Hopping Green & Sams

Attorneys and Counselors

Writer's Direct Dial No.
(850) 425-2359

December 21, 2012

BY HAND DELIVERY

Ms. Ann Cole
Director Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399

Re: Petition of Progress Energy Florida, Inc. for approval of new environmental program for cost recovery through Environmental Cost Recovery Clause, Docket No. 120318-EI
CONFIDENTIAL MATERIALS ENCLOSED

Dear Ms. Cole:

Enclosed for filing on behalf of Progress Energy Florida, Inc., (PEF) are the following:

- The original and seven copies of PEF's Petition for Approval of New Environmental Program for Cost Recovery through the Environmental Cost Recovery Clause; and

- The original and seven copies of PEF's Request for Confidential Classification, along with a package containing Exhibit A, which includes two redacted copies of the confidential documents, and a CONFIDENTIAL package containing Exhibit B which includes one copy of the documents on which the confidential material has been highlighted.

Please stamp and return the enclosed extra copy of the filings. If you have any questions regarding this filing, please contact the undersigned.

Very truly yours,

Gary V. Perko

GVP/srl
Enclosures: As stated.

COM
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REDACTED

BEFORE THE PUBLIC SERVICE COMMISSION

In re: Petition of Progress Energy Florida, Inc. for approval of a new environmental program for cost recovery under the Envrionmental Cost Recovery Clause	DOCKET NO. 120318-EI FILED: December 21, 2012

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 of Certification which impose new Groundwater Monitoring and Operation and Maintenance Requirements for PEF's Crystal River Energy Center (Units 3, 4, & 5). 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
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gperko@hgslaw.com

John T. Burnet
Dianne M. Triplett
Progress Energy Services Co., LLC
299 First Avenue North, PEF-151
St. Petersburg, FL 33701
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3. Cost Recovery Eligibility. PEF will incur costs to comply with new Conditions of Certification imposed by the Florida Department of Environmental Protection ("FDEP") pursuant to the Florida Electrical Power Plant Siting Act ("PPSA") by order dated August 1, 2012. (A copy of the Final Order Modifying Conditions of Certification (PA77-09P) and Attachment H to Conditions of Certification is provided as Exhibit 2 to this petition). As detailed below, the compliance activities associated with the new Conditions of Certification 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. PEF's Crystal Units 3, 4 and 5 operate in accordance with certain Conditions of Certification established pursuant to the PPSA. In accordance with the PPSA, section 403.516, Florida Statutes, FDEP periodically modifies the Conditions of Certification to incorporate new environmental requirements applicable to the Crystal River facility. Most recently, by Final Order dated August 1, 2012, FDEP imposed new *Groundwater Monitoring, Operation and Monitoring Requirements* (GWMOMR) in a new Attachment H to the Conditions of Certification. The GWMOMR Conditions of Certification

impose the following new environmental requirements in order to ensure compliance with FDEP's groundwater criteria in Rule 62-520, Florida Administrative Code:

a. Percolation Pond Flow Quantification Requirement. The new GWMOMR Conditions of Certification include a new requirement to quantify industrial wastewater flow to the Units 4 and 5 industrial wastewater percolation basin system. See Exhibit 2, Attachment H, at p. 12, Sect. II.9. Such flow monitoring device(s) must be installed within 240 days of the Final Order (i.e., March 29, 2013), unless FDEP grants an extension of time.

b. Freeboard Limitation and Related Studies. The new GWMOMR Conditions of Certification include new limitations on the freeboard capacity of the facility's Industrial Wastewater percolation basins. See Exhibit 2, Attachment H at p. 14, Sect. III.A.3. Specifically, PEF must ensure that percolation basins are operated at a level to maintain a certain freeboard requirements except after rainfall events exceeding the 25-year, 24-hour storm event. Additionally, the basins are required to have the capability to hold all industrial wastewater as well as rainfall from a 25-year, 24-hour storm event without discharging to surface waters. As a result, PEF must engage a consultant to perform an assessment of the basins to determine appropriate operating levels.

c. Impoundment Integrity Inspections. The new GWMOMR Conditions of Certification require annual inspections of impoundment integrity by individual(s) qualified to perform such inspections. See Exhibit 2, Attachment H at p. 15, Sect. IV.C.and D. As a result, PEF will incur consultant costs associated with these annual inspections and the preparation of reports required by FDEP.

d. Groundwater Flow/Contour Mapping: The new GWMOMR Conditions of Certification contain a new requirement to provide groundwater contour maps and groundwater flow analyses utilizing data from wells associated with the ash storage facility. The contour maps and groundwater flow analyses are to be summarized in an annual report generated, signed and sealed by a Florida registered professional geologist or professional engineer. See Exhibit 2, Attachment H at p. 17, Sect. VI.B.2.a. As a result, PEF will incur consultant costs associated with performing the required analyses and generating the annual report.

5. No Base Rates Recovery of Program Costs. PEF seeks approval to recover through the ECRC incremental costs incurred to comply with the GWMOMR Conditions of Certification. 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.

6. Cost Estimates. Exhibit 1 to this Petition to this petition provides the estimated costs for complying with the new GWMOMR Conditions of Certification for 2013.[1]

7. Prudence of Expenditures. In order to ensure that the costs incurred to comply with the new GWMOMR Conditions of Certification are prudent and reasonable, PEF will identify qualified contractors and, when appropriate, will use competitive bidding.

8. No Change in Current ECRC Factors. PEF does not seek to change the ECRC factors established for 2013 in Order No. PSC- 12-0613-FOF-EI. The Company proposes to include in costs incurred in 2013 in its Estimated True-Up filings in next year's ECRC docket.

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[1]To prevent disclosure of confidential proprietary information, a redacted copy of Exhibit 1is attached to this Petition. An un-redacted copy of Exhibit 1 is being filed separately with a Request for Confidential Classification pursuant to Rule 25-22.006, Florida Administrative Code.

The Company will include program costs projected for 2014 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.

9. Allocation to Rate Classes. The O&M costs associated with the new GWMOMR Conditions of Certification will be allocated to the rate classes on an energy basis and any resulting capital expenditures will be allocated on a demand basis.

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 GWMOMR Conditions of Certification described more fully above.

RESPECTFULLY SUBMITTED this 21st day of December, 2012.

John T. Burnett
Deputy General Counsel
Dianne M. Triplett
Associate General Counsel
PROGRESS ENERGY SERVICE
COMPANY, LLC
Post Office Box 14042
St. Petersburg, FL 33733-4042
PEF-151

HOPPING GREEN & SAMS, P.A.

By: Gary V. Perko
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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 Generation Field Support Services - Florida of Environmental Services, Energy Supply, for Progress Energy Florida, Inc.

2. I have reviewed the above Petition of Progress Energy Florida, Inc. for Approval of Cost Recovery for New 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

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

(✓) is personally known to me

( ) presented Florida Drivers License Number _____ as identification

this 17th day of December, 2012.

JUNE C. MOONEY
MY COMMISSION # EE 199938
EXPIRES: September 18, 2016
Bonded Thru Budget Notary Services

June C. Mooney
Notary Public

EXHIBIT 1

Estimated Costs of Monitoring and Operation and Maintenance Requirements for Crystal River Energy Center

Requirement	2013		Frequency
	O&M	Capital	
Percolation Pond Flow Quantification	[redacted]	[redacted]	One-time installation, annual calibration
Freeboard Limitation & Related Studies	[redacted]	[redacted]	One-time
Impoundment Inspection	[redacted]	[redacted]	Annual
Groundwater flow/contour mapping	[redacted]	[redacted]	Annual
TOTAL COSTS	[redacted]	[redacted]	

Florida Department of Environmental Protection
Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard
Secretary

August 1, 2012

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Michael Shrader
Lead Environmental Specialist
Progress Energy Florida, Inc.
100 Central Avenue
St. Petersburg, FL 33733

RE: Crystal River Energy Complex
Modification to Conditions of Certification
DEP Case Number PA77-09P
OGC Case Number 10-2632

FINAL ORDER MODIFYING CONDITIONS OF CERTIFICATION

Dear Mr. Shrader:

The Florida Pollution Control Board issued the Site Certification for Progress Energy Florida's (PEF) Crystal River Energy Complex (CREC) Units 4 and 5 on November 21, 1978. This certification authorized the construction and operation of two 640 MW coal-fired power plant units (Units 4 and 5) and ancillary facilities. Crystal River nuclear Unit 3 was certified August 28, 2008. The Department of Environmental Protection (Department) has modified the Conditions of Certification (Conditions) for CREC by Final Order on sixteen other occasions.

The Department has reviewed PEF's petition received September 10, 2010, for a modification to CREC's Conditions pursuant to Section 403.516(1)(c), Florida Statutes (F.S.), Additionally, the Department has considered modifications pursuant to 403.516(1)(c), F.S., to incorporate a uniform set of general conditions consistent with recent site certifications.

On June 15, 2012, all parties to the certification proceeding were provided notice by mail of the Department's intent to modify the Conditions for CREC, along with a draft copy of the proposed order modifying the Conditions. On June 22, 2012, notice of the Department's intent to modify CREC's Conditions was also published in the Florida Administrative Weekly (FAW).

Pursuant to Section 403.516, F.S., and Rule 62-17.211, Florida Administrative Code (F.A.C.), all parties to the certification proceeding have **45 days** from the issuance of notice by mail to such party's last address of record in which to file a written objection to the modification. Pursuant Section 403.516, F.S., and Rule 62-17.211, Florida Administrative Code (F.A.C.), any person

EXHIBIT 2

who is not already a party to the certification proceeding and whose substantial interests will be affected by the requested modification has **30 days** from the date of publication of the public notice in the FAW to object in writing. Failure to act within the 30 day time frame constitutes a waiver of the right to become a party. The Department will issue an order modifying the Conditions for this facility if no written objections are received by the Department.

These timeframes have expired and no objections to the modification have been received by the Department. Written comments were received via email from PEF on June 18, 2012, July 25, 2012 and July 30, 2012 requesting clarifications and corrections to specific draft Conditions of Certification.

The submitted comments have been considered and changes have been made, as necessary, in the Conditions of Certification. The requested changes (*italics*) followed by the Department's responses are listed below.

1. PEF Comment: *Section B. Condition I.H.b. - The condition be corrected as follows: It has been demonstrated through the Golder Associates North Plant Area Stormwater Jacobs Modeling Report (dated July 19, 2010) and submitted with the PEF Petition for Modification (Mod P) dated September 9, 2010, that the receiving system for Area 1B-Vii is adequate to handle the volume of discharge from that area. For activities within Area 1B-Vii not previously authorized by post certification submittal, the Licensee shall provide the information pursuant to Section A, Condition XXX. Environmental Resources ~~accept~~ except that further modeling for additional impervious surfaces shall not be required.*

   Department Response: The change shall be made accordingly to the final conditions.

2. *PEF Comment: "We have come to an agreement with the Water Management District regarding the changes to the alternate water supply conditions in the COC for PA 77-09. As a PEF comment to the current COC Mod P draft conditions that are currently open for comments, the following should be incorporated into the COC Mod P as agreed upon with the SWFWMD "Amended the reporting date of the Annual Monitoring Report to April 1st of each year for the preceding year".*

   Department Response: This request is in reference to Section B. Condition VIII.C.6. CREC currently submits an annual environmental monitoring data summary by January 1st of each year for the preceding year (October 1 - September 30). The request is to change the reporting period to January 1 through December 31 and the annual reporting deadline to April 1st. This will provide more consistency with other reporting requirements. The condition is revised as follows:

   6. Annual Environmental Monitoring Reports

   Licensee shall submit an annual environmental monitoring data summary by ~~January~~ April 1st of each year for the preceding water year (~~October 1 – September 30~~ January 1 – December 31).

PEF Comment: The discharge limitation for land application system (G-001) is listed in the GROUNDWATER MONITORING, OPERATION AND MAINTENANCE REQUIREMENTS (Attachment H) to the Modification P Conditions of Certification as 0.91 million gallons per day (MGD) monthly average daily flow (MADF). The Modification P Notice of Intent and Draft Final Order issued on June 15, 2012 included language describing part of the modification as "authorization to increase the permitted flow to the south percolation pond (land application system G-001) from 0.91 MGD to 1.2 MGD MADF."

Department Response: The discharge limitation for the south percolation pond system (land application system G-001) authorized by this modification is an increase from 0.76 to 0.91 MGD MADF consistent with the attached *GROUNDWATER MONITORING, OPERATION AND MAINTENANCE REQUIREMENTS.* The modification description in this Final Order is revised to reflect the more restrictive discharge limitation increase to 0.91 MGD as it correctly appears in Attachment H of the Conditions of Certification and as authorized by this modification.

The Conditions for CREC are hereby modified as follows:

1. *Permit FLA016960 is being incorporated into the COC in its entirety. This includes authorization to increase the permitted flow to the south percolation pond from 0.76 million gallons per day (MGD) to 0.91 MGD monthly average flow and incorporates a new Monitoring, Operation and Maintenance Requirements Plan (Attachment H). Attachment H incorporates the monitoring, operation, and maintenance requirements for the industrial wastewater section and solid waste section.*
2. *The Crystal River North (CRN) Domestic Wastewater Treatment Permit (FLA011862) is being incorporated in its entirety. The PEFoperates an existing 0.020 MGD 3-Month Average Daily Flow (3MADF), Type III, extended aeration domestic wastewater treatment plant.*
3. *The Southwest Florida Water Management District is reallocating the water distribution from the site's 10 existing water wells. The ten wells are allowed to operate equally at 430,900 gpd.*
4. *Conditions are being added to the COC defining the modeling requirements defined by the SWD for the CRN stormwater management system for future development and treatment.*
5. *The facility's water quality criteria exemption from the ground water standard for sodium associated with industrial wastewater discharge to ground water (OGC File No. 10-3490) is being incorporated into the COC.*
6. *The existing Conditions are being modified to incorporate a uniform set of general conditions consistent with recent site certifications and to remove/modify requirements no longer applicable.*

This modification also incorporates conditions of Modification Q for the facility. Modifications P and Q were being processed simultaneously by the SCO and Modification Q was finalized prior to this modification P. Modification Q approved the vertical expansion of the facility's

existing ash landfill. For reference, these conditions are incorporated into the COC in Section B.I.F.(h-j).

The modified Conditions PA 77-09P (Attachment A) replaces the existing Conditions PA 77- (Attachment B) in its entirety. Several existing conditions have been updated and incorporated into a more uniform set of general conditions. Many existing conditions have been moved to different sections of the document. The existing Conditions (Attachment B) contain cross references to the corresponding conditions in the modified Conditions (Attachment A) appearing in red following each section of the document. These documents can be found on the DEP public files website at http://publicfiles.dep.state.fl.us/Siting/Outgoing/PEF%20CREC/PEF_CREC_Mod_P/MOD%20P%20NOI/

A complete set of the Conditions (including attachments) can be viewed and downloaded from the following website: http://www.dep.state.fl.us/siting/files/certification/pa77_09_2010_P.pdf. Copies of the Conditions and/or attachments may also be obtained by contacting the Department of Environmental Protection, Siting Coordination Office, 3900 Commonwealth Blvd., M.S. 48, Tallahassee, Florida 32399-3000, (850) 245-2002.

Pursuant to Section 120.68, F.S., any party to the this order has a right to seek judicial review, by filing a Notice of Appeal, pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 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 this order is filed with the Clerk of the Department of Environmental Protection.

Cindy Mulkey
Administrator,
Siting Coordination Office

CC by email:
FDEP SWD District Assistant Director, Pamala Vazquez, pamala.vazquez@dep.state.fl.us
FDEP SWD Siting Liaison: Danny Stubbs, danny.stubbs@dep.state.fl.us
FDEP SWD Solid Waste Section: Susan Pelz, susan.pelz@dep.state.fl.us
FDEP SWD Industrial Waste Section: Yanisa Angulo, yanisa.angulo@dep.state.fl.us

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Essie Turner August 1, 2012
Clerk Date

Service List: CC by email (return receipt requested):

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ATTACHMENT H

GROUNDWATER MONITORING, OPERATION AND MAINTENANCE REQUIREMENTS

Crystal River Energy Complex
15760 West Powerline Street
Crystal River, FL 34428
Citrus County

Latitude: 28° 57' 27" N Longitude: 82° 42' 36" W

These Groundwater Monitoring, Operation and Monitoring Requirements (GWMOMR) were developed by the Licensee, Progress Energy Florida, Inc., in conjunction with the Florida Department of Environmental Protection Southwest District's Industrial Wastewater (IWW) Section and Solid Waste (SW) Section to incorporate the groundwater (GW) monitoring requirements of Industrial Wastewater Permit, FLA016960, into the Licensee's Conditions of Certification (COC or License). The GWMOMR incorporates Units 4 and 5 IWW percolation pond, Units 1, 2 and 3 percolation pond system, Units 4 and 5 coal storage area, ash landfill, the flue gas desulfurization (FGD) blowdown treatment pond area, and south coal storage area. The Department's Southwest District IWW Section and SW Section are responsible for reviewing and approving all revisions to this document in accordance with Section A, Condition .XX. Procedures for Post-Certification Submittals and Section B, III DEP Facility-Wide Specific Conditions, A. Groundwater Monitoring Requirements of this License.

New sources or deletion of existing sources of wastewater with changes to water quality standards, applications for a new Water quality Criteria exemption pursuant to Rule 62-520.500 F.A.C., and improvements made at a treatment facility to provide for a new or expanded land application system with increase in the permitted capacity are considered modifications to the existing license. The licensee shall submit a petition for modification to the Conditions of Certification to the Department for review and approval in accordance with Section 403.516, F.S. and 62-17.211, F.A.C.

WASTEWATER TREATMENT:

The neutralized wastes are discharged into a percolation pond system consisting of four ponds including the "south Pond Expansion Area" (pond #4). Ponds #1 and #2 are operated in parallel. The ponds act as settling basins and the settled effluent from either pond is routed to Pond #3 which overflows into pond #4 (7.16 acres) for percolation. Pond #4 has the capability to hold the wastewater as well as direct rainfall resulting from a 25-year 24-hour storm in the 13.6-acre pond catchment area. The sources of wastewater include power plant equipment drains, laboratory drains, floor drains, neutralized regeneration wastes from the demineralizer resin beds, boiler blowdown, boiler drains (chemical cleanings), air pre-heater wash drains, sewage treatment plant effluents, stormwater drainage from the transformer area, treated [settling treatment] blowdown from the Units 4 & 5 Flue Gas Desulfurization, precipitator washes, boiler washes, boiler water blowdown, and reverse osmosis/micro filtration concentrate.

Neutralized wastewater generated from Units 4 and 5 are discharged into a percolation pond [pond #5]. The sources of wastewater include low volume wastes (demineralizer regeneration, cooling tower basin cleaning wastes, floor drainage, sample drains and similar wastes), metal cleaning wastes (including preheater and fireside wash) and boiler blowdown.

ASH LANDFILL:

The ash disposal area, which is located in the northeast corner of the Crystal River Energy Complex, was originally certified under the Units 4 and 5 Conditions of Certifications for the disposal of unsalable fly ash and bottom ash

from Units 4 and 5 and was subsequently modified to include disposal of unsalable fly ash and bottom ash from Units 1 and 2. The ash disposal area is comprised of separate storage piles for fly ash, high chloride ash, commingled material, Units 1 and 2 bottom ash, and Units 4 and 5 bottom ash.

With Department approval, solid wastes other than the ash materials described in paragraph #1 of this section have been disposed in the ash disposal area. Examples of other solid wastes that have been placed in the ash disposal area following receipt of Department approval include, but are not limited to, the following:

- Non-hazardous sand blast grit
- Sediment/sludge from on-site domestic wastewater infiltration basin
- Sediment/sludge from on-site industrial wastewater infiltration basin
- Intake screenings and sediment from cooling towers
- Non-petroleum contaminated soil
- Percolation pond dredge material
- Cooling tower solids
- Mill scale

All future requests for approval to dispose of solid wastes other than the ash materials described in paragraph #1 and the solid wastes described in paragraph #2 of this section shall be submitted to the DEP Southwest District Office Solid Waste program for review and approval, with copies to the Siting Office, in accordance with Section B, Condition I. Department of Environmental Protection E. Solid Waste Management Plan, of the Conditions of Certification.

I. SITE GROUNDWATER MONITORING

A. Construction Requirements

1. New background monitor well. The licensee shall construct a replacement ground water monitoring well for MWB-30 as depicted in the response to request for additional information dated December 17, 2010. The construction shall be completed within 45 days after Modification P is final. The following requirements apply to the construction of the well:

a. New monitoring well shall be identified as MWB-30R; and

b. screen depth shall be no deeper than necessary to intercept the seasonal low ground water table; and

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. existing MWB-30 shall be properly plugged and abandoned in accordance with Rule 62-532.500(5), F.A.C.

2. New compliance monitoring wells

a. IWW Wells. The licensee shall construct ground water monitoring well MWC-32 and MWC-33 at the Northern boundary of the property as depicted in the response to request for additional information dated December 17, 2010. The licensee shall submit prior to the installation material specifications for the wells. Construction shall be complete within 180 days after Modification P is final. The following requirements apply to the construction of the wells:

i. screen depth shall be no deeper than necessary to intercept the seasonal low ground water table; and

ii. screen interval shall be no greater than 10 feet in length; and

iii. the bottom of the monitoring well shall be above the highest tide elevation.

b. SW Wells. No new compliance wells are proposed for the ash disposal area.

3. The licensee 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 license including the GWMOMR. [62-620.320(6)]

4. The QUARTERLY sampling and analysis of all new ground water monitoring wells shall begin upon proper completion of the GWMOMR well system in accordance with condition I.B.1. below. The wells shall be sampled for the parameters identified in Condition I.B.3. below. All field work done in connection with this GWMOMR regarding the collection of ground water samples shall be conducted in accordance with the Standard Operating Procedures (SOPs) described in DEP-SOP-001/01 (revised March 31, 2008, effective December 3, 2008), or as replaced by successor SOPs [Rule 62-160.210(1), F.A.C.]. All laboratory analyses done in connection with this GWMOMR shall be conducted by firms that hold certification from the Department of Health, Environmental Laboratory Certification Program under Chapter 64E-1, F.A.C. [Rule 62-160.300(1), F.A.C.].

5. 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)]

6. Location Requirements. Within 60 days after completion of construction of new ground water monitoring wells, the following information shall be submitted.

a. IWW Wells. A properly scaled figure depicting monitor well locations (active and abandoned) with identification numbers shall be submitted to the Southwest District IWW Section. 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)]

b SW Wells. A surveyed drawing shall be prepared in accordance with Rule 62-701.510 (3)(d)(1), F.A.C., showing the location of all monitor wells and piezometers (active and abandoned), horizontally located in degrees, minutes and seconds of latitude and longitude, and the elevation of the top of the well casing and ground surface by the well casing to the nearest 0.01 foot, using a consistent, nationally recognized datum. The surveyed drawing shall include the monitor well and piezometer identification numbers, locations and elevations of all permanent benchmarks and/or corner monument markers at the site. The survey shall be conducted by a Florida Licensed Professional Surveyor and Mapper and shall be submitted to the Southwest District SW Section.

7. Well Construction Detail Requirements. Within 30 days after completion of construction or abandonment of new ground water monitoring wells, the following information shall be submitted.

a. For both IWW and SW wells, a copy of the Southwest Florida Water Management District (SWFWMD) State of Florida Permit Application to Construct, Repair, Modify, or Abandon a Well (LEGR.040.01 (June 2010) 40D-3.101(1), F.A.C.) and

b. IWW Wells, A copy of the SWFWMD Well Completion Report (LEG-R.005.02 (June 2010) 40D-3.411(1)(a), F.A.C.), SWFWMD Well Completion Report, and DEP Form 62-520.900(3), Monitor Well Completion Report, for each well shall be submitted to the Southwest District IWW Section. The DEP form can be accessed at http://www.dep.state.fl.us/water/groundwater/forms.htm. [62-532.410 and 62-520.900(3)

c. SW Wells, SWFWMD Well Completion Report, and DEP Form 62-701.900(30), Monitoring Well Completion Report for each well shall be submitted to the Southwest District SW Section. The DEP form can be accessed at:

http://www.dep.state.fl.us/waste/quick_topics/forms/documents/62-701/62-701.900(30).pdf.

8. Initial Sampling Requirements. Within 30 days of installation of all new wells within the existing Site boundary depicted in Attachment A of this license, the licensee shall conduct initial ground water sampling events as follow:

a. IWW Wells. Sample all new ground water monitoring wells for the Primary 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 initial sampling shall be submitted to the Southwest District IWW Section and the SCO within 60 days after sampling. *[62-520.600]*

b. SW Wells. Sample each new or replacement ground water monitoring well for analysis of the parameters listed in Table 2 of this document including ammonia, cobalt, and ORP. . Results of this initial sampling shall be submitted to the Southwest District SW Section and the SCO within 60 days after sampling.

9. All piezometers and monitoring wells not part of this GWMOMR are to be plugged and abandoned in accordance with Rule 62-532.500(5), F.A.C., unless future use is intended. *[62-532.500(5)]*

B. Operational Requirements

1. During the period of operation authorized by this Certification the licensee shall continue to sample ground water at the monitoring wells identified in item.I.B.2 below, in accordance with the COC and GWMOMR prepared in accordance with Rule 62-520.600, F.A.C.

2. The following monitoring wells shall be sampled for Groundwater Monitoring requirements listed in Table 1: TABLE 1

Monitoring Well ID	Alternate Well Name and/or Description of Monitoring Location	Depth (Feet)	Aquifer Monitored	New or Existing	Unit Monitored
MWB-30R	Background Well (replaced MWB-30)		Upper Floridan	New	Site background wel
MWC-1	Compliance Monitoring Well	20	Upper Floridan	Existing	IWW well Unit 4 &5
MWI-7R	Intermediate Monitor Well (Relocated)	20	Upper Floridan	Existing	IWW well
MWC-16	Compliance Monitor Well	21.1	Upper Floridan	Existing	IWW well FGD pond
MWC-21R	Compliance Monitor Well	20	Upper Floridan	Existing	IWW well
MWC-27	Compliance Monitor Well	33	Upper Floridan	Existing	IWW well ponds units 1, 2 &3
MWC-28	Compliance Monitor Well	20	Upper Floridan	Existing	IWW well
MWC-29	Compliance Monitor Well	20	Upper Floridan	Existing	IWW well South coal
MWC-IF2	Compliance Monitor Well	14	Upper Floridan	Existing	IWW well ponds units 1, 2 &3
MWC-31	Compliance Monitor Well	20	Upper Floridan	Existing	IWW well FGD pond
MWC-32	Compliance Monitor Well Northern boundary of the property		Upper floridan	New	IWW well
MWC-33	Compliance Monitor Well Northern boundary of the property		Upper floridan	new	IWW well
MWI-2R2	Intermediate Monitor Well		Upper Floridan	Existing	SW well Ash landfill
MWC-12R	Compliance Monitor Well (For Primary Drinking Water Standards Only)	20	Upper Floridan	Existing	SW well Ash landfill
TWI-1R	Intermediate Monitor Well		Upper Floridan	Existing	SW well Ash Landfill
TWI-2R	Piezometer		Upper	Existing	SW well

Monitoring Well ID	Alternate Well Name and/or Description of Monitoring Location	Depth (Feet)	Aquifer Monitored	New or Existing	Unit Monitored
			Floridan		Ash Landfill
TWI-3	Intermediate Monitor Well		Upper Floridan	Existing	SW well Ash Landfill
TWI-4	Intermediate Monitor Well		Upper Floridan	Existing	SW well Ash Landfill
TWI-5	Intermediate Monitor Well		Upper Floridan	Existing	SW well Ash Landfill

3. The monitor wells specified in Condition.I.B.2 above shall be sampled for the parameters listed below in Table 2:

TABLE 2

Parameter Name	Compliance Well Limit	Units	Sample Type	Monitoring Frequency
Radium 226 and 228	5.0	PCI/L	Grab	Quarterly
Copper, Total Recoverable	Report	MG/L	Grab	Quarterly
Chloride (as Cl)	Report	MG/L	Grab	Quarterly
Iron, Total Recoverable	Report	MG/L	Grab	Quarterly
Nitrogen, Nitrate, Total (as N)	10.0	MG/L	Grab	Quarterly
pH*	Report	SU	In-situ	Quarterly
Sodium, Total Recoverable	Report	MG/L	Grab	Quarterly
Solids, Total Dissolved (TDS)	Report	MG/L	Grab	Quarterly
Specific Conductance*	Report	UMH OS/C M	In-situ	Quarterly
Turbidity*	Report	NTU	In-situ	Quarterly
Water Level Relative to NGVD	Report	FEET	In-situ	Quarterly
Alpha, Gross Particle Activity	15.0	PCI/L	Grab	Quarterly
Antimony, Total Recoverable	6.0	UG/L	Grab	Quarterly
Arsenic, Total Recoverable	10.0	UG/L	Grab	Quarterly
Boron, Total Recoverable (GCTL Guidance concentration per 62-777 F.A.C.)	Report	MG/L	Grab	Quarterly
Barium, Total Recoverable	2.0	MG/L	Grab	Quarterly
Beryllium, Total Recoverable	4.0	UG/L	Grab	Quarterly
Cadmium, Total Recoverable	5.0	UG/L	Grab	Quarterly
Mercury, Total Recoverable	2.0	UG/L	Grab	Quarterly
Selenium, Total Recoverable	50.0	UG/L	Grab	Quarterly
Chromium, Total Recoverable	100.0	UG/L	Grab	Quarterly
Lead, Total Recoverable	15.0	UG/L	Grab	Quarterly
Nickel, Total Recoverable	100.0	UG/L	Grab	Quarterly
Thallium, Total Recoverable	2.0	UG/L	Grab	Quarterly
Oxygen, Dissolved (DO)*	Report	MG/L	In-situ	Quarterly
Zinc, Total Recoverable	Report	MG/L	Grab	Quarterly
Fluoride, Total (as F)	4	MG/L	Grab	Quarterly
Cyanide, Free	0.2	MG/L	Grab	Quarterly
Temperature, Water*	Report	°F	In-situ	Quarterly
Sulfate, Total	Report**	MG/L	Grab	Quarterly
Aluminum, Total Recoverable	Report**	UG/L	Grab	Quarterly

Parameter Name	Compliance Well Limit	Units	Sample Type	Monitoring Frequency
Manganese, Total Recoverable	Report**	UG/L	Grab	Quarterly
Molybdenum, Total Recoverable	Report	UG/L	Grab	Quarterly
Silver, Total Recoverable	Report	UG/L	Grab	Quarterly
Strontium, Total Recoverable	Report	UG/L	Grab	Quarterly
Vanadium, Total Recoverable	Report	UG/L	Grab	Quarterly

* The field parameters shall be sampled per DEP–SOP-001/01, FS 2200 Ground Water Sampling, Figure FS 2200-2 Ground Water Purging Procedure (http://www.dep.state.fl.us/water/sas/sop/sops.htm) and recorded on Form FD 9000-24, Ground Water Sampling Log (http://www.dep.state.fl.us/water/sas/qa/forms.htm). For the IWW wells, the sampling logs shall be submitted with each ground water Part D DMR. For the SW wells, the sampling logs shall be submitted with each ground water report submitted in accordance with Condition #VI.B., below. The field parameters to be included in the ground water reports for the IWW wells and the SW wells shall be the last sample recorded on FD 9000-24.

Guidance Concentration or Secondary parameters are report only result on the DMR.
**Applicable to the SW wells associated with Ash Storage Area only – (MWB-30R, MWI – 2R2, MWC-12R, TWI-1R, TWI-3, TWI-4, and TWI-5)

4. Ground water quality criteria of chapter 62-520, F.A.C., shall be met at the edge of the zone of discharge (ZOD). Progress Energy Florida Crystal River Energy Complex is an existing installation as defined by Rule 62-520.200(10), F.A.C., thus the ZOD has been established per the discretion of the Department in consideration of the property extent and site-specific hydrology [62-520.465, F.A.C.]. Accordingly, the ZOD is defined by the downgradient terminus of the upland ground water regime prior to transition to a surface water regime. This ground water, surface water ZOD boundary is delineated by the location of facility compliance monitor wells. The vertical limit of the ZOD as defined by Rule 62-520.200(27), F.A.C., is the base of the Floridan aquifer.

5. 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)]

6. Ground water monitoring wells shall be purged prior to sampling to obtain a representative sample. [62-160.210]

7. 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)]

8. If any monitoring well becomes inoperable or damaged to the extent that sampling or well integrity may be affected, the licensee shall notify the Department's SWD office 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)(l)]

9. Every 5 years upon issuance of the Modification P COC, the licensee shall submit a proposal identifying the IWW wells in the Department-approved monitoring requirements that will be sampled for the Primary 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). The selection of the wells should include at least one background well and one intermediate well, if they are available. Compliance well selections should be based on recent groundwater conditions. Sampling results should be submitted sixty days [60] upon Department's approval of the well proposal sampling. [62-520.600(5)(b)]

10. Ground water monitoring test results for the IWW wells shall be submitted on Part D of DEP Form 62-620.910(10) (attached) and shall be submitted as required under Section II C below. Ground water monitoring results for the SW wells shall be submitted as required under Section VI.B., below.

II. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS:

Land Application Systems

A. Land Application:

Units 1, 2 &3. An existing 0.91 MGD monthly average daily flow (MADF) land application system (G-001) consists of four [4] percolation ponds (Ponds 1-4). Land application system G-001 is located approximately at latitude 28° 57' 27" N, longitude 82° 42' 22" W.

Unit 4 & 5. An existing land application system (G-002) consists of one [1] percolation pond (Pond 5). Land application system G-002 is located approximately at latitude 28° 57' 52.6" N, longitude 82° 42' 00.9" W.

1. Water levels in ponds 1, 2, 3, 4 & 5 shall be recoded weekly on the part B DMRs. The part B DMRs shall be submitted quarterly in accordance to the schedule in Section II C below.

2. The licensee is authorized to discharge process wastewater, non process wastewater, power plant equipment drains, laboratory drains, floor drains, neutralized regeneration wastes from the demineralizer resin beds, boiler blowdown, boiler drains (chemical cleanings), air pre-heater wash drains, sewage treatment plant effluents, stormwater drainage from the transformer area, treated blowdown from the Units 4 &5 Flue Gas Desulfurization, precipitator washes, boiler washes, boiler water blowdown, and reverse osmosis/micro filtration concentrate to Land Application System G-001 [Units 1, 2 &3], a percolation pond system. Such discharge shall be limited and monitored by the Licensee as specified below and reported in accordance with specific condition Section II C below.

	Discharge Limitations			**Monitoring Requirements**		
Parameters (units)	**Monthly Average**	**Daily Maximum**	**Daily Minimum**	**Monitoring Frequency**	**Sample Type**	**Sample Point**
Flow (MGD)	0.91	Report See Cond. II.A.6	--	Daily	Calculated	FLW-3
Flow (MGD)	--	Report See Cond. II.A.6	--	Daily	Meter	FLW-1
Flow (MGD)	--	Report See Cond. II.A.6	--	Daily	Meter	FLW-2
Water Level Relative to NGVD	--	Report See Cond. II.A.1	--	Weekly	In-situ	OTH-1
Water Level Relative to NGVD	--	Report See Cond. II.A.1	--	Weekly	In-situ	OTH-2
Water Level Relative to NGVD	--	Report See Cond. II.A.1	--	Weekly	In-situ	OTH-3

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	Discharge Limitations			Monitoring Requirements		
Parameters (units)	**Monthly Average**	**Daily Maximum**	**Daily Minimum**	**Monitoring Frequency**	**Sample Type**	**Sample Point**
Water Level Relative to NGVD	--	Report See Cond. II. A.1	--	Weekly	In-situ	OTH-4
pH (SU)	--	Report	Report	Quarterly	In-situ	EFF-1 EFF-2
Solids, Total Dissolved (TDS) (MG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Specific Conductance (UMHO/CM)	--	Report	--	Quarterly	In-situ	EFF-1 EFF-2
Oil and Grease (MG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Nitrogen, Nitrate, Total (as N) (MG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Chloride (as Cl) (MG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Cyanide, Total (MG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Alpha, Gross Particle Activity (PCI/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Radium 226 + Radium 228, Total (PCI/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Antimony, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Arsenic, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Beryllium, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Boron, Total Recoverable (MG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Cadmium, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2

	Discharge Limitations			Monitoring Requirements		
Parameters (units)	**Monthly Average**	**Daily Maximum**	**Daily Minimum**	**Monitoring Frequency**	**Sample Type**	**Sample Point**
Copper, Total Recoverable (MG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Chromium, Total Recoverable (MG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Iron, Total Recoverable (MG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Lead, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Mercury, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Nickel, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Selenium, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Silver, Total Recoverable (UG/L)	--	Report	__	Quarterly	Grab	EFF-1 EFF-2
Sodium, Total Recoverable (MG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Thallium, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Zinc, Total Recoverable (MG/L)	--	Report	--	Quarterly	Grab	EFF-1 EFF-2
Molybdenum, Total Recoverable		Report	--	Quarterly	Grab	EFF-1 EFF-2
Strontium, Total Recoverable		Report	--	Quarterly	Grab	EFF-1 EFF-2
Vanadium, Total Recoverable		Report	--	Quarterly	Grab	EFF-1 EFF-2

3. Effluent samples shall be taken at the monitoring site locations as described below:

Sample Point	Description of Monitoring Location
FLW-3	The sum of FLW-1 and FLW-2
FLW-1	The sum of all flows to percolation pond system not including the FGD blows down.
FLW-2	Flow from the FGD blow down into evaporation/percolation pond #3
EFF-2	Effluent from the FGD treatment system. At discharge pipe into evaporation/percolation pond #3
EFF-1	At discharge pipe into the active pond, either the East Pond or West Pond. Ponds will be rotated on a yearly basis, or as necessary.
OTH-1	Staff gauge located in Pond#1.
OTH-2	Staff gauge located in Pond#2.
OTH-3	Staff gauge located in Pond#3.
OTH-4	Staff gauge located in Pond #4

4. The Licensee shall contact and request authorizations from the Department's Southwest District Office, prior to placing into service any backup/ emergency treatment system for the FGD blow down. (i.e. Filter press). The request shall provide details and specification for the proposed system and operational details along with the expected duration.

5. All flow measurement devices shall be calibrated at least once every 12 months or based on the manufacturer requirements.

6. The Licensee is required to measure flow from the FGD blowdown to the CR 1, 2 & 3 Percolation Pond System at the locations indentified as FLW-1, FLW-2, and FLW-3 in the DMRs of the GWMOMR required by this license. The Licensee shall record flow rates on the DMRs. Flow rate results shall be submitted with the DMR for each scheduled month and reported in accordance with Section II C below:

7. The licensee is authorized to discharge plant process wastewater, non-process wastewater, plant equipment drains, laboratory drains, floor drains, non-hazardous boiler chemical cleaning wastewater, low volume wastes (demineralizer regeneration, cooling tower basin cleaning wastes, floor drainage, sample drains and similar wastes), metal cleaning wastes (including preheater and fireside wash) and boiler blowdown to Land Application System G-002 (Units 4 & 5), a percolation pond [pond #5]. Such discharge shall be limited and monitored by the Licensee as specified below and reported in accordance with Section II C below.

	Discharge Limitations			Monitoring Requirements		
Parameters (units)	**Monthly Average**	**Daily Maximum**	**Daily Minimum**	**Monitoring Frequency**	**Sample Type**	**Sample Point**
Flow (MGD)	--	Report See Cond II.A.9 & 10	--	Daily	Calculated	FLW-4
Water Level Relative to NGVD	--	Report See Cond. II.A.1	--	Weekly	In-situ	OTH-5
pH (SU)	--	Report	Report	Quarterly	In-situ	EFF-4

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	Discharge Limitations			Monitoring Requirements		
Parameters (units)	**Monthly Average**	**Daily Maximum**	**Daily Minimum**	**Monitoring Frequency**	**Sample Type**	**Sample Point**
Solids, Total Dissolved (TDS) (MG/L)	--	Report	--	Quarterly	Grab	EFF-4
Specific Conductance (UMHO/CM)	--	Report	--	Quarterly	In-situ	EFF-4
Oil and Grease (MG/L)	--	Report	--	Quarterly	Grab	EFF-4
Chloride (as Cl) (MG/L)	--	Report	--	Quarterly	Grab	EFF-4
Antimony, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-4
Arsenic, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-4
Beryllium, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-4
Boron, Total Recoverable (MG/L)	--	Report	--	Quarterly	Grab	EFF-4
Cadmium, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-4
Copper, Total Recoverable (MG/L)	--	Report	--	Quarterly	Grab	EFF-4
Chromium, Total Recoverable (MG/L)	--	Report	--	Quarterly	Grab	EFF-4
Iron, Total Recoverable (MG/L)	--	Report	--	Quarterly	Grab	EFF-4
Lead, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-4
Mercury, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-4
Nickel, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-4

	Discharge Limitations			Monitoring Requirements		
Parameters (units)	**Monthly Average**	**Daily Maximum**	**Daily Minimum**	**Monitoring Frequency**	**Sample Type**	**Sample Point**
Selenium, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-4
Sodium, Total Recoverable (MG/L)	--	Report	--	Quarterly	Grab	EFF-4
Thallium, Total Recoverable (UG/L)	--	Report	--	Quarterly	Grab	EFF-4
Zinc, Total Recoverable (MG/L)	--	Report	--	Quarterly	Grab	EFF-4

8. Effluent samples shall be taken at the monitoring site locations listed in this attachment, condition II.A.7 and as described below:

Sample Point	Description of Monitoring Location
FLW-4	Total flow measurement at evaporation/percolation pond #5
EFF-4	Representative location from Evaporation/percolation pond #5 in the vicinity of the IWW discharge structures.
OTH-5	Staff gauge located in Pond#5

9. The total flows from Units 4 & 5 IWW to percolation pond #5 shall be calculated. Flows measurement could be obtained by flow meters or determined by an alternative method approved by the Department. Flow meters shall be installed, if needed within 240 days of the issuance of Mod P COC. However, an extension of time may be granted by the Department for reasonable circumstances. This submittal is subject to the Post Certification Requirements in Section A.XX.

10. The Licensee is required to measure flow at the discharge pipe from Units 4 & 5 to Percolation Pond System at the locations identified as FLW-4 in the DMRs of the GWMOMR required by this license. The Licensee shall record flow rates on the DMRs. Flow rate results shall be submitted with the DMR for each scheduled month and reported in accordance with Section II C below:

B. Other Methods of Disposal or Recycling

There shall be no discharge of industrial wastewater from this facility to ground or surface waters, except as authorized by the COC including this GWMOMR or by NPDES Permit No.s FL0000159 and FL036366.

C. Monitoring and Reporting Requirements – Industrial Wastewater Components

Monitoring requirements under this attachment are effective on the first day of the second month following issuance of the Modification P COC. Until such time, the licensee shall continue to monitor and report in accordance with previously administratively continued permit FLA016960 requirements, if any. During the period of operation authorized by the Condition of Certification, the Licensee shall complete and submit to the Southwest District IWW Section 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

Southwest District IWW Section 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 license. Monitoring results for each monitoring period shall be submitted in accordance with the associated DMR due dates below.

REPORT Type on DMR	Monitoring Period	Mail or Electronically Submit by
Monthly or Toxicity	first day of month – last day of month	28th day of following month
Quarterly	January 1 - March 31 April 1 – June 30 July 1 – September 30 October 1 – December 31	April 28 July 28 October 28 January 28
Semiannual	January 1 – June 30 July 1 – December 31	July 28 January 28
Annual	January 1 – December 31	January 28

DMRs shall be submitted for each required monitoring period including months of no discharge.

The licensee may submit either paper or electronic DMR forms. If submitting paper DMR forms, the licensee shall make copies of the attached DMR forms, without altering the original format or content unless approved by the Department, and shall mail the completed DMR forms to the Department's Southwest District Office at the address specified below by the twenty-eighth (28th) of the month following the month of operation.

Florida Department of Environmental Protection
Industrial Wastewater Program
Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, Florida 33637-0926

If submitting electronic DMR forms, the licensee shall use the electronic DMR system(s) approved in writing by the Department and shall electronically submit the completed DMR forms to the Department by the twenty-eighth (28th) of the month following the month of operation. Data submitted in electronic format is equivalent to data submitted on signed and certified paper DMR forms. *[62-620.610(18)]*

Unless specified otherwise in this GWMOMR, all reports and notifications required by this GWMOMR, including twenty-four hour notifications, shall be submitted to or reported to the Southwest District Office at the address specified below:

Southwest District Office
13051 North Telecom Parkway
Temple Terrace, FL 33637-0926

Phone Number - (813) 632-7600
FAX Number - (813) 632-7662

An Electronic copy of all submittals required by this Plan other than DMRs shall also be sent to the Siting Coordination Office by email to SCO@dep.state.fl.us. If electronic copies are not available, copies can be mailed to:

Siting Coordination Office
3900 Commonwealth Boulevard
Tallahassee, FL 32399

Phone Number- (850) 245-2002
Fax Number-(850) 245-2020

[62-620.610(18)][62-601.300(1),(2), and (3)]

D. Other Limitations

1. All reports and other information shall be signed in accordance with requirements of Rule 62-620.305, F.A.C.

2. The Licensee shall provide safe access points for obtaining representative samples which are required by this attachment.

3. If there is no discharge from the facility on a day scheduled for sampling, the sample shall be collected on the day of the next discharge.

4. Any bypass of the treatment facility which is not included in the monitoring specified in Sections.I.B.3, and II.A.2&7 above, is to be monitored for flow and all other required parameters. For parameters other than flow, at least one grab sample per day shall be monitored. Daily flow shall be monitored or estimated, as appropriate, to obtain reportable data. All monitoring results shall be reported on the appropriate DMR

III. INDUSTRIAL SLUDGE/SOLIDS

A. Additional Land Application Requirements.

1. Routine aquatic weed control and regular maintenance of storage pond embankments and access areas are required. [62-620.320(6)]

2. 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. Solids and sludges from this system shall be recovered and either disposed at a Class I landfill site authorized by the Department to accept solid waste under Chapter 62-701, F.A.C.,or, in the on-site ash storage/disposal area if authorized in the plant's coal combustion product/solid waste materials management plan mentioned in VI.A. below.

3. During normal plant operation, the freeboard of the percolation basins shall not be less than three feet except after rainfall events exceeding the 25-year, 24-hour storm event.

4. The licensee shall not discharge water from the percolation basins to surface waters of the State.

IV. DESIGN, CONSTRUCTION, OPERATION AND MAINTENANCE OF WASTEWATER FACILITIES REQUIREMENTS

A. General Operation and Maintenance Requirements

1. During the period of operation authorized by this license, 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 licensee shall maintain the following records and make them available for inspection on the site of the licensed 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 license 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 at least three years from the date the application was filed;

d. A copy of the current license;

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]

B. Impoundment Operation and Maintenance

1. All impoundments 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 NPDES Permit Numbers FL0000159 and FL0036366.

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.

C. Impoundment Integrity Inspections

1. No later than 180 days following issuance of the Mod P COC, 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.

3. 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.

4. The licensee shall conduct follow-up inspections within 7 days after large or extended rain events (i.e., 25-year, 24-hour precipitation event).

5. In the event that the impoundment integrity is compromised and may result in a potential discharge to surfaces waters of the State, the licensee 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.

D. 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 Condition V.A. below, and made available to Department inspectors upon request.

2. Starting with the issuance of the Modification P COC., 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 Condition IV.A. above and made available to Department inspectors upon request.

V. OTHER SPECIFIC CONDITIONS

A. Specific Conditions Applicable

1. Drawings, plans, documents or specifications submitted by the licensee, not attached hereto, but retained on file at the Southwest District Office, are made a part hereof.

2. Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.) F.S., applicable portions of reports to be submitted as required by this GWMOMR shall be signed and sealed by the professional(s) who prepared them.

VI. SOLID WASTE MANAGEMENT

A. Coal Combustion Product and Non-Coal Combustion Products

According to the September 14, 2010 Coal Combustion Product (CCP)/Solid Waste Materials Management Plan, prepared by Golder Associates, received December 20, 2010, materials generated at Crystal River Energy Complex (CREC) Units 1, 2, 4, and 5 have been grouped into Coal Combustion Products (CCPs), Non-Coal Combustion Products (Non-CCPs), and Miscellaneous Solid Wastes, as follow:

1. CCPs: fly ash (all units), Bottom Ash – pyrite free (Units 1 and 2), Bottom Ash (Units 4 & 5), Flue Gas Desulfurization Products (Gypsum) (Units 4 and 5).

2. Non-CCPs: Pyrite Mill Reject (Units 1 and 2), Cooling Tower Solids (Units 4 and 5, Helper Cooling Tower Solids), Dredge Materials (intake/discharge canals, ditch cleanings, IWW ponds), Truck Wash Solids.

3. Miscellaneous Solid Wastes: Units 4 and 5 Coal Yard Soil and Impacted Soils (site-wide).

4. See Table 1 "Summary of Coal Combustion Product and Non-Coal Combustion Product Manual" of the CCP/Solid Waste Materials Management Plan for the Department-approved disposition of CCPs and Non-CCPs (i.e., off-site disposal, beneficial use off-site, on-site disposal, etc.).

B. Monitoring and Reporting Requirements – Solid Waste Components

1. Ground Water Monitor Well Locations. The ground water monitoring network for the ash landfill (i.e., the "SW wells") are located on the figure (Attachment I) prepared by PEF, , as follow:

Well #	Scheduling Notes	WACS Testsite #	Aquifer Monitored	Well Designation	Location
MWI-2R2	A	28398	Floridan	Intermediate	See figure
MWC-12R	A	28399	Floridan	Compliance	See figure
TWI-1R	A, B	28400	Floridan	Intermediate	See figure
TWI-3	A, B	28401	Floridan	Intermediate	See figure
TWI-4	A, B	28402	Floridan	Intermediate	See figure
TWI-5	A, B	28403	Floridan	Intermediate	See figure
TWI-2R	A, B	28404	Floridan	Piezometer	See figure
MWB-30R	B	28738	Floridan	Background	See figure

Scheduling Notes:
A = existing well/piezometer; construction details previously submitted.

B = Department form #62-701.900(30), Monitoring Well Completion Report shall be submitted to the Southwest District SW Section by the licensee within 60 days of final approval of Modification P of this license, the form referenced in Condition #I.A.7.c., above.

All monitor wells and piezometers are to be clearly labeled and easily visible at all times. Bollards or other devices shall be installed to protect the monitor wells located in areas of high traffic flow within the facility. The permittee shall keep all monitor wells locked to minimize unauthorized access. [62-701.510(3)(d)5, F.A.C.]

2. Water Quality Reporting Requirements. The results of each ground water sampling event conducted at the ash landfill of the Crystal River Energy Complex to comply with the conditions presented herein shall be included in Electronic Data Deliverable (EDD) reports that provide:

a. Required water quality monitoring reports and all analytical results shall be submitted electronically. Water quality monitoring reports shall be submitted in Adobe pdf file format. The water quality monitoring EDD reports shall be provided to the Department in an electronic format consistent with requirements for importing the data into the Department's databases as summarized on the Department's web site at:

http://www.dep.state.fl.us/waste/categories/shw/pages/ADaPT.htm.

Water quality monitoring reports shall provide the following information:

i. Cover letter;

ii. Chain of custody forms;

iii. Water levels;

iv. Appropriate sampling information on Form FD 9000-24 (DEP-SOP-001/01); and,

v. Laboratory and Field data and error logs, as applicable. [In addition to the Adobe pdf file format, this data and associated error logs shall be submitted in an ADaPT-compatible, comma separated text file format.

In addition to the above water quality reports, PEF will provide ground water contour maps and ground water flow analysis utilizing existing groundwater monitoring well data from TWI-1R, TWI-2R (piezometer water level measurements), TWI-3, TWI-4, TWI-5, MWI-2R2, and MWC-12R). Contour map information will be collected from the aforementioned groundwater wells on a semi-annual basis and will be summarized and submitted in an annual report provided to the Department within 90 days following the second semi-annual groundwater contour data collection effort. The annual summary report containing contour maps and ground water flow analysis shall be generated, signed and sealed by a Florida registered professional geologist or professional engineer with experience in hydrogeological investigations.

The report of results shall be submitted to:

Department of Environmental Protection, Southwest District Office, Solid Waste Section, 13051 North Telecom Parkway, Temple Terrace, FL 33637-0926; and,

Department of Environmental Protection, Solid Waste Section 2600 Blair Stone Road, MS 4565, Tallahassee, FL 32399-2400.

b. The Licensee shall submit to the Southwest District SW Section the results of analyses reported for each sampling event conducted at the "SW wells" identified in #I.B.2. above, by the following due dates:

i. Condition #I.A.8.b. above – results of ground water initial sampling at SW wells shall be submitted within 60 days after sampling.

ii. Condition #I.B.3. above – results of ground water routine, quarterly sampling at the site background wells and all SW wells shall be submitted by April 28, July 28, October 28, and January 28 of each year for the periods January 1-March 31, April 1-June 30, July 1-September 30, and October 1-December 31, respectively.

VII. FACILITY-WIDE GENERAL CONDITIONS

A. This license does not relieve the licensee 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 license source; nor does it allow the licensee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. The licensee shall take all reasonable steps to minimize or prevent any discharge, reuse of reclaimed water, or residuals use or disposal in violation of this license which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a licensee in an enforcement action that it would have been necessary to halt or reduce the licensee activity in order to maintain compliance with the conditions of this license. [62-620.610(5)]

B.The licensee 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 licensee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the licensee 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.

1. The following shall be included as information which must be reported within 24 hours under this condition:

a. Any unanticipated bypass which causes any reclaimed water or effluent to exceed any permit limitation or results in an unpermitted discharge,

b. Any upset which causes any reclaimed water or the effluent to exceed any limitation in the permit,

c. Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice, and

d. Any unauthorized discharge to surface or ground waters.

2. Oral reports as required by this subsection shall be provided as follows:

a. For unauthorized releases or spills of untreated or treated 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 Department by calling 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:

iii. Name, address, and telephone number of person reporting;

iv. Name, address, and telephone number of permittee or responsible person for the discharge;

v. Date and time of the discharge and status of discharge (ongoing or ceased);

vi. Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater);

vii. Estimated amount of the discharge;

viii. Location or address of the discharge;

ix. Source and cause of the discharge;

x. Whether the discharge was contained on-site, and cleanup actions taken to date;

xi. Description of area affected by the discharge, including name of water body affected, if any; and

xii. Other persons or agencies contacted.

b. Oral reports, not otherwise required to be provided pursuant to subparagraph b.1 above, shall be provided to Department's Southwest District Office within 24 hours from the time the permittee becomes aware of the circumstances.

3. 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)]

C. Bypass Provisions.

1. Bypass" means the intentional diversion of waste streams from any portion of a treatment works.

2. Bypass is prohibited, and the Department may take enforcement action against a Licensee for bypass, unless the licensee affirmatively demonstrates that:

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

b. 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

c. The Licensee submitted notices as required under facility-wide General Condition VII.C.3 . of this Attachment H.

3. If the licensee 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 licensee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as under Facility-Wide General Condition VII.B of this Attachment H. 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.

4. 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 Facility-Wide General Condition. C2. a through c of this Attachment H.

5. 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 Facility-Wide General Condition. C. 2 through 4 of this Attachment H.

D. Upset Provisions

1. A licensee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:

a. An upset occurred and that the licensee can identify the cause(s) of the upset;

b. The licensed facility was at the time being properly operated;

c. The licensee submitted notice of the upset as required in Facility-Wide General Condition B of this Attachment H; and

d. The licensee complied with any remedial measures required in Facility-Wide General condition A of this Attachment H.

2. In any enforcement proceeding, the burden of proof for establishing the occurrence of an upset rests with the licensee.

3. 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), F.A.C.]