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# Exhibit B REDACTED

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FPSC-COMMISSION CLERK

Progress Energy Florida, Inc. Coal Combustion Residual – Fly Ash Produced/marketed/disposed										
Year	Fly Ash Produced (tons)	Fly Ash Marketed (tons)	Fly Ash Disposed (tons)	Disposal Location	Disposal Cost	Sales Revenue	TOTAL NET			
2008	545,771	277,620	268,151	On-site Landfill	N/A	N/A	<b>INTERNATION</b>			
2009	460,650	319,136	141,514	On-site Landfill	N/A	N/A				
2010	493,846	334,589	159,257	On-site Landfill	800000	E45,638				

Exhibit 9 Source: Supplemental Document Request 1.7(b)

Note: For 2008 & 2009, PEF only has the Net (Expense)/Revenue. The disposal cost & revenue is not broken out separately.

С	oal Combi		idual – Bo				18
Year	Bottom Ash Produced (tons)	Bottom Ash Marketed (tons)	Bottom Ash Disposed (tons)	Disposal Location	Disposal Cost *	Sales Revenue *	TOTAL NET
2008	69,182	60,984	8,198	On-site Landfill	•	•	*
2009	58,392	12,902	45,490	On-site Landfill	*	*	*
2010	62,600	22,736	39,864	On-site Landfill	*	*	*

Exhibit 10 Source: Supplemental Document Request 1.7(b)

• For costs/revenues, these amounts are all inclusive with the Fly Ash amounts.

								2 <sup>nd</sup> l	Revised
	Coal Co	Progress mbustion ed/Market	Residual -						
Year	Gypsum Produced (tons)	Gypsum Marketed (tons)	Gypsum Stored (tons)	Storage Location	Gypsum Disposed (tons)	Disposal Location	Disposal Cost	Sales Revenue	TOTAL NET AMOUNT
2008	0	0	0	On-site Storage Pad	0	Off-site Landfill	N/A	N/A	N/A
2009	1,702	0	0	On-site Storage Pad	1,702	Off-site Landfill	N/A	N/A	N/A
2010	249,663	186,645	6,185	On-site Storage Pad	56,833	Off-site Landfill			

Exhibit 11

Source: Supplemental Document Request

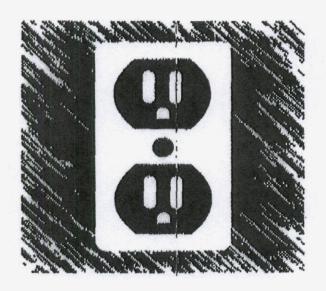
1.7(b)

Note: PEF didn't create gypsum until the end of 2009. The systems to create gypsum were not functional at the end of 2009, therefore no volume was created during years 2008 and 2009.

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# COAL COMBUSTION RESIDUAL STORAGE AND DISPOSAL PROCESSES OF THE FLORIDA ELECTRIC

NOVEMBER 2011

BY AUTHORITY OF

THE FLORIDA PUBLIC SERVICE COMMISSION
OFFICE OF AUDITING AND PERFORMANCE ANALYSIS

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### 1.3 FINDINGS AND CONCLUSIONS

### WHAT ARE AUDIT STAFF'S FINDINGS AND CONCLUSIONS?

Each of the four IOUs are proactively managing CCR storage and disposal activities. All four IOUs are taking steps to market CCRs for beneficial use with varying degrees of success, and each employ management oversight of storage and disposal operations. The company self-assessment information reflected in **Exhibits 2 and 3** appears to indicate general compliance with applicable federal, state and local regulations pertaining to CCR storage and disposal.

In addition, audit staff believes each company is assessing the potential operational changes and impacts of the proposed EPA regulations. The companies state that they continue to monitor the proceeding and will conduct a more thorough cost analysis once the EPA issues its rinal rules.

Audit staff's findings specific to each of the company's CCR management processes are as follows:



### PEF

Audit staff commends PEF for appropriately recognizing the risks associated with CCR management through its risk matrix analysis. Audit staff encourages PEF to ensure that it has developed specific actions to address all potential risk items identified in its priority ranking chart (a.k.a. risk matrix)—with emphasis on those items marked as potential catastrophic and high priority events—to prevent such problems from occurring.

Audit staff notes that PEF does not have operational procedures in place to handle an emergency event involving any of its CCR surface impoundments or landfills. To remedy this, PEF states that while it does not currently have a specific emergency management or disaster recovery plan in place to address CCR storage or disposal problems, it is working towards establishing emergency response procedures by January 1, 2012, which will cover spills, erosion, slope fallure, flooding, and dust control as part of an overall CCR storage and disposal area operational plan.

Audit staff found that in 2010 PEF marketed 67 percent of its QCR production for beneficial use. PEF's total CCR net sales revenue was percent of its QCR production for the sale of fly and bottom ash. This revenue was offset by the marketing of gypsum which yielded net revenues of in 2010. Audit staff encourages PEF to consider the use of a competitive bidding process to potentially increase marketing revenues. Although the revenues may be relatively small, cost savings associated with the reduction in storage and disposal activities should be realized.

4

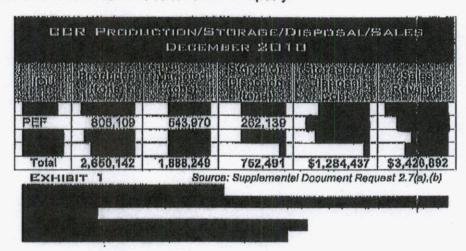
EXECUTIVE BUMMARY

# 2.0 OVERVIEW OF OPERATIONAL COMPLIANCE

### ZII DBSERVATIONS

MOW MUCH OF THE COAL COMBUSTION RESIDUALS ARE PRODUCED, MARKETED, STORED OR DISPOSED BY THE FLORIDA (OUS, AND WHAT ARE THE ASSOCIATED COSTS AND REVENUES?

Combined, the Florida utilities produced approximately three million tons of CCRs in 2010. Over 71 percent of the residuals produced were marketed for beneficial use with the remainder stored or disposed. In 2010, the combined Florida cost for storage and disposal totaled about \$1.3 million. Sales revenue for the residuals was over \$3.4 million. Exhibit 1 shows a summary of the amounts of CCRs produced, marketed, stored on disposed, and the associated costs and revenues in 2010 for each company.



WHAT IS THE STATUS OF THE UTILITY'S COMPLIANCE WITH THE CURRENT COAL COMBUSTION RESIDUAL STORAGE AND DISPOSAL REQUIREMENTS?

Exhibits 2 and 3 below reflect each IOU's self-assessment of the status of compliance with the current requirements for the disposal of CCRs in Florida. Exhibit 2 identifies the self-assessments for surface impoundments, and Exhibit 3 identifies the self-assessments for landfills.



<sup>5</sup>EPA's April 2010 RIA at <a href="http://nffilbrary.files.wordpress.com/2010/05/epa-hq-rore-2009-0640-0003.pdf">http://nffilbrary.files.wordpress.com/2010/05/epa-hq-rore-2009-0640-0003.pdf</a>, provides a summary of baseline state government requirements for both landfills and surface impoundments. See <a href="http://www.regulations.gov/#idocumentDetail;0=EPA-HQ-RCRA-2009-0640-0003;oldLink=false.">http://www.regulations.gov/#idocumentDetail;0=EPA-HQ-RCRA-2009-0640-0003;oldLink=false.</a>

7

OVERVIEW OF OPERATIONAL GOMPLIANCE

## 4.0 PROGRESS ENERGY FLORIDA, INC.

### 4周 | COAL COMBUSTION RESIDUAL MANAGEMENT

HOW MUCH AND WHAT TYPES OF COAL COMBUSTION RESIDUALS ARE PRODUCED, MARKETED, STORED OR DISPOSED BY THE UTILITY, AND WHAT ARE THE ASSOCIATED COSTS AND REVENUES?

PEF has four coal-fired electric power generation units at its Crystal River Energy Complex (Plant Crystal River) in Florida that are capable of producing a combined 2,313 MW. The amounts, by type, of CCRs produced, marketed, stored or disposed, and the associated costs and revenues for 2008 through 2010 are shown in Exhibits 6 through 8 below. In 2010, Plant Crystal River marketed 68 percent of its fly ash and 36 percent of its bottom ash, generating sales revenue of for both.

		BUAL BU	мвиятр		RIDA, INC. AL FLY / MSPOSED		
2008	545,771	277,620	268,161	On-site Landfill	N/A <sup>q</sup>	N/A <sup>n</sup>	
2009	460,650	319,136	141,514	On-site Landfill	N/A <sup>D</sup>	N/A <sup>a</sup>	(MAKE)
2010	493,846	334,589	159,267	On-site Landfill	(market)		

"Note: For 2008 and 2009, PEF states it only has the net (expense) and revenue amounts. PEF ald not provide the reasons why its disposal cost and net (expense) amounts are negative.

EXHIBIT 6

Source: Supplemental Document Request 1.7(b)

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	(COTE)	legion de la companya de la company La companya de la co		johnsky fi Justinia	P1212	7 Sills Revented	
2008	69,182	60,984	8,198	Ön-site Landfill	*	*	^
2009	68,392	12,902	45,490	On-site Landfill	W	*	4
2010	62,600	22,736	39,864	On-site Landfill	*	*	*

\*Note: For cost and revenues, these amounts are all inclusive with the fly ash amounts in Exhibit 6.

EXHIBIT 7

Source: Supplemental Document Request 1.7(b)

**LPSC** 

PROGRESS ENERGY FLORIDA, INC. COAL COMBUSTION RESIDUAL - EYPSUM PRODUCED/MARKETED/STORED/DISPOSED											
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2008	0	0	. 0	On-site Storage Pad	0	Off-site Landfill	N/A <sup>D</sup>	N/A <sup>a</sup>	N/A <sup>a</sup>		
2009	1,702	0	0	On-site Storage Pad	1,702	Off-site Landfill	N/A <sup>6</sup>	N/A <sup>B</sup>	N/A <sup>a</sup>		
2010	249,663	186,645	6,185	On-site Storage Pad	56,833	Off-site Landfill	b b	· b			

\*PEF states its processing systems to create gypsum were not completely functional until the beginning of 2010.

PEF did not provide the reasons why its disposal cost and sales revenue are negative.

EXHIBIT B

Source: Supplemental Document Request 1.7(b)

In 2010, PEF began producing gypsum, and was able to market 75 percent of production. Because this was the first year of operation sales revenue were negative. Audit staff notes that although PEF reported only the net dollar amounts for the CCRs marketed for beneficial use, the company has implemented a processing system in 2010 to record and track the disposal costs and sales revenues on a future basis.

WHAT ARE THE UTILITY'S COAL COMBUSTION RESIDUAL STORAGE AND DISPOSAL ACTIVITIES AND PROGRAMS?

PEF's Plant Crystal River personnel manages CCRs generated at the facility, including fly ash and bottom ash in the dry storage area. The ash storage area at Plant Crystal River incorporates separate management piles of fly ash, bottom ash, comingled materials, and high chloride ash. A primary ash contractor supports PEF with the transportation, spreading, compacting, pile maintenance, and final disposition of the ash. To the extent that the contractor is unable to use or sell these materials, it temporarily transfers unsalable fly ash to the existing on-site ash storage area.

Flue gas desulfurization (FGD) systems, commonly called scrubbers, have been installed at Crystal River Units 4 and 5. The FGD treatment systems, which became operational in December 2009, produce synthetic gypsum (calcium sulfate) which is transported off-site for beneficial use or disposal. Some of the FGD materials (i.e. scrubber purge) were transported to a FGD blow down pond system that became operational in February 2010. The FGD blow down pond system consists of two lined settling ponds with two pipes installed between the ponds that serve as overflow outlets for the backup pond. An emergency spillway is located on the western side of the primary pond.

After settling of suspended solids in the FGD blow down pends, the figuid is pumped to the existing primary percolation pend at the south plant, with the backup percolation pend available when needed for cleanout and maintenance of the primary pend. Pend solids are removed from the pends after they have accumulated to a design elevation and are transported off-site for beneficial use or disposal. The solids removal from the primary and backup FGD

PROBRESS ENERGY FLORIDA, INC.

2