge,
  - (2) Any upset which causes any reclaimed water or the effluent to exceed any limitation in the permit,
  - (3) Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice, and
  - (4) Any unauthorized discharge to surface or ground waters.
- b. Oral reports as required by this subsection shall be provided as follows:
- (1) For unauthorized releases or spills of treated or untreated wastewater reported pursuant to subparagraph (a)4. that are in excess of 1,000 gallons per incident, or where information indicates that public health or the environment will be endangered, oral reports shall be provided to the STATE WARNING POINT TOLL FREE NUMBER (800) 320-0519, as soon as practical, but no later than 24 hours from the time the permittee becomes aware of the discharge. The permittee, to the extent known, shall provide the following information to the State Warning Point:
    - (a) Name, address, and telephone number of person reporting;
    - (b) Name, address, and telephone number of permittee or responsible person for the discharge;
    - (c) Date and time of the discharge and status of discharge (ongoing or ceased);
    - (d) Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater);
    - (e) Estimated amount of the discharge;
    - (f) Location or address of the discharge;
    - (g) Source and cause of the discharge;
    - (h) Whether the discharge was contained on-site, and cleanup actions taken to date;
    - (i) Description of area affected by the discharge, including name of water body affected, if any; and
    - (j) Other persons or agencies contacted.
  - (2) Oral reports, not otherwise required to be provided pursuant to subparagraph b.1 above, shall be provided to the Department's Tallahassee within 24 hours from the time the permittee becomes aware of the circumstances.
- c. If the oral report has been received within 24 hours, the noncompliance has been corrected, and the noncompliance did not endanger health or the environment, the Department's Tallahassee shall waive the written report.
- [62-620.610(20)]
21. The permittee shall report all instances of noncompliance not reported under Permit Conditions IX. 17, 18 or 19 of this permit at the time monitoring reports are submitted. This report shall contain the same information required by Permit Condition IX.20 of this permit. [62-620.610(21)]
22. Bypass Provisions.
- a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment works.

PERMITTEE: Progress Energy Florida, Inc  
FACILITY: Anclote Power Plant

PERMIT NUMBER: FL0002992 (Major)  
ISSUANCE DATE: January 14, 2011  
EXPIRATION DATE: January 13, 2016

- b. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless the permittee affirmatively demonstrates that:
- (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
  - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
  - (3) The permittee submitted notices as required under Permit Condition IX. 22. b. of this permit.
- c. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as required in Permit Condition IX. 20. of this permit. A notice shall include a description of the bypass and its cause; the period of the bypass, including exact dates and times; if the bypass has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.
- d. The Department shall approve an anticipated bypass, after considering its adverse effect, if the permittee demonstrates that it will meet the three conditions listed in Permit Condition IX. 22. a. 1 through 3 of this permit.
- e. A permittee may allow any bypass to occur which does not cause reclaimed water or effluent limitations to be exceeded if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Permit Condition IX. 22. a. through c. of this permit.

[62-620.610(22)]

23. Upset Provisions.

- a. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee.
- (1) An upset does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, careless or improper operation.
  - (2) An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of upset provisions of Rule 62-620.610, F.A.C., are met.
- b. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
- (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
  - (2) The permitted facility was at the time being properly operated;
  - (3) The permittee submitted notice of the upset as required in Permit Condition IX.5. of this permit; and
  - (4) The permittee complied with any remedial measures required under Permit Condition IX. 5. of this permit.
- c. In any enforcement proceeding, the burden of proof for establishing the occurrence of an upset rests with the permittee.
- d. Before an enforcement proceeding is instituted, no representation made during the Department review of a claim that noncompliance was caused by an upset is final agency action subject to judicial review.

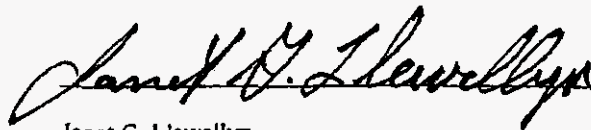
[62-620.610(23)]

PERMITTEE: Progress Energy Florida, Inc  
FACILITY: Anclote Power Plant

PERMIT NUMBER: FL0002992 (Major)  
ISSUANCE DATE: January 14, 2011  
EXPIRATION DATE: January 13, 2016

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION



Janet G. Llewellyn  
Director  
Division of Water Resource Management  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
(850) 245-8336

Attachment(s):  
Discharge Monitoring Report

Docket No. 110007-EI  
Progress Energy Florida  
Witness: Patricia Q. West  
Exhibit No. (PQW-1)  
Page 73 of 85

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Progress Energy  
 MAILING ADDRESS: 1729 Baillies Bluff Road  
 Holiday, Florida 34691-  
 FACILITY LOCATION: Anclote Power Plant  
 1729 Baillies Bluff Rd  
 Holiday, FL 34691-9753  
 COUNTY: Pasco  
 OFFICE: Southwest District

PERMIT NUMBER: FL0002992-010-1W1S  
 LIMIT: Final  
 CLASS SIZE: MA  
 MONITORING GROUP NUMBER: D-004  
 MONITORING GROUP DESCRIPTION: combined plant discharge  
 RE-SUBMITTED DMR:   
 NO DISCHARGE FROM SITE:   
 MONITORING PERIOD: From: \_\_\_\_\_ To: \_\_\_\_\_

REPORT FREQUENCY: Monthly  
 PROGRAM: Industrial

Parameter		Quantity or Loading	Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Temperature (F), Intake (Mode I* and Mode II*) PARM Code 00011 *7 Mon. Site No. INT-1	Sample Measurement			Report Max 24-hr. Avg.	Report Max 3-hr. Avg.	Report Max 1-hr. Avg.	DEG F		Continuous	Recorder
Temperature (F), Discharge (Mode I*, primary**) PARM Code 00011 *1 Mon. Site No. EFF-1	Sample Measurement			Report Max 24-hr. Avg.	90.0 Max 3-hr. Avg.	92.0 Inst. Maximum	DEG F		Continuous	Recorder
Temperature Rise (Mode I*, primary**) PARM Code 61576 1 Mon. Site No. EFF-1	Sample Measurement			Report Max 24-hr. Avg.	Report Max 3-hr. Avg.		DEG F		Continuous	Recorder
Temperature (F), Discharge (Mode I*, alternate**) PARM Code 00011 P Mon. Site No. EFF-1	Sample Measurement			92.0 Max 24-hr. Avg.	Report Max 3-hr. Avg.	95.0 Max 1-hr. Avg.	DEG F		Continuous	Recorder
Temperature (F), Discharge (Mode I*, alternate**) PARM Code 00011 Q Mon. Site No. EFF-1	Sample Measurement			95.5 Inst. Maximum			DEG F		Continuous	Recorder
Temperature Rise (Mode I*, alternate**) PARM Code 61576 P Mon. Site No. EFF-1	Sample Measurement			Report Max 24-hr. Avg.	5.0 Max 3-hr. Avg.	Report Max 1-hr. Avg.	DEG F		Continuous	Recorder

\*Mode I, January 1 until first instance of Temperature >= 82.0 deg F and first instance of Temperature < 82.0 deg F until December 31. Otherwise Mode II applies.

\*\* Alternate monitoring and limitations are applicable only when the facility is unable to meet primary limitations with three cooling tower pumps and 22 cooling tower fans in operation.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

ISSUANCE/REISSUANCE DATE:

DEP Form 62-620.910(10), Effective Nov. 29, 1994

Docket No. 110007-EI  
 Progress Energy Florida  
 Witness: Patricia Q. West  
 Exhibit No. (PQW-1)  
 Page 74 of 85

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Anclote Power Plant

MONITORING GROUP NUMBER:  
MONITORING PERIOD

D-004

PERMIT NUMBER: FL0002992-010-IWIS

From: \_\_\_\_\_ To: \_\_\_\_\_

Parameter		Quantity or Loading	Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Temperature (F), Discharge (Mode II*, primary**) PARM Code 00011 R. Mon. Site No. EFF-1	Sample Measurement			Report	92.0	95.0	DEG F		Continuous	Recorder
	Permit Requirement			Max 24-hr. Avg	Max 1-hr Avg	Inst. Maximum				
Temperature Rise (Mode II*, primary**) PARM Code 61576 Q Mon. Site No. EFF-1	Sample Measurement			Report	Report		DEG F		Continuous	Recorder
	Permit Requirement			Max 24-hr. Avg	Max 1-hr Avg					
Temperature (F), Discharge (Mode II*, alternate**) PARM Code 00011 S Mon. Site No. EFF-1	Sample Measurement			92.0	Report	95.0	DEG F		Continuous	Recorder
	Permit Requirement			Max 24-hr. Avg	Max 1-hr Avg	Max 1-hr Avg				
Temperature (F), Discharge (Mode II*, alternate**) PARM Code 00011 T Mon. Site No. EFF-1	Sample Measurement			95.5			DEG F		Continuous	Recorder
	Permit Requirement			Inst. Maximum						
Temperature Rise (Mode II*, alternate**) PARM Code 61576 R Mon. Site No. EFF-1	Sample Measurement			Report	5.0	Report	DEG F		Continuous	Recorder
	Permit Requirement			Max 24-hr. Avg	Max 3-hr Avg	Max 1-hr Avg				
	Sample Measurement									
	Permit Requirement									
	Sample Measurement									
	Permit Requirement									
	Sample Measurement									
	Permit Requirement									

\*Mode I: January 1 until first instance of Temperature >= 82.0 deg F and first instance of Temperature < 82.0 deg F until December 31; Otherwise Mode II applies.

\*\* Alternate monitoring and limitations are applicable only when the facility is unable to meet primary limitations with three cooling tower pumps and 22 cooling tower fans in operation.

**DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A**

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Progress Energy  
 MAILING ADDRESS: 1729 Baillies Bluff Road  
 Holiday, Florida 34691-

PERMIT NUMBER:

FL0002992-010-1W15

FACILITY LOCATION: Anclote Power Plant  
 1729 Baillies Bluff Rd  
 Holiday, FL 34691-9753

LIMIT: Final  
 CLASS SIZE: MA  
 MONITORING GROUP NUMBER: D-004  
 MONITORING GROUP DESCRIPTION: combined plant discharge  
 RE-SUBMITTED DMR:   
 NO DISCHARGE FROM SITE:   
 MONITORING PERIOD From: \_\_\_\_\_ To: \_\_\_\_\_

REPORT FREQUENCY: Quarterly  
 PROGRAM: Industrial

COUNTY: Pasco  
 OFFICE: Southwest District

Parameter		Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Temperature (C), Water	Sample Measurement							
PARM Code 00010 7 Mon. Site No. INT-1	Permit Requirement			Report (Max)	Deg C		Quarterly	Grab
Temperature (C), Water	Sample Measurement							
PARM Code 00010 Q Mon. Site No. EFF-1	Permit Requirement			Report (Max)	Deg C		Quarterly	Grab
pH	Sample Measurement							
PARM Code 00400 7 Mon. Site No. INT-1	Permit Requirement			Report (Max)	mg/L		Quarterly	Grab
pH	Sample Measurement							
PARM Code 00400 Q Mon. Site No. EFF-1	Permit Requirement			Report (Max)	mg/L		Quarterly	Grab
Nitrogen, Ammonia, Total (as N)	Sample Measurement							
PARM Code 00610 7 Mon. Site No. INT-1	Permit Requirement			Report (Max)	mg/L		Quarterly	Grab
Nitrogen, Ammonia, Total (as N)	Sample Measurement							
PARM Code 00610 Q Mon. Site No. EFF-1	Permit Requirement			Report (Max)	mg/L		Quarterly	Grab
Ammonia, Unionized (as NH3)	Sample Measurement							
PARM Code 00619 7 Mon. Site No. INT-1	Permit Requirement			Report (Max)	mg/L		Quarterly	Calculated

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

ISSUANCE/REISSUANCE DATE:

DEP Form 62-620.910(10), Effective Nov. 29, 1994

Docket No. 110007-EI  
 Progress Energy Florida  
 Witness: Patricia Q. West  
 Exhibit No. (POW-1)  
 Page 76 of 85

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Anciate Power Plant

MONITORING GROUP  
NUMBER:  
MONITORING PERIOD

D-004

PERMIT NUMBER FL0002992-010-1W15

From: \_\_\_\_\_ To: \_\_\_\_\_

Parameter		Quantity or Loading	Units	Quality or Concentration	Units	No. Ex	Frequency of Analysis	Sample Type
Ammonia, Unionized (as NH3)	Sample Measurement							
PARM Code 00619 Q Mon. Site No. EFF-1	Permit Requirement			Report (Max.)	mg/L		Quarterly	Calculated
Nitrogen, Kjeldahl, Total (as N)	Sample Measurement							
PARM Code 00625 7 Mon. Site No. INT-1	Permit Requirement			Report (Max.)	mg/L		Quarterly	Grab
Nitrogen, Kjeldahl, Total (as N)	Sample Measurement							
PARM Code 00625 Q Mon. Site No. EFF-1	Permit Requirement			Report (Max.)	mg/L		Quarterly	Grab
Nitrite plus Nitrate, Total I det. (as N)	Sample Measurement							
PARM Code 00630 7 Mon. Site No. INT-1	Permit Requirement			Report (Max.)	mg/L		Quarterly	Grab
Nitrite plus Nitrate, Total I det. (as N)	Sample Measurement							
PARM Code 00630 Q Mon. Site No. EFF-1	Permit Requirement			Report (Max.)	mg/L		Quarterly	Grab
Nitrogen, Total	Sample Measurement							
PARM Code 00600 7 Mon. Site No. INT-1	Permit Requirement			Report (Max.)	mg/L		Quarterly	Grab
Nitrogen, Total	Sample Measurement							
PARM Code 00600 Q Mon. Site No. EFF-1	Permit Requirement			Report (Max.)	mg/L		Quarterly	Grab
Phosphorus, Total (as P)	Sample Measurement							
PARM Code 00665 7 Mon. Site No. INT-1	Permit Requirement			Report (Max.)	mg/L		Quarterly	Grab
Phosphorus, Total (as P)	Sample Measurement							
PARM Code 00665 Q Mon. Site No. EFF-1	Permit Requirement			Report (Max.)	mg/L		Quarterly	Grab
Phosphate, Ortho (as PO4)	Sample Measurement							
PARM Code 00660 7 Mon. Site No. INT-1	Permit Requirement			Report (Max.)	mg/L		Quarterly	Grab
Phosphate, Ortho (as PO4)	Sample Measurement							
PARM Code 00660 Q Mon. Site No. EFF-1	Permit Requirement			Report (Max.)	mg/L		Quarterly	Grab

ISSUANCE/REISSUANCE DATE:

DEP Form 62-620 9/10/10 Effective Nov 29 1994

Docket No. 110007-EI  
Progress Energy Florida  
Witness: Patricia Q. West  
Exhibit No. (PQW-1)  
Page 77 of 85



**DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A**

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Progress Energy  
 MAILING ADDRESS: 1729 Baillies Bluff Road  
 Holiday, Florida 34691-

PERMIT NUMBER: FL0002992-010-IWIS

FACILITY LOCATION: Anclote Power Plant  
 1729 Baillies Bluff Rd  
 Holiday, FL 34691-9753

LIMIT CLASS SIZE: Final MA D-004  
 MONITORING GROUP NUMBER: combined plant discharge  
 DESCRIPTION:  
 RE-SUBMITTED DMR:   
 NO DISCHARGE FROM SITE:   
 MONITORING NOT REQUIRED:   
 MONITORING PERIOD From: \_\_\_\_\_

REPORT FREQUENCY PROGRAM: Toxicity Industrial

COUNTY: Pasco  
 OFFICE: Southwest District

To: \_\_\_\_\_

Parameter		Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
7-DAY CHRONIC STATRE Mysidopsis bahia(Routine)	Sample Measurement							
PARM Code TRP3E P Mon. Site No. EFF-1	Permit Requirement			100 (Min.)	percent		Quarterly	24-hr TPC
7-DAY CHRONIC STATRE Mysidopsis bahia(Additional)	Sample Measurement							
PARM Code TRP3E Q Mon. Site No. EFF-1	Permit Requirement			100 (Min.)	percent		As needed	As required by the permit
7-DAY CHRONIC STATRE Mysidopsis bahia(Additional)	Sample Measurement							
PARM Code TRP3E R Mon. Site No. EFF-1	Permit Requirement			100 (Min.)	percent		As needed	As required by the permit
7-DAY CHRONIC STATRE Menidia beryllina(Routine)	Sample Measurement							
PARM Code TRP6B P Mon. Site No. EFF-1	Permit Requirement			100 (Min.)	percent		Quarterly	24-hr TPC
7-DAY CHRONIC STATRE Menidia beryllina(Additional)	Sample Measurement							
PARM Code TRP6B Q Mon. Site No. EFF-1	Permit Requirement			100 (Min.)	percent		As needed	As required by the permit
7-DAY CHRONIC STATRE Menidia beryllina(Additional)	Sample Measurement							
PARM Code TRP6B R Mon. Site No. EFF-1	Permit Requirement			100 (Min.)	percent		As needed	As required by the permit

\*ENTER "MNR" IN THE RESULTS COLUMN FOR EACH TEST THAT IS NOT REQUIRED.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

ISSUANCE/REISSUANCE DATE

DEP Form 62-620.910(10), Effective Nov. 29, 1994

Docket No. 110007-EI  
 Progress Energy Florida  
 Witness: Patricia Q. West  
 Exhibit No. (POW-1)  
 Page 78 of 85

**DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A**

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Progress Energy	PERMIT NUMBER: FL0002992-010-IW1S	Final	REPORT FREQUENCY	Monthly
MAILING ADDRESS: 1729 Baillies Bluff Road Holiday, Florida 34691-	LIMIT:	MA	PROGRAM:	Industrial
FACILITY: Anclote Power Plant	CLASS SIZE:	1-001		
LOCATION: 1729 Baillies Bluff Rd Holiday, FL 34691-9753	MONITORING GROUP NUMBER:			
	MONITORING GROUP DESCRIPTION:			
	RE-SUBMITTED DMR: <input type="checkbox"/>			
	NO DISCHARGE FROM SITE: <input type="checkbox"/>			
COUNTY: Pasco	MONITORING PERIOD	From: _____	To: _____	
OFFICE: Southwest District				

Parameter		Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Flow (Total Units 1 and 2 OTCW)	Sample Measurement							
PARM Code 50050 1	Permit Requirement	Report (Day Avg)	MGD				Daily, 24 hours	Pump Logs
Mon. Site No. EEW-1								

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

**DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A**

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Progress Energy  
 MAILING ADDRESS: 1729 Baillies Bluff Road  
 Holiday, Florida 34691-

PERMIT NUMBER: FL0002992-010-IWIS

LIMIT: Final  
 CLASS SIZE: MA  
 MONITORING GROUP NUMBER: I-003  
 MONITORING GROUP DESCRIPTION: Dilution pump flow to the discharge canal.  
 RE-SUBMITTED DMR:   
 NO DISCHARGE FROM SITE:   
 MONITORING PERIOD: From: \_\_\_\_\_ To: \_\_\_\_\_

REPORT FREQUENCY: Monthly  
 PROGRAM: Industrial

FACILITY: Aucote Power Plant  
 LOCATION: 1729 Baillies Bluff Rd  
 Holiday, FL 34691-9753

COUNTY: Pasco  
 OFFICE: Southwest District

Parameter		Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement							
PARM Code 50050 1 Mon. Site No. FLW-2	Permit Requirement	Report (Day Avg.)	MGD				Daily, 24 hours	Pump Logs
Duration of Discharge	Sample Measurement							
PARM Code 81381 1 Mon. Site No. FLW-2	Permit Requirement	Report (Day Avg.)	MGD				Daily, 24 hours	Pump Logs

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

ISSUANCE/REISSUANCE DATE

DEP Form 62-620.910(10), Effective Nov. 29, 1994

Docket No. 110007-EI  
 Progress Energy Florida  
 Witness: Patricia Q. West  
 Exhibit No. (PQW-1)  
 Page 80 of 85

**DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A**

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME:	Progress Energy	PERMIT NUMBER:	FL6002992-G10-1W1S		
MAILING ADDRESS:	1729 Bailties Bluff Road Holiday, Florida 34691-	LIMIT:	Final	REPORT FREQUENCY:	Monthly
FACILITY:	Anclote Power Plant	CLASS SIZE:	MA	PROGRAM:	Industrial
LOCATION:	1729 Bailties Bluff Rd Holiday, FL 34691-9753	MONITORING GROUP NUMBER:	1-005		
COUNTY:	Pasco	MONITORING GROUP DESCRIPTION:	Cooling tower discharge to the discharge canal.		
OFFICE:	Southwest District	RE-SUBMITTED DMR:	<input type="checkbox"/>		
		NO DISCHARGE FROM SITE:	<input type="checkbox"/>		
		MONITORING PERIOD	From: _____	To: _____	

Parameter		Quantity or Loading	Units	Quality or Concentration	Units	No. Ex	Frequency of Analysis	Sample Type
TRO-Discharge Time	Sample Measurement							
PARM Code 04223 Mon. Site No. EFF-2	Permit Requirement			120 (Inst. Max)	min/day		Daily; 24 hours	Calculated
Oxidants, Total Residual	Sample Measurement							
PARM Code 34044 Mon. Site No. EFF-1	Permit Requirement			0.01 (Inst. Max)	mg/L		Weekly	Grab
Oxidants, Total Residual	Sample Measurement							
PARM Code 34044 Mon. Site No. EFF-2	Permit Requirement			0.03 (Inst. Max)	mg/L		Weekly	Meter
Dosage Rate*	Sample Measurement							
PARM Code 82391 Mon. Site No. INT-2	Permit Requirement	500 Inst. Maximum	lbs/day				Daily	Calculated

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

ISSUANCE/REISSUANCE DATE.

DEP Form 62-620.910(10), Effective Nov. 29, 1994

Docket No. 110007-EI  
 Progress Energy Florida  
 Witness: Patricia Q. West  
 Exhibit No. (PQW-1)  
 Page 81 of 85

**DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A**

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Progress Energy  
 MAILING ADDRESS: 1729 Baillies Bluff Road  
 Holiday, Florida 34691-

PERMIT NUMBER: FL0002992-010-1W1S  
 LIMIT: Final  
 CLASS SIZE: MA  
 MONITORING GROUP NUMBER: I-006  
 MONITORING GROUP DESCRIPTION: storm water discharge  
 RE-SUBMITTED DMR:   
 NO DISCHARGE FROM SITE:   
 MONITORING PERIOD From: \_\_\_\_\_ To: \_\_\_\_\_

REPORT FREQUENCY: Monthly  
 PROGRAM: Industrial

FACILITY: Anclote Power Plant  
 LOCATION: 1729 Baillies Bluff Rd  
 Holiday, FL 34691-9753

COUNTY: Pasco  
 OFFICE: Southwest District

Parameter		Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement						Monthly, when discharging	Calculated
PARM Code 50350 1 Mon. Site No. EFF-3	Permit Requirement	Report (Day Max.)	MGD					
Copper, Total Recoverable	Sample Measurement				Report (Day Max.)	ug/L	Monthly, when discharging	Grab
PARM Code 01119 1 Mon. Site No. EFF-3	Permit Requirement							
Iron, Total Recoverable	Sample Measurement				Report (Day Max.)	ug/L	Monthly, when discharging	Grab
PARM Code 00980 1 Mon. Site No. EFF-3	Permit Requirement							

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

ISSUANCE/REISSUANCE DATE

DEP Form 62-620 910(10), Effective Nov. 29, 1994

Docket No. 110007-EI  
 Progress Energy Florida  
 Witness: Patricia Q. West  
 Exhibit No. (PQW-1)  
 Page 82 of 85

## INSTRUCTIONS FOR COMPLETING THE WASTEWATER DISCHARGE MONITORING REPORT

Read these instructions before completing the DMR. Hard copies and/or electronic copies of the required parts of the DMR were provided with the permit. All required information shall be completed in full and typed or printed in ink. A signed, original DMR shall be mailed to the address printed on the DMR by the 28<sup>th</sup> of the month following the monitoring period. The DMR shall not be submitted before the end of the monitoring period.

The DMR consists of three parts--A, B, and D--all of which may or may not be applicable to every facility. Facilities may have one or more Part A's for reporting effluent or reclaimed water data. All domestic wastewater facilities will have a Part B for reporting daily sample results. Part D is used for reporting ground water monitoring well data.

When results are not available, the following codes should be used on parts A and D of the DMR and an explanation provided where appropriate. Note: Codes used on Part B for raw data are different.

CODE	DESCRIPTION/INSTRUCTIONS
ANC	Analysis not conducted.
DRY	Dry Well
FLD	Flood disaster.
IFS	Insufficient flow for sampling.
LS	Lost sample.
MNR	Monitoring not required this period

CODE	DESCRIPTION/INSTRUCTIONS
NOD	No discharge from/to site.
OPS	Operations were shutdown so no sample could be taken.
OTH	Other. Please enter an explanation of why monitoring data were not available
SEF	Sampling equipment failure.

When reporting analytical results that fall below a laboratory's reported method detection limits or practical quantification limits, the following instructions should be used:

1. Results greater than or equal to the PQL shall be reported as the measured quantity
2. Results less than the PQL and greater than or equal to the MDL shall be reported as the laboratory's MDL value. These values shall be deemed equal to the MDL when necessary to calculate an average for that parameter and when determining compliance with permit limits.
3. Results less than the MDL shall be reported by entering a less than sign (" $<$ ") followed by the laboratory's MDL value, e.g.  $< 0.001$ . A value of one-half the MDL or one-half the effluent limit, whichever is lower, shall be used for that sample when necessary to calculate an average for that parameter. Values less than the MDL are considered to demonstrate compliance with an effluent limitation.

### PART A -DISCHARGE MONITORING REPORT (DMR)

Part A of the DMR is comprised of one or more sections, each having its own header information. Facility information is preprinted in the header as well as the monitoring group number, whether the limits and monitoring requirements are interim or final, and the required submittal frequency (e.g. monthly, annually, quarterly, etc.). Submit Part A based on the required reporting frequency in the header and the instructions shown in the permit. The following should be completed by the permittee or authorized representative:

**Resubmitted DMR:** Check this box if this DMR is being re-submitted because there was information missing from or information that needed correction on a previously submitted DMR. The information that is being revised should be clearly noted on the re-submitted DMR (e.g. highlight, circle, etc.)

**No Discharge From Site:** Check this box if no discharge occurs and, as a result, there are no data or codes to be entered for all of the parameters on the DMR for the entire monitoring group number; however, if the monitoring group includes other monitoring locations (e.g., influent sampling), the "NOD" code should be used to individually denote those parameters for which there was no discharge.

**Monitoring Period:** Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

**Sample Measurement:** Before filling in sample measurements in the table, check to see that the data collected correspond to the limit indicated on the DMR (i.e. interim or final) and that the data correspond to the monitoring group number in the header. Enter the data or calculated results for each parameter on this row in the non-shaded area above the limit. Be sure the result being entered corresponds to the appropriate statistical base code (e.g. annual average, monthly average, single sample maximum, etc.) and units.

**No. Ex.:** Enter the number of sample measurements during the monitoring period that exceeded the permit limit for each parameter in the non-shaded area. If none, enter zero.

**Frequency of Analysis:** The shaded areas in this column contain the minimum number of times the measurement is required to be made according to the permit. Enter the actual number of times the measurement was made in the space above the shaded area.

**Sample Type:** The shaded areas in this column contain the type of sample (e.g. grab, composite, continuous) required by the permit. Enter the actual sample type that was taken in the space above the shaded area.

**Signature:** This report must be signed in accordance with Rule 62-620.305, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached in the event there are questions concerning this report. Enter the date when the report is signed.

**Comment and Explanation of Any Violations:** Use this area to explain any exceedances, any upset or by-pass events, or other items which require explanation. If more space is needed, reference all attachments in this area.

**PART B - DAILY SAMPLE RESULTS**

**Monitoring Period:** Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

**Daily Monitoring Results:** Transfer all analytical data from your facility's laboratory or a contract laboratory's data sheets for all day(s) that samples were collected. Record the data in the units indicated. Table 1 in Chapter 62-160, F.A.C., contains a complete list of all the data qualifier codes that your laboratory may use when reporting analytical results. However, when transferring numerical results onto Part B of the DMR, only the following data qualifier codes should be used and an explanation provided where appropriate.

CODE	DESCRIPTION/INSTRUCTIONS
<	The compound was analyzed for but not detected.
A	Value reported is the mean (average) of two or more determinations.
J	Estimated value, value not accurate.
Q	Sample held beyond the actual holding time.
Y	Laboratory analysis was from an unpreserved or improperly preserved sample.

To calculate the monthly average, add each reported value to get a total. For flow, divide this total by the number of days in the month. For all other parameters, divide the total by the number of observations.  
**Plant Staffing:** List the name, certificate number, and class of all state certified operators operating the facility during the monitoring period. Use additional sheets as necessary.

**PART D - GROUND WATER MONITORING REPORT**

**Monitoring Period:** Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

**Date Sample Obtained:** Enter the date the sample was taken. Also, check whether or not the well was purged before sampling.

**Time Sample Obtained:** Enter the time the sample was taken.

**Sample Measurement:** Record the results of the analysis. If the result was below the minimum detection limit, indicate that.

**Detection Limits:** Record the detection limits of the analytical methods used.

**Analysis Method:** Indicate the analytical method used. Record the method number from Chapter 62-160 or Chapter 62-601, F.A.C., or from other sources.

**Sampling Equipment Used:** Indicate the procedure used to collect the sample (e.g. airlift, bucket/bailer, centrifugal pump, etc.)

**Samples Filtered:** Indicate whether the sample obtained was filtered by laboratory (L), filtered in field (F), or unfiltered (N).

**Signature:** This report must be signed in accordance with Rule 62-620.305, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached in the event there are questions concerning this report. Enter the date when the report is signed.

**Comments and Explanation:** Use this space to make any comments on or explanations of results that are unexpected. If more space is needed, reference all attachments in this area.

**SPECIAL INSTRUCTIONS FOR LIMITED WET WEATHER DISCHARGES**

**Flow (Limited Wet Weather Discharge):** Enter the measured average flow rate during the period of discharge or divide gallons discharged by duration of discharge (converted into days). Record in million gallons per day (MGD).

**Flow (Upstream):** Enter the average flow rate in the receiving stream upstream from the point of discharge for the period of discharge. The average flow rate can be calculated based on two measurements; one made at the start and one made at the end of the discharge period. Measurements are to be made at the upstream gauging station described in the permit.

**Actual Stream Dilution Ratio:** To calculate the Actual Stream Dilution Ratio, divide the average upstream flow rate by the average discharge flow rate. Enter the Actual Stream Dilution Ratio accurate to the nearest 0.1.

**No. of Days the SDF > Stream Dilution Ratio:** For each day of discharge, compare the minimum Stream Dilution Factor (SDF) from the permit to the calculated Stream Dilution Ratio. On Part B of the DMR, enter an asterisk (\*) if the SDF is greater than the Stream Dilution Ratio on any day of discharge. On Part A of the DMR, add up the days with an "\*" and record the total number of days the Stream Dilution Factor was greater than the Stream Dilution Ratio.

**CBOD<sub>5</sub>:** Enter the average CBOD<sub>5</sub> of the reclaimed water discharged during the period shown in duration of discharge.

**TKN:** Enter the average TKN of the reclaimed water discharged during the period shown in duration of discharge.

**Actual Rainfall:** Enter the actual rainfall for each day on Part B. Enter the actual cumulative rainfall to date for this calendar year and the actual total monthly rainfall on Part A. The cumulative rainfall to date for this calendar year is the total amount of rain, in inches, that has been recorded since January 1 of the current year through the month for which this DMR contains data.

**Rainfall During Average Rainfall Year:** On Part A, enter the total monthly rainfall during the average rainfall year and the cumulative rainfall for the average rainfall year. The cumulative rainfall for the average rainfall year is the amount of rain, in inches, which fell during the average rainfall year from January through the month for which this DMR contains data.

**No. of Days LWWD Activated During Calendar Year:** Enter the cumulative number of days that the limited wet weather discharge was activated since January 1 of the current year.

**Reason for Discharge:** Attach to the DMR a brief explanation of the factors contributing to the need to activate the limited wet weather discharge.

**EXHIBIT "C"**

**REDACTED**

**Projected Compliance Costs for NPDES Renewal Permits**

Project	Plant/Year							
	Bartow		Anclote		Crystal River		Suwannee	
	2011	2012	2011	2012	2011	2012	2011	2012
Thermal Studies	██████	██████	██████	██████	██████	██████	██████	██████
Aquatic Org. Ret. Studies & Implementation	██████	████	██████	████	██████	████	██████	████
Whole Effluent Toxicity Testing	██████	██████	██████	██████	██████	██████	██████	██████
Dissolved Oxygen Study	██████	██████	████	████	████	████	████	████
Freeboard Limitation & Related Studies	██████	████	████	████	████	████	████	████
<b>TOTAL COSTS</b>	<b>\$635,000</b>	<b>\$240,000</b>	<b>\$145,000</b>	<b>\$55,000</b>	<b>\$210,000</b>	<b>\$85,000</b>	<b>\$120,000</b>	<b>\$50,000</b>



**BEFORE THE PUBLIC SERVICE COMMISSION**

In re: Environmental Cost Recovery Clause

DOCKET NO. 110007-EI

FILED: May 24, 2011

**PROGRESS ENERGY FLORIDA, INC.'S PETITION TO MODIFY  
SCOPE OF EXISTING ENVIRONMENTAL PROGRAM**

Progress Energy Florida, Inc. ("PEF" or "Company"), pursuant to Section 366.8255, Florida Statutes, and Florida Public Service Commission Order Nos. PSC-94-0044-FOF-EI and PSC-99-2513-FOF-EI, hereby petitions the Commission to modify the scope of its previously approved Integrated Clean Air Compliance Program to encompass additional activities such that the costs associated with such activities prudently incurred after the filing of this Petition may be recovered through the Environmental Cost Recovery Clause ("ECRC"). In support, PEF states:

1. Petitioner. PEF is a public utility subject to the regulatory jurisdiction of the Commission under Chapter 366, Florida Statutes. The Company's principal offices are located at 299 First Avenue North, St. Petersburg, Florida.
2. Service. All notices, pleadings and other communications required to be served on the petitioner should be directed to:

Gary V. Perko  
Hopping Green & Sams, P.A.  
119 S. Monroe St., Suite 300  
P.O. Box 6526 (32314)  
Tallahassee, FL 32301

John T. Burnett  
Dianne M. Triplett  
Progress Energy Services Co., LLC  
299 First Avenue North, PEF-151  
St. Petersburg, FL 33701

3. Cost Recovery Eligibility. As further discussed below, the U.S. Environmental Protection Agency ("EPA") recently issued proposed rules that would establish new standards for air emissions from coal- and oil-fired electric generating units. As a result of the new regulations, PEF will incur costs for new environmental compliance activities related to its

DOCUMENT NUMBER-DATE

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) )

previously approved Integrated Clean Air Compliance Program. As detailed below, the new compliance activities meet the criteria for cost recovery established by the Commission in Order No. PSC-94-0044-FOF-EI in that:

- (a) all expenditures will be prudently incurred after April 13, 1993;
- (b) the activities are legally required to comply with a governmentally imposed environmental regulation that was created, became effective, or whose effect was triggered after the company's last test year upon which rates are based; and
- (c) none of the expenditures are being recovered through some other cost recovery mechanism or through base rates.

The information provided below for each program satisfies the minimum filing requirements established in Part VI of Order No. PSC-99-2513-FOF-EI.

4. New Rules Affecting PEF's Approved Integrated Clean Air Compliance Plan. In the 2007 ECRC Docket, the Commission approved PEF's Integrated Clean Air Compliance Plan (Plan D) as a reasonable and prudent means to comply with the requirements of the Clean Air Interstate Rule (CAIR), the Clean Air Mercury Rule (CAMR), the Clean Air Visibility Rule (CAVR), and related regulatory requirements. Order No. PSC-07-0922-FOF-EI, at 8 (Nov. 16, 2007). In each subsequent ECRC docket, the Commission approved PEF's annual review of the Integrated Clean Air Compliance Plan, concluding that the Plan remains the most cost-effective alternative for achieving and maintaining compliance with the applicable air quality control and monitoring regulatory requirements. See Order No. PSC-10-0683-FOF-EI, at 6-7 (Nov. 15, 2010); Order No. PSC-09-0759-FOF-EI, at 18 (Nov. 18, 2009); Order No. 08-0775-FOF-EI, at 11 (Nov. 24, 2008).

As the Commission is aware, in February 2008, the U.S Circuit Court of Appeals for the District of Columbia vacated the CAMR regulation and rejected EPA's delisting of coal-fired electric generating units from the list of emission sources that are subject to Section 112 of the Clean Air Act. See Order No. PSC-09-0759-FOF-EI, at pp. 15, 18 (Nov. 18, 2009). As a result, in lieu of CAMR, EPA must adopt National Emission Standards for Hazardous Air Pollutants (NESHAPs) that define Maximum Available Control Technology (MACT) for control of hazardous air pollutant emissions from coal-fired electric generators. Id.

EPA issued its proposed rule to replace CAMR on March 16, 2011, with publication following in the *Federal Register* on May 3, 2011. 76 Fed. Reg. 24976 (May 3, 2011) PEF and other interested persons have 60 days following publication (i.e., July 5, 2011) to submit comments on the proposed rule to EPA. In accordance with a consent decree, the EPA Administrator must sign a final rule by November 16, 2011. The Clean Air Act generally requires affected facilities to comply with the final rule within three years of adoption, although one-year compliance extensions can be granted on a case-by-case basis. See 42 U.S.C. § 7412(i)(3).

Adoption of the new NESHAP rule will require PEF to modify its Integrated Clean Air Compliance Plan to ensure compliance with new emission standards. EPA's proposed standards apply to all existing coal- and oil-fired electric generators, including PEF's Crystal River Units 1, 2, 4, and 5, and Anclote Units 1 and 2, and Suwannee Units, 1, 2, and 3. The standards would place stringent limits on emissions of: (1) metals, including mercury, arsenic, chromium and nickel; (2) acid gases, including hydrogen chloride and hydrogen fluoride; and (3) particulate matter. Potential compliance options include installation of emission controls, fuel switches, efficiency improvements and unit retirements.

In addition to the proposed NESHAP rule, electric generating units are the subject of other ongoing rulemakings addressing the interstate transport of emissions contributing to ozone and particulate matter air quality issues, coal combustion wastes and cooling water control requirements. Harmonizing overlapping regulations and timelines could make a substantial difference in lowering costs to the customer. Accordingly, to the extent possible, PEF will take into account the combined effects of these upcoming rules in developing cost-effective alternatives for inclusion in a revised Integrated Clean Air Compliance Plan to be submitted for Commission review at a later date.

5. New Environmental Compliance Activities. The new requirements of the proposed NESHAP and other ongoing rulemakings present significant challenges to the utility industry, requiring substantial analysis and planning to develop and implement cost-effective compliance measures. At this time, PEF needs to contract with outside consultants to help the Company assess the proposed rule, prepare comments to EPA, and develop compliance strategies within the aggressive regulatory time-frames. In 2011, PEF will conduct diagnostic stack testing in order to help inform development of comments on the proposed rule and the development of compliance strategies. Specifically, PEF will perform emissions testing at Crystal River Units 4 and 5 in June, 2011, to assess emissions of mercury, HCl and condensable particulate matter at three load points while testing hydrated lime injection and various operating conditions. Upon issuance of the final rule, PEF expects to incur additional costs in 2012 for detailed engineering and other analyses necessary to develop compliance strategies for inclusion in an updated Integrated Clean Air Compliance Plan.

As the Commission has previously recognized, “[a]n effective way to control the costs of complying with a particular environmental law or regulation can be participation in the

regulatory and legal processes involved in defining compliance.” Order No. PSC-08-0775-FOF-EI, at 7-8 (Nov. 24, 2008). Based on that understanding, the Commission has repeatedly approved ECRC recovery of costs incurred by utilities for technical analyses and other activities associated with participation in development of regulatory compliance measures. See e.g., id. (costs for participating in rulemaking and legal proceedings related to EPA’s Section 316(b) Phase II rules); Order No. PSC-09-0759-FOF-EI (Nov. 18, 2009) (costs for emissions monitoring and modeling associating with development of TMDLs and parallel air rulemaking); Order No. PSC-05-1251-FOF-EI (Dec. 22, 2005) (costs associated with technical analysis and legal challenges to Clean Air Interstate Rule); and Order No. PSC-00-0476-PAA-EI (Mar. 6, 2000) (costs associated with participating in ozone modeling study). Accordingly, PEF’s costs associated with development of the NESHAP compliance measures described above are recoverable under the ECRC.

6. No Base Rates Recovery of Program Costs. PEF seeks approval to recover incremental costs associated with development of the NESHAP compliance measures. None of the costs for which PEF seeks recovery were included in the MFRs that PEF filed in its last ratemaking proceeding in Docket No. 090079-EI. Therefore, the costs are not recovered in PEF’s base rates.

7. Cost Estimates. PEF expects to incur approximately \$85,000 in costs for NESHAP-related activities for the remainder of 2011 and approximately \$300,000 for calendar year 2012.

8. Prudence of Expenditures. In order to ensure that the costs incurred for these activities are prudent and reasonable, PEF will identify qualified contractors and, when appropriate, will use competitive bidding when appropriate.

9. No Change in Current ECRC Factors. PEF does not seek to change the ECRC factors currently in effect for 2011. The Company proposes to include in its estimated true-up filing for 2011 all program costs incurred subsequent to the filing of this petition through the end of 2011. The Company will include program costs projected for 2012 and beyond in the appropriate projection filings. PEF expects that all of these costs will be subject to audit by the Commission and that the appropriate allocation of program costs to rate classes will be addressed in connection with those subsequent filings.

10. No Material Facts in Dispute. PEF is not aware of any dispute regarding any of the material facts contained in this petition. The information provided in this petition demonstrates that the programs for which approval is requested meets the requirements of Section 366.8255 and applicable Commission orders for recovery through the ECRC.

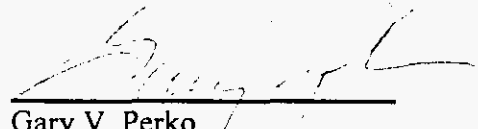
WHEREFORE, Progress Energy Florida, Inc., requests that the Commission approve for recovery through the ECRC all costs reasonably and prudently incurred after the date of this petition in connection with development of the NESHAP compliance measures described more fully above.

RESPECTFULLY SUBMITTED this 21<sup>st</sup> day of May, 2011.

John T. Burnett  
Associate General Counsel  
Dianne M. Triplett  
Associate General Counsel  
PROGRESS ENERGY SERVICE  
COMPANY, LLC  
Post Office Box 14042  
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HOPPING GREEN & SAMS, P.A.

By:

  
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Fax: (850) 224-8551

Attorneys for PROGRESS ENERGY FLORIDA, INC.

**AFFIDAVIT**

STATE OF FLORIDA     )  
  )  
COUNTY OF PINELLAS    )

The undersigned Patricia Q. West, first being duly sworn, deposes and says:

1. I am employed as Manager of Environmental Services / Power Generation Florida for Progress Energy Florida, Inc.

2. I have reviewed the above Petition of Progress Energy Florida, Inc. to Modify the Scope of an Existing Environmental Program and the facts stated in that petition are true and correct to the best of my knowledge, information and belief.

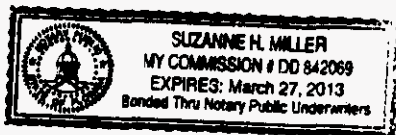
*Patricia Q. West*  
\_\_\_\_\_  
Patricia Q. West

Sworn to and subscribed before me by Patricia Q. West, who:

is personally known to me

presented Florida Drivers License Number \_\_\_\_\_ as identification

this 19<sup>th</sup> day of May, 2011.



*Suzanne H. Miller*  
\_\_\_\_\_  
Notary Public

**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via hand-delivery (\*) or regular U.S. mail this 24<sup>th</sup> day of May, 2011.

Martha Carter Brown (\*)  
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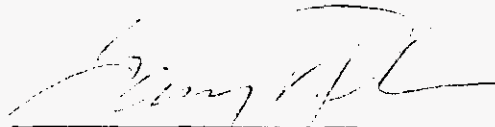
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\_\_\_\_\_  
Attorney