	Comprehensive Exhibit List for Entry into Hearing Record Docket 160154-EI October 3, 2016							
EXH #	Witness	I.D. # As Filed	Exhibit Description	Issue Nos.	Entered			
STAFF	7							
1		Exhibit List	Comprehensive Exhibit List					
FLOR	IDA POWER & L	IGHT (FP	L) (DIRECT)	• • •				
2	David W. Herr	DH-1	Curriculum Vitae	2, 4A				
3	David W. Herr	DH-2	Summary Report prepared by Duff & Phelps entitled "Valuation of Certain Assets of Indiantown Cogeneration LP"	2, 4A				
4	David W. Herr	DH-3	More Detailed Form of "Valuation of Certain Assets of Indiantown Cogeneration LP" Report <b>CONFIDENTIAL</b>	2, 4A				
5	Liz Fuentes	LF-1	Proposed Journal Entries	6, 8, 9				
6	Thomas L. Hartman	TLH-1	Existing Contract Capacity and Operation & Maintenance ("O&M") Payment Obligations	1, 2, 3, 4, 5				
7	Thomas L. Hartman	TLH-2	Purchase & Sale Agreement (CONFIDENTIAL)	1, 2, 3, 4, 5				
8	Thomas L. Hartman	TLH-3	ICL Corporate Structure	1, 2, 3, 4, 5				
9	Thomas L. Hartman	TLH-4	Projected Customer Savings Calculation	1, 2, 3, 4, 5				

STAF	F (DIRECT)				
10	Barrett (22, 25) Fuentes (21) Hartman (1-20, 23, 24, 27)		FPL's Responses to Staff's First Set of Interrogatories (Nos. 1-25 and 27) [Bates Nos. 001-040]	1-8	
11	Barrett (31, 32, 35, 36) Fuentes (37, 38) Hartman (28-30, 32, 34, 37, 39)		FPL's Responses to Staff's Second Set of Interrogatories (Nos. 28-32 and 34- 39) [Bates Nos. 041-058]	1, 3, 4, 5, 8	
12	Hartman		FPL's Responses to Staff's First Request for Production of Documents No. 3 <b>CONFIDENTIAL</b> [Bates Nos. 059-060]	6, 7	
13	Fuentes (1) Hartman (1-3)		FPL's Responses to OPC's First Set of Interrogatories (Nos. 1-3) [Bates Nos. 061-064]	1, 3, 4, 8	
14	Barrett		FPL's Responses to OPC's Second Set of Interrogatories (Nos. 4-6) [Bates Nos. 065-068]	1, 5, 8	
15	Hartman		FPL's Responses to OPC's First Request for Production of Documents (No. 1) [Bates Nos. 069-070]	1, 3, 4, 8	
16	Hartman		FPL's Responses to OPC's Second Request for Production of Documents (No. 2) [Bates Nos. 071-126]	5, 8	
17	Barrett (8, 9) Fuentes (9) Hartman (1-7, 9, 12)		FPL's Responses to FIPUG's First Set of Interrogatories (Nos. 1-9 and 12) [Bates Nos. 127-175]	1, 3, 5, 8	
			HEARING EXHIBITS		
Live Exhib Numb	oit	Party	Description		Moved In/Due Date of Late Filed

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18	Staff	FPL	Partial Joint Stipulation	
		OPC		
		FIPUB		

#### **David Herr Resume**

David Herr is a managing director in the Philadelphia office and part of the Valuation Services Advisory business unit, for which he is the global leader of the Energy and Mining industry group. He is also the Duff & Phelps Philadelphia city leader. David has over twenty years with the firm, starting with the Valuation Services Group within Coopers & Lybrand LLP.

David has substantial energy experience focused on fossil and renewable power as well as electric and water utilities. David has led purchase price allocations for eight transactions in excess of \$5 billion over the last five years, including four announced power and utility transactions with purchase prices in excess of \$10 billion. David has extensive experience in advising and assisting clients with application of Accounting Standards Codification ASC 820, Fair Value Measurements and Disclosures, ASC 805, Business Combinations and ASC 350, Intangibles-Goodwill and Other. Additionally, David has experience assisting global companies with preparation of purchase accounting pursuant to IFRS 3R, Business Combinations. David has substantial experience performing both single-entity tax valuations and complex multi-tier entity rollups for energy, mining and other industrial products companies.

David has instructed numerous internal courses on topics, such as valuation theory and fair value accounting and participated in an intensive training program in decision analysis, simulation and real option valuation. Additionally, David has been a speaker at numerous industry conferences, including Platt's Global Power Markets conference and Infocast's Solar Power Finance & Investment Summit.

David received his B.S. in finance from Villanova University, where he graduated first in his class. David is a chartered financial analyst ("CFA") charterholder, a member of the CFA Institute and the Financial Analysts of Philadelphia. David also is FINRA Series 7 and 63 certified. Prior to his valuation career, David was a pitcher in the Montreal Expos organization.

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 160154-EI EXHIBIT: 2 PARTY: FLORIDA POWER & LIGHT (FPL) (DIRECT) DESCRIPTION: David W. Herr DH-1

# Valuation of Certain Assets of Indiantown Cogeneration LP

June 20, 2016

# Prepared For: Florida Power & Light Company

This document and the accompanying schedules have been prepared for the limited purpose of evaluating the procedures to be employed, including the methods for verifying the underlying assumptions to be used, in a final report to be issued at a later date with respect to the Fair Value ("FV") of the properties described herein.

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 160154-EI EXHIBIT: 3 PARTY: FLORIDA POWER & LIGHT (FPL) (DIRECT) DESCRIPTION: David W. Herr DH-2

June 20, 2016

Ms. Kimberly Ousdahl Florida Power & Light Company Vice President, Controller and Chief Accounting Officer 700 Universe Blvd. Juno Beach, FL 33408

#### Subject: Valuation of Certain Assets of Indiantown Cogeneration LP

Dear Ms. Ousdahl:

Duff & Phelps, LLC ("Duff & Phelps"), having been retained by Florida Power & Light Company ("FPL" or the "Purchaser"), has completed the services (the "Services") set out below in connection with the estimation of the Fair Value of certain tangible and intangible assets (the "Subject Assets") in connection with the contemplated acquisition ("the "Acquisition") of Indiantown Cogeneration LP ("ICL") as of an expected transaction close on January 1, 2017 (the "Valuation Date"). Collectively, this arrangement is the "Engagement."

#### Scope of Services

It is understood that the Services provided will be used to assist FPL management ("Management") with financial reporting requirements in accordance with Accounting Standards Codification ("ASC") 805, *Business Combinations* and ASC 980, *Regulated Operations* and regulatory filing requirements as part of the transaction approval process with the Florida Public Service Commission ("FPSC") and the Federal Energy Regulatory Commission ("FERC" or together with FPSC, the "Regulators"). As part of the Services, we have assisted Management with the: (1) Estimation of the Fair Value of the Business Enterprise Value ("BEV") of ICL as well as certain assets and liabilities of ICL (altogether, the "Subject Assets"). Specifically, we have estimated the Fair Value of the following Subject Assets:

- Plant & Equipment ("P&E") of the Indiantown Cogeneration Facility ("Indiantown" or the "Facility") 330 MW coal-fired cogeneration plant in Florida
- Owned Real Estate ("Land")
- Power Purchase Agreement (the "PPA")
- Railcar Lease Agreement (the "RLA")

The PPA between Indiantown and FPL was entered into in 1990, and the avoided cost calculations used to establish the PPA pricing were based on an Integrated Gasification Combined Cycle ("IGCC") coal fired power plant that FPL had projected for resource planning purposes at the time, but was never built. The PPA provides FPL the right (or option) to call power from the Facility for 30 years at a price based on terms provided for in the contract, even if the cost to ICL of generating the power is greater than the contract price. In exchange for that option, FPL is required to make above market fixed capacity, bonus (for availability) and O&M payments to ICL that were established based upon the IGCC "avoided unit" costs. It is important to note that the PPA is unit contingent, and that ICL must generate the power from the Facility, even if cheaper power is available from other sources.

During the Engagement, we also worked with Management to confirm that there are no additional assets (including contingent assets) or liabilities that meet the separation criteria in ASC 805. In addition to the Subject Assets, we assessed certain contracts, including but not limited to the Coal Transportation Agreement, the Coal Supply Agreement, the Steam Sales Agreement and the O&M Agreement, but all other contracts of ICL were deemed to be at market pricing or approaching expiration (and therefore have negligible Fair Value as of the Valuation Date). Our

analysis considered Management's determination of the Fair Value or other amounts of any assets and liabilities excluded from the identified Subject Assets ("Excluded Assets and Liabilities"), which included the following:

- Current Assets
- Current Liabilities
- Debt
- Asset Retirement Obligations (the "ARO")

In the course of our valuation analysis, we used and relied upon financial and other information, including prospective financial information obtained from Management (which includes the Fair Value of the Excluded Assets and Liabilities) and from various public, financial, and industry sources. Our conclusions are dependent on such information being complete and accurate in all material respects. We will not accept responsibility for the accuracy and completeness of such provided information.

#### Procedures

The procedures that we followed in estimating the Fair Value of the Subject Assets included, but were not limited to, the following:

- Analysis of general market data, including economic, governmental, and environmental forces;
- Analysis of conditions in, and the economic outlook for the electric utility industry and specifically the Florida Reliability Coordinating Council ("FRCC") electricity market;
- Discussions concerning the history, current state, and future operations of ICL with Management;
- Discussions with Management to obtain an explanation and clarification of data provided;
- Analysis of financial and operating projections including revenues, operating margins (e.g., earnings before interest and taxes), working capital investments, and capital expenditures based on Indiantown's historical operating results, industry results and expectation, and Management representations;
- Development of discounted cash flow ("DCF") models for the Subject Assets, a form of the Income Approach, based on information received from and discussions with Management regarding the projected financial results of Indiantown;
- Estimation of an appropriate weighted average cost of capital ("WACC") for use in the Income Approach based on analysis of financial data for publicly traded companies engaged in the same or similar business activities as the Subject Assets (the "Guideline Companies");
- Discussed the physical nature of the land and the data provided with local personnel, as necessary;
- Researched public records and other readily available sources of data to confirm the physical characteristics of the subject property;
- Interviewed local market participants and real estate professionals;
- Researched and analyzed market data;
- Estimation of the Fair Values of the Subject Assets, primarily through the application of the Income Approach and Market Approach; and
- Analysis of other facts and data considered pertinent to estimating the Fair Value of the Subject Assets as of the Valuation Date.

#### Definition of Value

ASC 820, *Fair Value Measurements and Disclosures* defines Fair Value as "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date" ("Fair Value").

ASC 820 states that a Fair Value measurement assumes the highest and best use of the asset by market participants, considering the use of the asset that is physically possible, legally permissible and financially feasible at the measurement date. In broad terms, highest and best use refers to the use of an asset by market participants that would maximize the value of the asset or the group of assets within which the asset would be used. Moreover, the highest and best use is based on the use of the asset by market participants, even if the intended use of the asset by the reporting entity is different.

The highest and best use of the asset by market participants establishes the valuation premise used to measure the Fair Value of the asset: 1) in-use, if the asset would provide maximum value to market participants principally through its use in combination with other assets as a group, installed or otherwise configured for use; or, 2) in-exchange, if the asset would provide maximum value to market participants principally on a standalone basis.

In ascribing Fair Value to the Subject Assets, we assumed that a Market Participant purchaser would continue to operate the Facility through the remaining term of the PPA, in order to receive the payments to which the purchaser would be entitled under the favorable terms of the unit-contingent PPA. This is not to suggest that FPL would or should continue operating the Facility, but rather reflects the perspective of a Market Participant around which the Fair Value determination is structured. It is also important to note that, while the Subject Assets will be accounted for pursuant to ASC 980 after the acquisition, the Fair Value should exclude any impact of regulation, as only FPL could demonstrate that the Acquisition of the Subject Assets provides benefits to customers by terminating the PPA and continuing to operate Indiantown only for so long as it remains beneficial from an economic, contractual and/or reliability perspective. ASC 820 and related guidance explicitly indicates that unique benefits, or "buyer specific synergies" should not be included in the Fair Value of assets, and the ability to cancel the PPA, avoid more than 8 years of operating the Facility at a loss and seek rate recovery of the cancellation is clearly unique to FPL.

#### Valuation Approaches

We considered the following approaches when estimating the Fair Value of the Subject Assets: the Income Approach, the Market Approach, and the Cost Approach.

Income Approach: The Income Approach is a valuation technique that provides an estimation of the Fair Value of an asset based on market participant expectations about the cash flows that an asset would generate over its remaining useful life. The Income Approach begins with an estimation of the annual cash flows a market participant would expect the subject asset (or business) to generate over a discrete projection period. The estimated cash flows for each of the years in the discrete projection period are then converted to their present value equivalent using a rate of return appropriate for the risk of achieving the projected cash flows. The present value of the estimated cash flows are then added to the present value equivalent of the residual value of the asset (if any) or the business at the end of the discrete projection period to arrive at an estimate of Fair Value. For uncertain assets and liabilities, contingent consideration and contingencies, it may be necessary to consider the expected cash flows taking into consideration probabilities of future events and/or future cash flow scenarios.

<u>Market Approach</u>: The Market Approach is a valuation technique that provides an estimation of Fair Value of a business, business ownership interest, security, or asset by using one or more methods that compare and correlate the subject to similar businesses, business ownership interests, securities, or assets that have been sold. Considerations such as time and condition of sale and terms of agreements are analyzed and adjustments are made, where appropriate, to arrive at an estimation of Fair Value.

<u>Cost Approach</u>: The Cost Approach is a valuation technique that uses the concept of replacement cost as an indicator of Fair Value. The premise of the Cost Approach is that, if it were possible to replace the asset, from the

perspective of a market participant (seller), the price that would be received for the asset is estimated based on the cost to a market participant (buyer) to acquire or construct a substitute asset of comparable utility, adjusted for obsolescence. Obsolescence encompasses physical deterioration, functional (technological) obsolescence, and economic (external) obsolescence.

In developing the conclusions of Fair Value for the Subject Assets, we primarily relied on the Income Approach in reaching our valuation conclusion. The Income Approach incorporates the unique operating characteristics of the Subject Assets that cannot specifically be captured in the Market and Cost Approaches. As mentioned above, the DCF measures future cash flows and converts these cash flows to their present value using an appropriate cost of capital. The Income Approach should reflect Market Participant assumptions and assumes continued existence of the PPA, but it does not reflect of the potential regulatory recovery received by FPL in connection with the Acquisition, as this is a benefit specific to FPL.

The Cost Approach was considered in our analysis but ultimately not utilized as a prudent indicator of value. The primary reason for exclusion was that the power and capacity market forecast for FRCC as of the Valuation Date does not fully support the replacement cost of newly built merchant plants, nor is it expected to for the next 5 to 10 years. Accordingly it is likely that significant economic obsolescence will exist related to power plants within FRCC, including Indiantown (which is typically quantified through an Income Approach).

The Market Approach was also considered in our Fair Value conclusion for the P&E, but given the specific facts regarding the PPA as well as the economics of Indiantown (absent the PPA), no precedent transactions exist that would provide comparable metrics that would allow us to establish a Fair Value for the P&E. The Market Approach was used as the primary method in estimating the Fair Value of the Land.

In establishing the appropriate pool of market participants to consider related to ICL, it is important to note that the Facility is owned through a tax-efficient pass-through structure whereby ICL's current owner does not pay corporate level taxes. Instead, ICL's taxable income (and other tax attributes) flow directly to the current owner's investors. This single tax structure is beneficial relative to c-corporation taxability and investor level taxes on dividends and capital gains.

Because a transaction could be structured providing this benefit to market participants (and their investors), it is highly likely that private equity ("PE") buyers would pay a premium for the equity of ICL versus its potential value to public companies who would likely incur c-corporation taxes due to their structure. For transactions involving businesses held in similar structures to ICL, it is common for PE funds to reflect a 0% tax rate in their income approach models, but also adjust increase the required rate of return to account for the higher investor level tax obligations (who receive interest and depreciation deductions but are also taxed on ICL's pre-tax income at an ordinary income tax rate).

#### Summary Conclusion

Based on our analysis detailed in the accompanying report, we estimate the Fair Value of the Subject Assets as of the Valuation Date can be reasonably stated as follows (please see Exhibit A for further information):

Subject Asset	Fair Value (\$000s)
P&E	\$0
Land	\$8,500
PPA	\$450,000
RLA	\$(9,000)

In general terms, these Fair Value estimates reflect the following perspectives on the Subject Assets:

- The Land valuation assumes the subject property as vacant and available for alternative industrial use. As
  the cost to remove the Facility is included within the ARO estimated by FPL Management, it is reasonable
  and appropriate to estimate the Fair Value based on comparable sales of proximate vacant, available
  industrial property.
- The P&E valuation reflects the value of Indiantown as a merchant asset, without the benefit of the existing PPA. Specifically, because the annual net energy margin that Indiantown could generate from selling power at expected merchant power prices is less than the annual capital expenditures and fixed costs to maintain and operate the Facility, a merchant owner of the Facility would likely retire Indiantown to avoid future expected operating losses. In general, market participants typically assume that the salvage value (for scrap metal, etc.) approximately offsets dismantlement costs, resulting in a de minimis Fair Value conclusion for the P&E.
- It is important to also note that the reliability value of Indiantown to FPL is a buyer specific consideration
  which should not be included in the Fair Value of an asset, as market participants bidder for Indiantown
  (which would largely consist of power-focused and diversified private equity firms) could not know whether
  and to what extent FPL would be willing to make reliability payments.
- The Fair Value of the PPA reflects the expected stream of payments that the PPA would provide for its remaining term, less the costs of owning, operating and maintaining Indiantown in the manner required to fulfill its PPA obligations in order to qualify for those payments. This Fair Value is impacted by the unit-contingent requirement to deliver power from Indiantown despite the Facility's unfavorable economic profile.
- The Fair Value of the PPA also does not represent the avoided cost or value of the PPA termination to FPL, as this is a buyer specific value. ASC 805-10-55-20 through 805-10-55-23 provides for recognition by FPL of the loss computed as the difference between the Fair Value of the PPA to a Market Participant and its basis in the PPA (which is \$0). The fact that the avoided costs (for FPL and its customers) exceed the Fair Value is a buyer specific synergy which should be excluded from the Fair Value.
- The Fair Value of the RLA was determined to be a liability with a Fair Value of \$9 million, as FPL will be required to make lease payments for approximately 188 railcars more than necessary to transport the coal needed for the expected Facility operations.

Based on the foregoing, it is reasonable to conclude that approximately \$450 million (or virtually all) of the proposed purchase price for ICL relates to the buyout of the PPA, that the Fair Value of the Facility is \$0 and the Land is \$8.5 million, that the RLA represents a \$9 million liability and that FPL's ability to retire the Facility prior to the PPA expiration and avoid the obligation to run the Facility despite unfavorable economics represents a buyer specific synergy (and customer benefit) which would be not be included in the Fair Value of the Subject Assets.

#### **Limiting Conditions**

These conclusions are subject to the Assumptions & Limiting Conditions attached hereto, those set forth in our statement of work ("SOW") dated May 13, 2016 as well as the facts and circumstances as of the Valuation Date.

Any advice given or report issued by us is provided solely for your use and benefit and only in connection with the services that are provided hereunder. Except as required by law, this report shall not be provided to any third party, except that it may be provided to FPL's legal advisors and the Regulators and parties to any proceeding with the Regulators regarding the ICL acquisition. Except as it relates to proceedings with the Regulators: (i) you shall not refer to us either directly by name or indirectly as an independent valuation service provider (or by any other indirect reference or description), or to the services, whether in any public filing or other document, without our prior written consent, which we may at our discretion grant, withhold, or grant subject to conditions, and (ii) in addition to the

foregoing prohibitions and requirements with respect to all third parties, submission of our report or any portion thereof to, or responding to any comment letter issued by, the Securities and Exchange Commission or its staff, or any written or verbal references to us, this report or to the services in such a response is subject to you providing us with prior notice, and allowing us to provide input as to the content of such response. In no event, regardless of whether consent or pre-approval has been provided, shall we assume any responsibility to any third party to which any advice or report is disclosed or otherwise made available.

While our work has involved an analysis of financial information and accounting records, our Engagement does not include an audit in accordance with generally accepted auditing standards of ICL's existing business records. Accordingly, we assume no responsibility and make no representations with respect to the accuracy or completeness of any information provided by and on behalf of you and Management.

Budgets, projections, and forecasts relate to future events and are based on assumptions that may not remain valid for the whole of the relevant period. Consequently, this information cannot be relied upon to the same extent as that derived from audited accounts for completed accounting periods. We express no opinion as to how closely the actual results of ICL will correspond to those projected or forecast by Management.

In accordance with our agreement, this report is limited to estimating the Fair Value of certain tangible and intangible assets of ICL. Additional issues may exist that could affect the tax treatment of FPL or ICL. This report does not consider or provide a conclusion with respect to any of those issues. With respect to any significant local jurisdiction tax issue outside the scope of this report, this report was not written, and cannot be used, by anyone for the purpose of avoiding local jurisdiction tax penalties.

The valuation of companies and businesses is not a precise science and the conclusions arrived at in many cases will of necessity be subjective and dependent on the exercise of individual judgment. There is therefore no indisputable single value and we normally express our opinion on the value as falling within a likely range. However, if purpose requires the expression of specific values, we will adopt values that we find to be both reasonable and defensible based on the information available.

If you have any questions or need any additional information, please do not hesitate to contact David Herr, Managing Director, at (215) 430-6039 or Lee Tourscher, Director, at (215) 430-6051.

Yours sincerely,

Duff + Phelps Ldc

Duff & Phelps, LLC David Herr Managing Director

#### **CERTIFICATION**

We certify that, to the best of our knowledge and belief:

- The statements of fact contained in this report are true and correct.
- We have no present or prospective interest in the business or property that is the subject of this report, and we have no personal interest or bias with respect to the parties involved.
- Our compensation is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.
- The Engagement was not based on a requested minimum valuation, a specific valuation, or the approval of a loan.
- The analyses and conclusions are limited only by the reported assumptions and limiting conditions, and represents our unbiased professional analyses and conclusions.
- This analysis and report was prepared under the direction of David Herr, CFA, with significant professional assistance provided by Lee Tourscher, CFA, Payal Parikh and Jesse Worek.

By: David Herr, CFA Managing Director Docket No. 16\_\_\_\_\_-EI Valuation of Certain Assets of Indiantown Cogeneration LP Confidential Exhibit DH-3, Pages 1 - 80

Exhibit DH-3 is confidential in its entirety.

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 160154-EI EXHIBIT: 4 PARTY: FLORIDA POWER & LIGHT (FPL) (DIRECT) DESCRIPTION: David W. Herr DH-3

### Florida Power and Light Company Indiantown Transaction Proposed Journal Entries

Line No	Description	FERC Account		Amo (\$ Mil	ount lions	)
1	Electric Plant Purchased or Sold <sup>(1)</sup>	102	\$	18.4		
2	Regulatory Asset - Loss on Investment <sup>(2)</sup>	182	Ψ	451.5		
3	Deferred Tax Asset - Step up basis	190		174.2		
4	Asset Retirement Obligation <sup>(3)</sup>	230				9.9
5	Bonds	221				217.8
6	Cash	131				233.2
7	Deferred Tax Liability - Loss on Investment	283				174.2
8	Other Deferred Credits - Rail Car Lease Liability <sup>(4)</sup>	253				9.0
9						
10	Purpose: To record Indiantown equity purchase. <sup>(5)</sup>					
11						
12			•			
13 14	Asset Retirement Cost <sup>(3)</sup>	101	\$	9.9		
14	Land	101		8.5	•	40.4
16	Electric Plant Purchased or Sold	102			\$	18.4
17	Purpose: To clear account 102, Electric Plant Purchased, and record the acquired	d assats on		s books a	nd ro	cords
18		1 233613 011	TLO	5 DOONS A	nu ie	corus.
19						
20						
21						
22						
23						
24						
25	Notes:					
26	(1) The Indiantown Facility has a fair value of zero. In accordance with GAAP and book basis for the facility.	d FERC pred	ceder	nt, FPL w	ill rec	ord no
27	(2) Represents the amount of the ICL transaction purchase price plus the fair value	ue of acquire	d as	sets and	liabilit	ies.
28	(3) Represents the present value of the estimated amount of dismantlement costs expected to be retired no earlier than December 31, 2018.	s for the India	antov	vn facility	, whic	ch is
29	(4) Represents the amount of rail car contractual obligation which exceeds the fai forecasted for the future operations of the ICL Facility.	r value of the	e opt	imal amo	unt	
30	(5) Does not include the purchase of working capital, which will take place at clos	ina				
00						

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 160154-EI EXHIBIT: 5 PARTY: FLORIDA POWER & LIGHT (FPL) (DIRECT) DESCRIPTION: Liz Fuentes LF-1

### Florida Power and Light Company Indiantown Transaction Proposed Journal Entries

Line No	Description	FERC Account		Amoun (\$ Million	
1 2	Regulatory Asset - Loss on Investment	182	\$	451.5	
3	Remaining Months of PPA Contract as of January 1, 2017			108	
4	Monthly Amortization to be Collected through FPL's Capacity Clause <sup>(1)</sup>		\$	4.2	
5			Ŧ		
6	Annual Amortization to be Collected through FPL's Capacity Clause <sup>(1)</sup>		\$	50.2	
7					
8					
9	Annual Amortization				
10					
11	Other Expenses	557	\$	50.2	
12	Regulatory Asset - Loss on Investment	182		\$	50.2
13					
14	Purpose: To record annual amortization of the regulatory asset on FPL's bo	oks and reco	rds.		
15					
16	Deferred Tax Liability - Loss on Investment	283		19.4	
17	Current Income Tax Expense	409.1		19.4	
18	Provision for Deferred Income Taxes—Credit	411.1			19.4
19	Taxes Accrued	236			19.4
20	Durnance. To reached current and deformed income taxes accorded with the	omortization	of the	requirerent	
21 22	Purpose: To record current and deferred income taxes associated with the	amortization	oi the	regulatory a	isset.
23	Provisions for Deferred Income Taxes	410.1		6.5	
24	Taxes Accrued	236		6.5	
25	Deferred Tax Asset - Step up basis	190			6.5
26	Current Income Tax Expense	409.1			6.5
27					
28	Purpose: To record current and deferred income taxes associated with the	tax deprecia	tion of	the step up	
29	basis on the acquired plant (20 year MACRS). <sup>(2)</sup>				
30					
31					
32	Notes:				
33	(1) Retail jurisdictional amount to be recovered through the capacity clause	will be based	on th	e retail	
34	separation factor approved by the FPSC in each year of amortization.	The estimat			
35 36	(2) For illustrative purposes only, the first year of activity has been provided. will vary based on the tax depreciation rate utilized for each period.	The actual	annua	activity	
30 37	win vary based on the tax depresiation rate dunized for each period.				
51					

Year	Capacity Payment				O&M (escalated at 2.0%)		Total (\$/kW-Mo)	
2016		12,500	\$ 2,152	\$	9,024	\$	23.68	
2017	\$	12,220	\$ 2,142	\$	9,205	\$	23.57	
2018	\$	11,940	\$ 2,133	\$	9,389	\$	23.46	
2019	\$	11,670	\$ 2,125	\$	9,577	\$	23.37	
2020	\$	11,390	\$ 2,116	\$	9,768	\$	23.27	
2021	\$	11,110	\$ 2,107	\$	9,963	\$	23.18	
2022	\$	10,820	\$ 2,098	\$	10,163	\$	23.08	
2023	\$	10,560	\$ 2,093	\$	10,366	\$	23.02	
2024	\$	10,280	\$ 2,085	\$	10,573	\$	22.94	
2025	\$	10,000	\$ 2,078	\$	10,785	\$	22.86	

Fixed Payment Obligations under the Existing Contract

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 160154-EI EXHIBIT: 6 PARTY: FLORIDA POWER & LIGHT (FPL) (DIRECT) DESCRIPTION: Thomas L. Hartman TLH-1

Docket No. 16\_\_\_\_\_-EI Purchase and Sale Agreement Confidential Exhibit TLH-2, Pages 1 - 174

Exhibit TLH-2 is confidential in its entirety.

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 160154-EI EXHIBIT: 7 PARTY: FLORIDA POWER & LIGHT (FPL) (DIRECT) DESCRIPTION: Thomas L. Hartman TLH-2

### ICL Corporate Structure

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 160154-EI EXHIBIT: 8 PARTY: FLORIDA POWER & LIGHT (FPL) (DIRECT) DESCRIPTION: Thomas L. Hartman TLH-3



## Indiantown Cogeneration \$451 MM Enterprise Value Results of FPL's Economic Evaluation<sup>(1)</sup>

	(dollars in millions)	 2017	2018	2019	2020	2021	2022	2023	2024	2025	Nominal Total	Pres Valu	
A	Discount Factor <sup>(2)</sup>	0.96	0.89	0.82	0.76	0.70	0.65	0.60	0.56	0.51			
В	Amortization <sup>(3)</sup>	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 451	\$	324
С	Operating Expenses <sup>(4)</sup>	11	13	2	2	1	1	1	1	1	34		29
D	Asset Retirement Obligation <sup>(5)</sup>	3	3	3	3	0	-	-	-	-	11		9
Е	Interest Expense <sup>(6)</sup>	4	4	3	1	3	2	2	1	0	20		16
F	Return on Equity <sup>(7)</sup>	29	27	23	20	9	7	5	3	1	125		103
G	Income Tax	19	17	15	12	6	4	3	2	1	78		64
н	Cost of Transaction	116	113	97	89	69	65	61	57	53	720		546
T	FPL System Impact <sup>(8)</sup>	(22)	(24)	(18)	(10)	(8)	(7)	(0)	(4)	(4)	(98)		(80)
J	Capacity Payment and Bonus	(57)	(56)	(55)	(53)	(52)	(51)	(50)	(49)	(48)	(471)		(342)
K	O&M Payment	(36)	(37)	(38)	(39)	(39)	(40)	(41)	(42)	(43)	(356)		(253)
L	Total Avoided Costs of PPA	 (93)	(93)	(93)	(92)	(92)	(91)	(91)	(91)	(91)	(827)		(594)
М	Net Customer Costs/(Savings)	\$ -	\$ (4)	\$ (14)	\$ (14)	\$ (31)	\$ (33)	\$ (30)	\$ (38)	\$ (41)	\$ (205)	\$	(129)

1) \$451 MM acquisition value includes \$233 MM equity price and \$218 MM of acquired debt

2) Discount Factor is based on weighted average cost of capital of 8.15% discounted to January 1, 2017

3) Reflects amortization of regulatory asset

4) Operating Expenses include operations and maintenance and expensed portion of rail lease. Estimates of Net Working Capital are not reflected in the model.

5) Reflects amortization of ARO Asset and accretion of ARO Liability

6) Interest expense assumes 2.90% market rate on acquired debt and 5.21% on incremental FPL debt, and 40.4% debt to capital ratio

7) Assumes after-tax return on equity of 11.5% and 59.6% equity to capital ratio

8) Includes incremental system fuel costs, start-up costs, variable O&M, environmental compliance costs, and short-term purchases

9) Present value is calculated as the sum the annual values multiplied by the respective discount factor

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 160154-EI EXHIBIT: 9 PARTY: FLORIDA POWER & LIGHT (FPL) (DIRECT) DESCRIPTION: Thomas L. Hartman TLH-4

# 10

# FPL's Responses to Staff's First Set of Interrogatories (Nos. 1-25 and 27)

# See Staff Exhibit CD for Excel files

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 160154-EI EXHIBIT: 10 PARTY: STAFF (DIRECT) DESCRIPTION: Barrett (22, 25)Fuentes (21) Hartman (1-20, 23, 24, 27)

160154 Hearing Exhibits 001

Florida Power & Light Company Docket No. 160154-EI Staff's First Set of Interrogatories Interrogatory No. 1 Page 1 of 1

**QUESTION**:

Please refer to the Direct Testimony of Florida Power & Light Witness Thomas L. Hartman. Please provide FPL's commodity, transportation, and delivered fuel price forecasts (exclusive of hedging) for both coal and natural gas used in support of FPL's Indiantown Cogeneration L.P. ICL Transaction.

#### RESPONSE:

Please see Attachment No. 1.

Florida Power & Light Company Docket No. 160154-EI Staff's First Set of Interrogatories Interrogatory No. 2 Page 1 of 1

**QUESTION**:

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Please provide the most recent five years of monthly commodity, transportation, and delivered prices for both coal and natural gas in terms (nominal or real) consistent with Interrogatory No. 1.

### **<u>RESPONSE</u>**:

Please see Attachment Nos. 1 through 55.

Florida Power & Light Company Docket No. 160154-EI Staff's First Set of Interrogatories Interrogatory No. 3 Page 1 of 1

#### **QUESTION**:

Please identify the sources and dates of FPL's fuel price forecast (short term & long term) used in support of its ICL Transaction.

#### RESPONSE:

FPL's Short Term fuel price forecast source for oil and gas was based on the January 4, 2016 forward curve.

Consistent with FPL's 2016 Ten Year Site Plan, FPL's Long Term fuel price forecast sources, as used in support of the ICL Transaction, are as follows:

#### Oil and Gas:

- 2016-2018 January 4, 2016 forward curve.
- 2019-2020 50/50 blend of the January 4, 2016 forward curve and the most current projections at the time from the PIRA Energy Group (PIRA).
- 2021-2035 PIRA's annual projections.
- 2036-2100 The real rate of escalation from the Energy Information Administration.

Coal (Short and Long Term):

- JD Energy's Coal forecast for Central Appalachian, Illinois Basin, Powder River Basin and South American coal provided March 2015.
- The coal price forecast for St. Johns River Power Plant (SJRPP) and Plant Scherer assumes the continuation of the existing mine-mouth and transportation contracts until expiration, along with the purchase of spot coal, to meet generation requirements.

FPL's Short and Long Term fuel price forecast date: January 5, 2016.

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#### **QUESTION**:

Please identify the sources and dates of FPL's next fuel price forecasts (short term and long term).

#### **RESPONSE**:

FPL's next Short and Long Term fuel price forecast is currently projected to be issued on August 2, 2016.

If issued on August 2, 2016, the information for the Short Term fuel price forecast will be sourced from the August 1, 2016 forward curve.

Per FPL's 2016 Ten Year Site Plan, FPL's Long Term fuel price forecast sources are as follows, if issued on August 2, 2016:

#### Oil and Gas:

- 2016-2018 August 1, 2016 forward curve.
- 2019-2020 50/50 blend of the August 1, 2016 forward curve and the most current projections at the time from the PIRA Energy Group (PIRA).
- 2021-2035 PIRA's annual projections.
- 2036-2100 The real rate of escalation from the Energy Information Administration.

Coal (Short and Long Term):

- JD Energy's Coal forecast for Central Appalachian, Illinois Basin, Powder River Basin, and South American coal provided March 2016.
- The coal price forecast for St. Johns River Power Plant (SJRPP) and Plant Scherer assumes the continuation of the existing mine-mouth and transportation contracts until expiration, along with the purchase of spot coal, to meet generation requirements.

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#### **QUESTION**:

What is the name and date of each previous FPSC filing containing FPL's fuel price forecasts used in developing the projected customer impacts contained Witness Hartman's testimony, page 10?

#### **RESPONSE**:

The FPL fuel price forecast used in developing the projected customer impacts, contained in page 10 of Witness Hartman's testimony, was used in the development of FPL's 2016 Ten Year Power Plant Site Plan.

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#### **QUESTION**:

Please refer to the Direct Testimony of Florida Power & Light (FPL) Witness Thomas L. Hartman, page 4. Please elaborate on the compensation arrangement of "... the unit cost for coal based upon a published index." What "published index" is being referred to here? Please provide a sample compensation calculation.

#### **RESPONSE:**

The ICL Power Purchase Agreement ("PPA") specifies that the Unit Energy Cost ("UEC") will be \$23.20/MWh effective January 1, 1990, then indexed as provided for in Appendix I.

Appendix I was revised with Amendment 2I to the contract in 1992. Section I.1 specifies that the UEC will include anticipated costs for F.O.B. mine coal and the remaining cost components (coal transportation, lime supply and ash disposal). Section I.2 refers back to Section 8.4 of the PPA and adjusts for ICL's actual costs for coal and the remaining cost components annually. This actual cost is then used as the estimated UEC for the subsequent year, which, in turn, is adjusted quarterly based upon the indices.

The F.O.B. coal prices are adjusted based upon FPSC Form 423-2 for Appalachian Coal costs delivered to Florida utilities. Other costs are adjusted based upon weighed percentages of the Rail Cost Adjustment Factor prescribed by the Interstate Commerce Commission ("ICC"), Producer Price Index – all commodities, Gross National Product – Implicit Price Deflator, Personal Consumption – Implicit Price Deflator, and Producer Price Index – Industrial Commodities Less Fuel and Power Expenditures.

The ICL Cost Calculation for the 1<sup>st</sup> quarter of 2016 (confidential) is a sample calculation (see confidential Attachment No. 1).

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#### **QUESTION**:

For the following questions please refer to FPL witness Hartman's testimony, page 10, lines 18 - 20.

- a. Please explain how the Base Case forecast of emissions costs was developed.
- b. Please specify all the assumptions FPL used in developing its Base Case forecast of emissions costs.
- c. Please identify all the data sources FPL used in developing its Base Case forecast of emissions costs.
- d. Please explain how the impacts of the Environmental Protection Agency's "Clean Power Plan" and Section 111(b) and (d) of the federal Clean Air Act were taken into consideration in FPL's development of its Base Case forecast of CO2 emissions costs.
- e. Please identify all the consultants FPL relied upon in developing its Base Case forecast of emissions costs, and explain the role each consultant played in developing the forecast.
- f. Please identify each of the filings (i.e. document number, description, date, docket number) FPL has submitted to the Commission which contain the identical, or similar (please specify), forecast of CO2 emissions costs

#### RESPONSE:

a. The annual SO2, NOx, and CO2 compliance costs forecasts used by FPL are based on the costs projections that were developed, and supplied, by the consultant ICF International. ICF's model and practices have been, and continue to be, used by the EPA in the development of the air emission regulations such as the Clean Power Plan. FPL believes that ICF is the most respected source in the industry for this type of forecast.

In 2016, FPL updated its CO2 forecast using ICF's Probability Weighted CO2 Emission Price Forecast, which was issued in the first quarter of 2016. This forecast reflects ICF's most current understanding of the implications of the Clean Power Plant Act at the time it was issued. At that time, ICF also issued new forecasts for SO2 and NOx emission prices.

ICF's Probability Weighted CO2 Emission Price Forecast became FPL's ENV II (medium) CO2 Emission Price Forecast. To create the ENV I (low) CO2 Emission Price Forecast, FPL reduced the CO2 prices in the ENV II (Mid) forecast by 20%. To create the ENV III (high) CO2 Emission Price Forecast, FPL increased the CO2 prices in the ENV II (Mid) forecast by 20%. FPL believes that this range of +/- 20% from the mid band forecast results in reasonable low and high CO2 emission price ranges.

- b. See response to subpart (a) above.
- c. See response to subpart (a) above.
- d. See response to subpart (a) above.
- e. The only consultant that FPL relied upon in developing its emission forecast was ICF International, whose role is described in the response to subpart (a) above.

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f. The emissions price forecast used in this filing, developed in the first quarter of 2016, was used in the 2016 Ten Year Power Plant Site Plan that was filed with the FPSC in April 2016. It has not been used in any other filings.

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Florida Power & Light Company Docket No. 160154-EI Staff's First Set of Interrogatories Interrogatory No. 8 Page 1 of 1

#### **QUESTION**:

Please refer to witness Hartman's testimony, page 11, lines 1 - 2. For each environmental sensitivities (low, base, and high) included in the table of CPVRR Net Cost/(Net Benefit) of Transaction, please provide the following:

- a. Types of the air emissions of which the associated compliance costs were embedded in the table.
- b. The forecast of the annual total emission costs embedded in the table for the period 2016 through 2025.
- c. The forecast (2016 through 2025) of the annual costs embedded in the table for each type of the emission, respectively, if more than one type of air emission (e.g.: CO2, SOx, NOx, Hg, etc.).
- d. A detailed description of the methodology used to arrive at the estimated forecasted emission costs discussed in questions b. and c. above.
- e. When each of the forecasts discussed in questions b. and c. above was completed.

#### **RESPONSE:**

- a. The types of emissions that comprise the emissions costs displayed in the table of witness Hartman's testimony, page 11, line 1 2 are SO<sub>2</sub>, NO<sub>X</sub>, and CO<sub>2</sub>.
- b. See response to subpart (c).
- c. Attached table displays the annual emissions costs embedded in the table (SO<sub>X</sub>, NO<sub>X</sub>, and  $CO_2$ ).
- d. The annual emissions costs are derived using FPL's production model, UPLAN. The emission rates and prices for  $NO_X$ ,  $SO_X$ , and  $CO_2$ , which are inputs in the model, are applied to the units' energy output to calculate the emissions projections. The results are then rolled up, unit by unit, to the system level which is what is displayed in the table In Attachment No. 1 to this response.
- e. The analysis discussed above was completed in March 2016.

#### Florida Power & Light Company Docket No. 160154-EI Staff's First Set of Interrogatories Interrogatory No. 8 Attachment No. 1 Page 1 of 1

#### Low Fuel - Low CO2

	SOX	NOX	CO <sub>2</sub>	Total
Year	(MS)	(MS)	(MS)	(MS)
2016	0.00	0.00	0.00	0.00
2017	0.00	-0.04	0.00	-0.04
2018	0.00	-0.03	0.00	-0.03
2019	0.00	0.01	0.00	0.01
2020	0.00	-0.01	0.00	-0.01
2021	0.00	0.01	0.00	0.01
2022	0.00	0.00	-0.21	-0.21
2023	0.00	0.01	-0.62	-0.62
2024	0.00	0.02	-0.58	-0.56
2025	0.00	0.00	-0.91	-0.90
NPV	0.00	-0.03	-1.16	-1.19

#### Base Fuel - Low CO2

	SOX	NO <sub>X</sub>	CO <sub>2</sub>	Total
Year	(MS)	(M\$)	(M\$)	(MS)
2016	0.00	0.00	0.00	0.00
2017	0.00	-0.01	0.00	-0.01
2018	0.00	0.02	0.01	0.02
2019	0.00	0.02	0.00	0.02
2020	0.00	0.00	0.00	0.00
2021	0.00	0.02	0.00	0.02
2022	0.00	0.02	-0.11	-0.10
2023	0.00	0.02	-0.32	-0.30
2024	0.00	0.00	-0.54	-0.54
2025	0.00	0.01	-0.61	-0.60
NPV	0.00	0.05	-0.78	-0.72

	SOX	NOX	CO <sub>2</sub>	Total	
Year	(MS)	(MS)	(MS)	(M\$)	
2016	0.00	0.00	0.00	0.00	
2017	0.00	0.00	0.00	0.00	
2018	0.00	0.03	0.00	0.03	
2019	0.00	0.02	0.00	0.02	
2020	0.00	0.03	0.01	0.03	
2021	0.00	0.01	0.01	0.02	
2022	0.00	0.01	-0.25	-0.25	
2023	0.00	0.00	-0.53	-0.54	
2024	0.00	0.01	-0.91	-0.90	
2025	0.00	0.00	-0.90	-0.90	
NPV	0.00	0.07	-1.29	-1.22	

High Fuel - Low CO2

#### Low Fuel - Base CO2

#### SOX NOX CO<sub>2</sub> Total (MS) (MS) (MS) Year (MS) 2016 0.00 0.00 0.00 0.00 2017 0.00 -0.04 0.00 -0.04 2018 0.00 -0.03 0.00 -0.03 2019 0.00 0.01 0.00 0.01 2020 0.00 -0.01 0.00 -0.01 2021 0.00 0.01 0.00 0.01 -0.25 2022 0.00 -0.01 -0.25 2023 0.00 0.01 -0.76 -0.76 2024 0.00 0.02 -0.71 -0.69 2025 0.00 0.00 -1.12 -1.12 NPV 0.00 -0.04 -1.41 -1.45

Base	Fuel	- Base	CO2

	SOX	NO <sub>X</sub>	CO <sub>2</sub>	Total
Year	(MS)	(MS)	(MS)	(MS)
2016	0.00	-0.05	0.00	-0.05
2017	0.00	-0.01	0.00	-0.01
2018	0.00	-0.01	0.03	0.02
2019	0.00	-0.01	0.03	0.02
2020	0.00	0.00	0.00	0.00
2021	0.00	-0.01	0.03	0.02
2022	0.00	0.00	-0.10	-0.10
2023	0.00	0.00	-0.36	-0.36
2024	0.00	-0.01	-0.64	-0.65
2025	0.00	-0.01	-0.72	-0.73
NPV	0.00	-0.09	-0.84	-0.92

**Base Fuel - High CO2** 

	SOX	NOX	CO <sub>2</sub>	Total
Year	(MS)	(MS)	(MS)	(MS)
2016	0.00	0.00	0.00	0.00
2017	0.00	0.00	0.00	0.00
2018	0.00	0.03	0.00	0.03
2019	0.00	0.02	0.00	0.02
2020	0.00	0.03	0.01	0.03
2021	0.00	0.01	0.01	0.02
2022	0.00	0.00	-0.29	-0.29
2023	0.00	0.00	-0.65	-0.65
2024	0.00	0.01	-1.12	-1.11
2025	0.00	0.00	-1.10	-1.10
NPV	0.00	0.07	-1.56	-1.50

High Fuel - Base CO2

#### Low Fuel - High CO2

Total SOx NOx CO2 Year (MS) (MS) (MS) (MS) 0.00 0.00 0.00 0.00 2016 2017 0.00 -0.03 -0.01 -0.04 0.00 -0.03 2018 -0.03 0.00 0.00 0.01 0.00 0.01 2019 2020 0.00 0.00 -0.01 -0.01 0.00 0.01 0.00 0.01 2021 0.00 -0.31 -0.31 2022 0.00 2023 0.00 0.00 -0.93 -0.92 -0.84 2024 0.00 0.01 -0.85 2025 0.00 0.00 -1.36 -1.36 NPV 0,00 -0.03 -1.73 -1.76

	SO <sub>X</sub>	NO <sub>X</sub>	CO <sub>2</sub>	Total
Year	(MS)	(MS)	(MS)	(MS)
2016	0.00	0.00	0.00	0.00
2017	0.00	-0.01	0.00	-0.01
2018	0.00	0.02	0.01	0.02
2019	0.00	0.02	0.00	0,02
2020	0.00	0.00	0.00	0.00
2021	0.00	0.02	0.00	0.02
2022	0.00	0.02	-0.17	-0.14
2023	0.00	0.02	-0.47	-0.46
2024	0.00	0.01	-0.81	-0.80
2025	0.00	0.01	-0.91	-0.90
NPV	0.00	0.06	-1.16	-1.10

#### High Fuel - High CO2

	SOx	NOX	CO <sub>2</sub>	Total
Year	(M\$)	(MS)	(MS)	(MS)
2016	0.00	0.00	0.00	0.00
2017	0.00	0.00	0.00	0.00
2018	0.00	0.03	0.00	0.03
2019	0.00	0.02	0.00	0.02
2020	0.00	0.02	0.01	0.03
2021	0.00	0.01	0.01	0.02
2022	0.00	0.00	-0.37	-0.37
2023	0.00	0.00	-0.81	-0.80
2024	0.00	0.00	-1.36	-1.36
2025	0.00	0.00	-1.34	-1.34
NPV	0.00	0.07	-1.93	-1.86

#### 160154 Hearing Exhibits 011

Florida Power & Light Company Docket No. 160154-EI Staff's First Set of Interrogatories Interrogatory No. 9 - Redacted Page 1 of 2

### **QUESTION**:

Please identify the following which are currently in place to ensure the ICL coal-fired facility is in compliance with all the existing environmental rules and regulations:

- a. All the air emission monitors and controls with which the Indiantown Cogeneration L.P. (ICL) coal-fired facility is equipped at the present time.
- b. The annual O&M costs for operating the equipment/devices identified in question a. above for the period of 2016 2018.
- c. Whether the costs identified in question b. above have been included in the cost-benefit analysis of the petitioned PPA Transaction.

### **RESPONSE:**

- a. Air Emissions Control Systems
  - The main boiler has low NOx (oxides of nitrogen) burners, Selective Catalytic Reduction (SCR), Spray Dryer Absorber and a bag house for emissions control devices. The SCR uses aqueous ammonia as the reagent. The SCR catalyst has been changed from plate-type catalyst to a honeycomb catalyst. When the catalyst is exhausted it is sent for regeneration. There is a fully regenerated catalyst set stored in North Carolina, for the next change out.
  - ICLP uses fiberglass for the bag house bags. They do not use the reverse air flow to clean the bags. When flue gas flow to the bags is suspended the bags deflate and slough off the accumulated ash without the need of reverse air flow, reducing maintenance and extending the life of the bags.

Continuous Emissions Monitoring (CEM)

- The ICLP has 3 CEM shelters:
  - 1. The main boiler NOx, sulfur dioxide (SO<sup>2</sup>), carbon monoxide (CO), oxygen (O<sup>2</sup>) emission rates are calculated using Stack Flow. ICLP uses stack flow monitoring to calculate emission rates instead of the Part 75 Appendix D fuel flow methodology.
  - 2.  $SO^2$  CEM is located upstream of the adsorber spray dryer to determine pre-control  $SO^2$  emissions so a removal rate can be calculated from the final stack  $SO^2$  monitor.
  - 3. There is a CEM shelter for the two Aux Boilers that measures NOx and CO. The analyzers shuttle back and forth between the two aux boiler stacks.

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Other Air Emissions Compliance

- The most recent air emissions test results, particularly Mercury emissions Hg emissions of 0.177 pounds per trillion British thermal units (lb./TBtu) is well under the Mercury Air Toxics Standard (MATS) emissions limit of 1.2lb/TBtu and is <5 pounds per year via 30-day emissions test in 2015.
- Industrial, Commercial, Institutional (ICI) Boiler Maximum Achievable Control technology (MACT) Rule compliance certifications, i.e., boiler tune-ups and energy assessments ICLP completed tune-ups on both Aux Boilers and energy assessments. Submitted Notice of Compliance to EPA.
- The plant's MATS compliance strategy Plant meets Hg emissions limits. The use of low sulfur coal and the operation of the absorber/spray dryer maintain good control of SO<sub>2</sub> emissions. Alternative PM emissions used as a surrogate for hydrogen chloride (HCl) – PM emissions are 0.008 pounds per million British thermal units (lb./MMBtu); limit is 0.018 lb. /MMBtu.
- b. Forecasted O&M Cost for 2016 for operating this equipment/devices is Assuming a 2.5% inflation rate, the figure for 2017 would be and and and a 2.5% inflation rate.
- c. The costs identified in subpart (b), above, have been included as part of the O&M cost used in the cost benefit analysis of the petitioned transaction.

Florida Power & Light Company Docket No. 160154-EI Staff's First Set of Interrogatories Interrogatory No. 10 Page 1 of 1

#### **QUESTION**:

Please identify the following which are required to install and/or implement to ensure the ICL coal-fired facility will be in compliance with all the environmental rules and regulations:

- a. The air emission and/or pollution monitors and controls needed to be installed and the associated total capital costs.
- b. The estimated annual O&M costs for operating the equipment/devices identified in question a. above for the period of 2016 2018.
- c. Each and all the rule/regulation compliance program/project(s) to be implemented.
- d. The estimated capital and O&M costs for implementing the program/project(s) identified in question c. above for the period of 2016 2018.
- e. Whether the costs identified in questions b. and d. above have been included in the costbenefit analysis of the petitioned PPA Transaction

#### **<u>RESPONSE</u>**:

- a. ICL is currently in compliance with all environmental rules and regulations. No air emissions or pollution monitors and controls in addition to those currently installed are known to be needed.
- b. These costs are identified in FPL's response to Staff's First Set of Interrogatories No. 9.
- c. No additional rule/regulation compliance programs/projects are anticipated to be needed or implemented beyond what is currently implemented at the Facility.
- d. No capital is estimated to be needed. O&M costs are disclosed in FPL's response to Staff's First Set of Interrogatories No. 9.
- e. The costs identified in subparts (b) and (d) above have been included in the O&M budget used in the cost benefit analysis of the petitioned PPA transaction.

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#### **QUESTION**:

Please provide the following for the emissions of SO2, NOx, Hg, and CO2:

- a. ICL facility's emission profile in 2015.
- b. FPL's system-wide emission profile for the period 2016 2025: i) with ICL facility running at capacity factor of 24%; ii) with ICL facility running at capacity factor of 5%; and iii) without the ICL facility.

#### **RESPONSE:**

a. 2015 Emissions were as follows:

SO <sub>2</sub>	Nox	CO <sub>2</sub>	Hg
(Tons)	(Tons)	(Tons)	(Tons)
524.2	807.4	833,433	0.003

b. The tables below show FPL's system emissions under the three scenarios requested.

FPL (ICL Capacity Factor - 24%)

FPL (ICL Capacity Factor - 5%)

	SO <sub>2</sub>	NOX	CO <sub>2</sub>
Year	(tons)	(tons)	(tons)
2016	4,050	15,190	39,814,638
2017	2,456	13,054	39,414,982
2018	2,467	12,811	39,398,845
2019	2,721	12,942	39,385,438
2020	2,108	11,623	39,229,257
2021	2,366	12,274	39,355,678
2022	2,413	12,275	39,148,959
2023	2,382	12,253	39,649,097
2024	2,424	11,947	39,821,348
2025	2,308	11,356	39,531,500

	SO <sub>2</sub>	NOX	CO <sub>2</sub>
Year	(tons)	(tons)	(tons)
2016	3,444	14,124	38,766,321
2017	1,833	12,358	38,317,592
2018	1,774	11,980	38,298,136
2019	2,012	12,055	38,334,211
2020	1,695	11,125	38,592,891
2021	1,928	11,706	38,720,809
2022	1,966	11,713	38,488,802
2023	1,948	11,709	39,028,670
2024	1,991	11,436	39,188,869
2025	1,921	10,887	38,965,267

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### FPL (No ICL)

	SO <sub>2</sub>	NOX	CO <sub>2</sub>
Year	(tons)	(tons)	(tons)
2016	3,666	14,750	39,069,680
2017	1,864	12,291	38,208,867
2018	1,797	11,931	38,216,291
2019	2,041	12,017	38,252,227
2020	1,700	11,110	38,563,886
2021	1,933	11,700	38,685,569
2022	1,979	11,703	38,460,145
2023	1,927	11,684	38,980,757
2024	2,002	11,435	39,174,876
2025	1,932	10,886	38,943,878

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#### **QUESTION**:

Please refer to FPL's Petition, paragraph 18, on page 6 for the following questions.

- a. Please explain in detail how the petitioned PPA Transaction, if approved by the Commission, will reduce CO2 emissions in Florida by over 657,000 tons per year.
- b. Please complete the table below pertaining to the ICL facility.

#### **RESPONSE**:

a) If approved by the Commission, FPL will be both the off-taker of the power and energy of the facility under the PPA, as well as owner of the facility. FPL will be in the position to waive certain provisions of the PPA which are not in FPL's customers' best interest, given the current economics of gas versus coal. For example, at present the number of starts of the facility is limited. As a result, the plant is often kept on-line when uneconomic, in order to use the capacity of the facility, without incurring another start. Similarly, there are limitations on minimum run time and minimum down time. Relaxation of these restrictions will allow FPL to more economically dispatch the Facility. This is anticipated to reduce the dispatch from 24% per year at present to 5%. This reduction in output is the source of the  $CO_2$  savings.

According to the Energy Information Agency,  $CO_2$  produced by burning bituminous coal is 205.7 lbs/MMBtu. With an average heat rate of 11,940 Btu/kWh, ICL would be estimated to produce 2.46 Lbs of  $CO_2$  per kWh. At a 24% capacity factor, annual production is estimated at 835,312 tons per year. At a 5% capacity factor, the annual production would be estimated at 177,492 tons per year.

Annual dispatch rate	Current	24%	5%
Tons of CO <sub>2</sub> avoided	835,312	835,312	177,492
Equivalent number of vehicles removed from the road	150,054	150,054	31,884

Reduction in dispatch from 24% rate to 5% rate reduces emissions by 657,821 tons per year. This is the equivalent of taking 118,170 passenger vehicles from the road. (See Attachment No. 1 for calculations).

b)
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### **QUESTION**:

Please refer to the Environmental Protection Agency's Steam Electric Power Generating Effluent Limitations Guidelines (ELG) rule published in November 2015 for the following questions.

- a. Please discuss whether the ICL facility is affected by this rule.
- b. If your response to question a. above is affirmative, please discuss FPL's plan to comply with the rule after the PPA Transaction, if FPL's petition is approved.
- c. Please identify the projected costs associated with the compliance plan discussed in question b. above, and specify whether such costs have been included in the cost-benefit analysis of the petitioned transaction.

# **RESPONSE:**

ICL is not affected by the revised ELG Rule because it is not required to have a Florida Department of Environmental Protection Industrial Waste Water permit as the plant has no discharges of industrial wastewater from plant operations to surface waters. Fly ash generated and captured is handled in a dry state and any wastewater generated by other plant processes is recycled or treated via a zero liquid discharge wastewater treatment system. Therefore, the ELG Rule does not apply to ICL.

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ICL Estimated CO2 production and savings

Pounds of CO2 emissions per MMBtu for Bituminous Coal	205.691 "www.eia.gov/tools/faqs/faq.cfm?id=74&t=11
Plant Heat Rate	11,940 Btu/kWh
Plant CO2 emissions rate	2.45595054 Lbs/kWh
2015 Production	680235.435 MWh From 2015 final QF report
2015 Capacity Factor	24%
CO2 Production	835,312 tons
Future Production	144540 MWh
Future Capacity Factor	5%
CO2 Production	177,492 tons
Savings in CO2 Emissions	657,821 Tons
CO2 emissions per passenger automobile	9737.44 Lb/year https://www3.epa.gov/otaq/consumer/420f08024.pdf
CO2 emissions per light truck and SUVs	13572.69 Lb/year https://www3.epa.gov/otaq/consumer/420f08024.pdf
Fraction of passenger vehicles that are automobiels	63.60% http://www.nhtsa.gov/cars/rules/CAFE/DomesticCarFleet.htm
Average emissions	11,133.47 Lb/year
Vehicles reduced	118,169.93 Vehicles saved per year
At 24% Capacity Factor - vehicle equivalent	150,054.24
At 5% Capacity Factor - vehicle equivalent	31,884.31

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#### **QUESTION:**

Please provide the percent of FPL's system net energy for load and the amount that the ICL facility would be anticipated to generate for the period 2016 through 2025, if the transaction was approved or denied. Please also provide the percent NEL for those scenarios.

#### RESPONSE:

The table below represents the expected generation for ICL if the transaction is denied, i.e., ICL remains in-service through 2025.

	FPL NEL	ICL Generation	% of FPL NEL served by ICL
Year	(MWh)	(MWh)	(%)
2016	119,720,978	725,730	0.6%
2017	118,975,642	652,580	0.5%
2018	119,756,154	665,080	0.6%
2019	120,521,870	647,310	0.5%
2020	121,883,592	365,980	0.3%
2021	122,136,203	364,980	0.3%
2022	122,377,992	366,170	0.3%
2023	123,240,498	365,610	0.3%
2024	124,172,421	365,130	0.3%
2025	125,061,870	331,290	0.3%

If the transaction is approved, there would be no change in the expected output for ICL in 2016; so the 2016 output would therefore be the same amount as shown in the table above. After 2016, it is projected that ICL will not be producing any energy, so its expected contribution to NEL would be zero for all the years following.

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**QUESTION**:

Please provide a history of the annual dispatch and availability for the ICL facility for the years 2000 through 2015, and the partial year dispatch for availability for 2016.

# **RESPONSE**:

Please see Attachment No. 1.

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	Capacity		
	Billing	Energy	Monthly
Month	Factor	Delivered	Dispatch
		(MWh)	
1/1/2000	100%	179,459	73.09%
2/1/2000	100%	178,863	77.88%
3/1/2000	100%	212,747	86.65%
4/1/2000	99%	190,670	80.25%
5/1/2000	97%	88,939	36.22%
6/1/2000	97%	227,508	95.75%
7/1/2000	98%	233,582	95.14%
8/1/2000	98%	237,003	96.53%
9/1/2000	98%	232,521	97.86%
10/1/2000	98%	129,199	52.62%
11/1/2000	98%	210,081	88.42%
12/1/2000	99%	223,105	90.87%
1/1/2001	98%	222,023	90.43%
2/1/2001	99%	197,045	88.85%
3/1/2001	99%	218,732	89.09%
4/1/2001	98%	219,402	92.34%
5/1/2001	99%	175,464	71.47%
6/1/2001	101%	225,159	94.76%
7/1/2001	101%	232,284	94.61%
8/1/2001	98%	190,761	77.70%
9/1/2001	97%	195,694	82.36%
10/1/2001	95%	140,535	57.24%
11/1/2001	90%	35,273	14.85%
12/1/2001	90%	224,198	91.32%
1/1/2002	90%	217,729	85.91%
2/2/2002	91%	183,815	85.96%
3/1/2002	90%	227,169	92.53%
4/1/2002	90%	218,395	91.92%
5/1/2002	90%	126,541	51.54%
6/1/2002	89%	185,009	77.87%
7/1/2002	89%	221,634	90.27%
8/1/2002	89%	216,173	88.05%
9/1/2002	90%	107,712	45.33%
10/1/2002	90%	-	0.00%
11/1/2002	91%	149,650	62.98%
12/1/2002	93%	224,910	91.61%
1/1/2003	97%	194,428	79.19%
2/1/2003	98%	194,893	87.88%
3/1/2003	97%	200,563	81.69%

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	Capacity		
	Billing	Energy	Monthly
Month	Factor	Delivered	Dispatch
4/1/2003	97%	115,668	48.68%
5/1/2003	97%	226,052	92.07%
6/1/2003	97%	226,238	95.22%
7/1/2003	98%	243,640	99.23%
8/1/2003	99%	235,654	95.98%
9/1/2003	99%	216,183	90.99%
10/1/2003	99%	136,504	52.23%
11/3/2003	99%	210,265	94.82%
12/1/2003	99%	219,010	89.20%
1/1/2004	99%	211,368	86.09%
2/1/2004	100%	198,459	86.41%
3/1/2004	101%	216,968	88.37%
4/1/2004	101%	215,639	90.76%
5/1/2004	101%	118,134	48.12%
6/1/2004	101%	204,952	86.26%
7/1/2004	99%	171,278	69.76%
8/1/2004	98%	204,164	83.16%
9/1/2004	96%	188,411	79.30%
10/1/2004	95%	131,276	53.47%
11/1/2004	96%	207,905	87.50%
12/1/2004	95%	206,579	84.14%
1/1/2005	95%	207,092	84.35%
2/1/2005	93%	179,345	80.87%
3/1/2005	93%	204,925	83.47%
4/1/2005	93%	111,072	46.75%
5/1/2005	93%	208,893	85.08%
6/1/2005	93%	174,046	73.25%
7/1/2005	93%	235,374	95.87%
8/1/2005	96%	230,137	93.73%
9/1/2005	96%	206,541	86.93%
10/1/2005	95%	152,895	62.27%
11/1/2005	96%	175,759	73.97%
12/1/2005	96%	236,199	96.20%
1/1/2006	97%	208,842	85.06%
2/1/2006	97%	193,587	87.30%
3/1/2006	97%	112,555	45.84%
4/1/2006	98%	216,654	91.18%
5/1/2006	97%	195,800	79.75%
6/1/2006	97%	214,794	90.40%
7/1/2006	97%	233,048	94.92%

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	Capacity		
	Billing	Energy	Monthly
Month	Factor	Delivered	Dispatch
8/1/2006	97%	240,820	98.09%
9/1/2006	97%	171,184	72.05%
10/1/2006	97%	-	0.00%
11/1/2006	97%	94,659	39.84%
12/1/2006	97%	207,800	84.64%
1/1/2007	99%	209,319	85.26%
2/1/2007	99%	200,825	90.56%
3/1/2007	97%	183,121	74.58%
4/1/2007	97%	114,498	48.19%
5/1/2007	97%	207,718	84.60%
6/1/2007	97%	208,877	87.91%
7/1/2007	98%	200,162	81.53%
8/1/2007	98%	226,162	92.12%
9/1/2007	98%	209,622	88.22%
10/1/2007	98%	134,234	54.67%
11/1/2007	98%	209,060	87.99%
12/1/2007	98%	217,293	72.20%
1/8/2008	97%	196,798	80.16%
2/8/2008	98%	206,147	89.75%
3/8/2008	96%	192,375	78.35%
4/8/2008	97%	117,054	49.27%
5/8/2008	98%	213,595	87.00%
6/8/2008	98%	203,473	85.64%
7/8/2008	97%	217,118	88.43%
8/8/2008	99%	230,289	93.80%
9/8/2008	99%	233,882	98.44%
10/8/2008	100%	129,983	52.94%
11/8/2008	98%	184,889	77.82%
12/8/2008	97%	192,916	78.57%
1/8/2009	97%	191,673	78.07%
2/8/2009	98%	109,118	49.21%
3/8/2009	98%	108,178	44.06%
4/8/2009	99%	79,297	33.37%
5/8/2009	100%	165,863	67.56%
6/8/2009	100%	168,573	70.95%
7/8/2009	99%	160,218	65.26%
8/8/2009	99%	169,802	69.16%
9/8/2009	97%	121,186	51.00%
10/8/2009	98%	106,055	43.20%
11/8/2009	97%	15,387	6.48%

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	Capacity		
	Billing	Energy	Monthly
Month	Factor	Delivered	Dispatch
12/8/2009	94%	89,447	36.43%
1/8/2010	100%	134,698	54.86%
2/8/2010	100%	66,286	29.89%
3/8/2010	100%	77,273	31.47%
4/8/2010	99%	76,582	32.23%
5/8/2010	100%	85,805	34.95%
6/8/2010	100%	178,247	75.02%
7/8/2010	100%	178,066	72.53%
8/8/2010	100%	168,773	68.74%
9/8/2010	100%	156,715	65.96%
10/8/2010	101%	56,154	22.87%
11/8/2010	101%	90,220	37.97%
12/8/2010	101%	113,767	46.34%
1/8/2011	100%	85,271	34.73%
2/8/2011	100%	87,165	39.31%
3/8/2011	100%	49,342	20.10%
4/8/2011	100%	133,995	56.40%
5/8/2011	100%	121,638	49.54%
6/8/2011	100%	110,335	46.44%
7/8/2011	100%	111,969	45.61%
8/8/2011	101%	118,220	48.15%
9/8/2011	101%	107,577	45.28%
10/8/2011	101%	58,551	23.85%
11/8/2011	100%	2,940	1.24%
12/8/2011	101%	-	0.00%
1/8/2012	101%	68,204	27.78%
2/8/2012	99%	69,114	30.09%
3/8/2012	102%	73,412	29.90%
4/8/2012	102%	76,030	32.00%
5/8/2012	102%	95,754	39.00%
6/8/2012	102%	81,115	34.14%
7/8/2012	102%	123,171	50.17%
8/8/2012	101%	93,294	38.00%
9/8/2012	101%	92,662	39.00%
10/8/2012	101%	28,304	11.53%
11/8/2012	101%	-	0.00%
12/8/2012	101%	-	0.00%
1/8/2013	101%	-	0.00%
2/8/2013	101%	-	0.00%
3/8/2013	101%	31,221	12.72%

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	Capacity		
	Billing	Energy	Monthly
Month	Factor	Delivered	Dispatch
4/8/2013	101%	102,370	43.08%
5/8/2013	99%	84,679	34.49%
6/8/2013	101%	85,285	35.89%
7/8/2013	101%	85,889	34.98%
8/8/2013	101%	86,899	35.39%
9/8/2013	102%	80,870	34.04%
10/8/2013	102%	24,654	10.04%
11/8/2013	102%	51,238	21.56%
12/8/2013	102%	-	0.00%
1/8/2014	102%	-	0.00%
2/8/2014	102%	-	0.00%
3/8/2014	102%	22,053	8.98%
4/8/2014	101%	75,353	31.71%
5/8/2014	101%	94,659	38.55%
6/8/2014	101%	94,195	39.64%
7/8/2014	101%	95,478	50.23%
8/1/2014	101%	96,338	39.24%
9/1/2014	101%	78,882	33.20%
10/1/2014	101%	33,077	13.47%
11/1/2014	100%	68,049	28.64%
12/1/2014	100%	-	0.00%
1/1/2015	100%	-	0.00%
2/1/2015	100%	1,779	0.80%
3/1/2015	100%	-	0.00%
4/1/2015	100%	85,150	35.84%
5/1/2015	99%	81,102	33.03%
6/1/2015	99%	99,426	41.85%
7/1/2015	99%	95,448	38.88%
8/1/2015	99%	100,006	40.73%
9/1/2015	99%	92,347	38.87%
10/1/2015	98%	80,571	32.82%
11/1/2015	98%	6,613	2.78%
12/1/2015	99%	37,793	15.39%
1/1/2016	99%	-	0.00%
2/1/2016	99%	-	0.00%
3/1/2016	99%	28,289	11.52%
4/1/2016	97%	79,902	33.63%
5/1/2016	97%	81,448	33.17%
6/1/2016	99%	90,684	38.17%
7/1/2016			

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#### **QUESTION**:

Please refer to Witness Hartman's Direct Testimony Page 1, lines 13-15. What is the anticipated environmental impact that will be reduced?

#### **RESPONSE**:

Page 11, lines 13-15 of Witness Hartman's Testimony refers to reduced environmental impact. Reduced dispatch of the facility facilitated by the proposed transaction will result in reduced  $SO_2$ ,  $NO_x$ , Hg and  $CO_2$  emissions from the facility, as well as reduced water consumption. While the energy will be replaced by other units in FPL's system, these units all have better heat rates and reduced environmental emission rates as compared to ICL.

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#### **QUESTION**:

Please discuss the EPA's Clean Power Plan and its potential impacts to coal-fired generation. As part of this discussion, please address whether coal-fired units in Florida, such as the ICL facility, would be required to retire or reduce output through the end of the PPA term

- a. Based on FPL's forecast CO2 price, how much would ICL pay if the contract were continued?
- b. Who is responsible for the CO2 costs under the PPA?

#### RESPONSE:

EPA's final Clean Power Plan is designed to reduce  $CO_2$  emissions nationally by 32% from existing fossil fueled power plants. The final rule establishes rate (Lbs./MWh) and mass based (total tons)  $CO_2$  targets for each state. Under Section 111(d) of the Clean Air Act EPA has developed a "Best System of Emissions Reductions" to reduce  $CO_2$  emissions, that is focused on each state's potential to: 1) improve heat rate efficiency at affected power plants; 2) increase the capacity factor of existing natural gas fired power plants; and 3) increase the deployment of renewable generation throughout the U.S. The Clean Power Plan as designed under Section 111(d) allows each state to determine how it will achieve the  $CO_2$  targets established for the State. Each state would determine in its State Implementation Plan (SIP) whether the state will utilize a rate based or mass based allocation program for the reduction of  $CO_2$ . How individual states achieve their mass or rate based target is determined by the state. Nothing in the proposed CPP requires retirement of any particular coal-fired generator, although retirement of coal-fired plants is one of the means of achieving compliance with  $CO_2$  reductions.

Today the Clean Power Plan (CPP) rule is stayed by the Supreme Court of the United States (SCOTUS) pending completion of the litigation process. It is uncertain when litigation impacting this rule will be completed. It is anticipated that once the DC Circuit rules on the CPP, regardless of their decision, the rule will then be taken up by the SCOTUS for review. If the rule is not vacated by the SCOTUS, it would ultimately be finalized and states would be required to develop their SIPs that are subject to EPA approval. The preliminary state plans were initially due to EPA in September of 2016. Final Plans were due to EPA in September 2018. However, due to the Stay of the final rule, it is uncertain when the state SIPs will be required. Though the dates of state SIPs are likely to slip, EPA anticipates the January 1, 2022 effective date of the rule will remain intact.

Under the Best System of Emissions Reduction established by the Clean Power Plan, it is expected that increased use of existing natural gas plants and the increased deployment of renewable energy will have the effect of decreasing the dispatch of coal-fired generators on the grid. For utility-owned or purely merchant generators, this has the impact of decreasing the revenues associated with those units, leading to eventual retirement on purely economic grounds.

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ICL, however, is different because of the capacity payments the facility receives under the PPA with FPL. As dispatch is reduced, the profitability of the unit for its owners <u>increases</u>. The less ICL operates the more money it makes, due to the very high capacity payments under the PPA and the negative energy margin associated with dispatch.

The possibility of a Florida SIP resulting in retirement of the Indiantown Cogeneration Plant prior to the end of the existing PPA would be pure conjecture at present. The available evidence is that the ICL plant will continue to be economically viable for its owners through the end of the PPA despite the future cost of  $CO_2$  emissions.

- a. Using analysis from ICF Inc., FPL has evaluated the potential costs of CO<sub>2</sub> allowances under the Clean Power Plan, assuming a mass-based allocation program. In nominal dollars, these costs range from \$2 per ton in 2022 (the first compliance year of the CPP) to \$9 per ton in 2025 (the last year of FPL's PPA with ICL). Assuming ICL's recent average of approximately 650,000 tons of CO<sub>2</sub> emissions annually, these projected CO<sub>2</sub> costs would represent a CO<sub>2</sub> cost burden to the ICL plant ranging from \$1,300,000 to \$5,850,000 annually depending on the dispatch of the facility during this timeframe.
- b. Under the PPA, Indiantown Cogeneration Limited Partnership would be responsible for CO<sub>2</sub> costs.

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#### **QUESTION:**

Please refer to Exhibit TLH-4. Please provide an annual breakdown of the line FPL System Impact, including annual values for incremental system fuel costs, start-up costs, variable O&M, environmental compliance costs (O2, and non-CO2), and short-term purchases.

#### **RESPONSE**:

The table below displays the annual values for the incremental system costs requested. Note that the incremental emissions costs displayed below are comprised of the  $NO_2$ ,  $SO_X$ , and  $CO_2$  emissions costs.

	Short Term Purchase	System Net Fuel	VOM	Emission	Total
Year	(MS)	(MS)	(MS)	(MS)	(MS)
2017	0	23	-1	0	22
2018	0	24	0	0	24
2019	0	18	0	0	18
2020	0	11	-1	0	10
2021	0	9	-1	0	8
2022	0	8	-1	0	7
2023	-5	7	-1	0	0
2024	0	6	-1	-1	4
2025	0	5	0	-1	4

### **FPL System Impact**

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# **QUESTION**:

Please refer to exhibit TLH-4. Provide a version of this exhibit for each of the cost effective results, use a no CO2 scenario for fuel and environmental costs.

# **RESPONSE**:

The tables in Attachment No. 1 display the annual cost effective results of the FPL System Impact(s), shown in Exhibit TLH-4, including the subsequent "no  $CO_2$ " scenarios.

# Indiantown Cogeneration Response to Staff's First INT, No. 20 Results of FPL's Economic Evaluation<sup>(1)</sup> *Low Fuel No CO2*

Florida Power & Light Company Docket No. 160154-El Staff's First Set of Interrogatories Interrogatory No. 20 Attachment No. 1 Tab 1 of 3

	(dollars in millions)	2017	2018	2019	2020	2021	2022	2023	2024	2025	Nominal Total	Pres Valu	
А	Discount Factor <sup>(2)</sup>	 0.96	0.89	0.82	0.76	0.70	0.65	0.60	0.56	0.51			
в	Amortization <sup>(3)</sup>	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 451	\$	324
С	Operating Expenses <sup>(4)</sup>	11	13	2	2	1	1	1	1	1	34		29
D	Asset Retirement Obligation <sup>(5)</sup>	3	3	3	3	-	-	-	-	-	11		9
Е	Interest Expense <sup>(6)</sup>	4	4	3	1	3	2	2	1	0	20		16
F	Return on Equity <sup>(7)</sup>	29	27	23	20	9	7	5	3	1	125		103
G	Income Tax	19	17	15	12	6	4	3	2	1	78		64
н	Cost of Transaction	 116	113	97	89	69	65	61	57	53	720		546
I	FPL System Impact <sup>(8)</sup>	(24)	(26)	(23)	(13)	(12)	(10)	(5)	(9)	(9)	(131)		(102)
J	Capacity Payment and Bonus	(57)	(56)	(55)	(53)	(52)	(51)	(50)	(49)	(48)	(471)		(342)
Κ	O&M Payment	(36)	(37)	(38)	(39)	(39)	(40)	(41)	(42)	(43)	(356)		(253)
L	Total Avoided Costs of PPA	 (93)	(93)	(93)	(92)	(92)	(91)	(91)	(91)	(91)	(827)		(594)
м	Net Customer Costs/(Savings)	\$ (2)	\$ (6)	\$ (18)	\$ (16)	\$ (34)	\$ (36)	\$ (35)	\$ (43)	\$ (46)	\$ (237)	\$	(151)

1) \$451 MM acquisition value includes \$233 MM equity price and \$218 MM of acquired debt

2) Discount Factor is based on weighted average cost of capital of 8.15% discounted to January 1, 2017

3) Reflects amortization of regulatory asset

4) Operating Expenses include operations and maintenance and expensed portion of rail lease. Estimates of Net Working Capital are not reflected in the model.

5) Reflects amortization of ARO Asset and accretion of ARO Liability

6) Interest expense assumes 2.90% market rate on acquired debt and 5.21% on incremental FPL debt, and 40.4% debt to capital ratio

7) Assumes after-tax return on equity of 11.5% and 59.6% equity to capital ratio

8) Includes incremental system fuel costs, start-up costs, variable O&M, environmental compliance costs, and short-term purchases

9) Present value is calculated as the sum the annual values multiplied by the respective discount factor

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# Indiantown Cogeneration Response to Staff's First INT, No. 20 Results of FPL's Economic Evaluation<sup>(1)</sup> *Mid Fuel No CO2*

Florida Power & Light Company Docket No. 160154-El Staff's First Set of Interrogatories Interrogatory No. 20 Attachment No. 1 Tab 2 of 3

	(dollars in millions)	 2017	2018	2019	2020	2021	2022	2023	2024	2025	Nominal Total	Pre: Vali	sent ue <sup>(9)</sup>
Α	Discount Factor <sup>(2)</sup>	0.96	0.89	0.82	0.76	0.70	0.65	0.60	0.56	0.51			
в	Amortization <sup>(3)</sup>	\$ 50	\$ 50	\$ 50	\$50	\$ 50	\$50	\$50	\$ 50	\$50	\$ 451	\$	324
С	Operating Expenses <sup>(4)</sup>	11	13	2	2	1	1	1	1	1	34		29
D	Asset Retirement Obligation <sup>(5)</sup>	3	3	3	3	-	-	-	-	-	11		9
Е	Interest Expense <sup>(6)</sup>	4	4	3	1	3	2	2	1	0	20		16
F	Return on Equity <sup>(7)</sup>	29	27	23	20	9	7	5	3	1	125		103
G	Income Tax	19	17	15	12	6	4	3	2	1	78		64
н	Cost of Transaction	 116	113	97	89	69	65	61	57	53	720		546
1	FPL System Impact <sup>(8)</sup>	(22)	(24)	(18)	(10)	(8)	(7)	(1)	(4)	(5)	(100)		(81)
J	Capacity Payment and Bonus	(57)	(56)	(55)	(53)	(52)	(51)	(50)	(49)	(48)	(471)		(342)
κ	O&M Payment	(36)	(37)	(38)	(39)	(39)	(40)	(41)	(42)	(43)	(356)		(253)
L	Total Avoided Costs of PPA	 (93)	(93)	(93)	(92)	(92)	(91)	(91)	(91)	(91)	(827)		(594)
м	Net Customer Costs/(Savings)	\$ -	\$ (4)	\$ (14)	\$ (14)	\$ (30)	\$ (33)	\$ (31)	\$ (38)	\$ (43)	\$ (206)	\$	(130)

1) \$451 MM acquisition value includes \$233 MM equity price and \$218 MM of acquired debt

2) Discount Factor is based on weighted average cost of capital of 8.15% discounted to January 1, 2017

3) Reflects amortization of regulatory asset

4) Operating Expenses include operations and maintenance and expensed portion of rail lease. Estimates of Net Working Capital are not reflected in the model.

5) Reflects amortization of ARO Asset and accretion of ARO Liability

6) Interest expense assumes 2.90% market rate on acquired debt and 5.21% on incremental FPL debt, and 40.4% debt to capital ratio

7) Assumes after-tax return on equity of 11.5% and 59.6% equity to capital ratio

8) Includes incremental system fuel costs, start-up costs, variable O&M, environmental compliance costs, and short-term purchases

# Indiantown Cogeneration Response to Staff's First INT, No. 20 Results of FPL's Economic Evaluation<sup>(1)</sup> *High Fuel No CO2*

Florida Power & Light Company Docket No. 160154-El Staff's First Set of Interrogatories Interrogatory No. 20 Attachment No. 1 Tab 3 of 3

	1.1.1										Nominal	Pres	
	(dollars in millions)	 2017	2018	2019	2020	2021	2022	2023	2024	2025	Total	Valu	le(°)
А	Discount Factor <sup>(2)</sup>	0.96	0.89	0.82	0.76	0.70	0.65	0.60	0.56	0.51			
В	Amortization <sup>(3)</sup>	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 451	\$	324
С	Operating Expenses <sup>(4)</sup>	11	13	2	2	1	1	1	1	1	34		29
D	Asset Retirement Obligation <sup>(5)</sup>	3	3	3	3	-	-	-	-	-	11		9
Е	Interest Expense <sup>(6)</sup>	4	4	3	1	3	2	2	1	0	20		16
F	Return on Equity <sup>(7)</sup>	29	27	23	20	9	7	5	3	1	125		103
G	Income Tax	19	17	15	12	6	4	3	2	1	78		64
Н	Cost of Transaction	116	113	97	89	69	65	61	57	53	720		546
I	FPL System Impact <sup>(8)</sup>	(18)	(18)	(13)	(7)	(5)	(3)	3	(1)	(1)	(62)		(53)
J	Capacity Payment and Bonus	(57)	(56)	(55)	(53)	(52)	(51)	(50)	(49)	(48)	(471)		(342)
к	O&M Payment	(36)	(37)	(38)	(39)	(39)	(40)	(41)	(42)	(43)	(356)		(253)
L	Total Avoided Costs of PPA	(93)	(93)	(93)	(92)	(92)	(91)	(91)	(91)	(91)	(827)		(594)
м	Net Customer Costs/(Savings)	\$ 5	\$2	\$ (9)	\$ (10)	\$ (27)	\$ (29)	\$ (27)	\$ (35)	\$ (39)	\$ (169)	\$	(102)

1) \$451 MM acquisition value includes \$233 MM equity price and \$218 MM of acquired debt

2) Discount Factor is based on weighted average cost of capital of 8.15% discounted to January 1, 2017

3) Reflects amortization of regulatory asset

4) Operating Expenses include operations and maintenance and expensed portion of rail lease. Estimates of Net Working Capital are not reflected in the model.

5) Reflects amortization of ARO Asset and accretion of ARO Liability

6) Interest expense assumes 2.90% market rate on acquired debt and 5.21% on incremental FPL debt, and 40.4% debt to capital ratio

7) Assumes after-tax return on equity of 11.5% and 59.6% equity to capital ratio

8) Includes incremental system fuel costs, start-up costs, variable O&M, environmental compliance costs, and short-term purchases

Florida Power & Light Company Docket No. 160154-EI Staff's First Set of Interrogatories Interrogatory No. 21 Page 1 of 1

# **QUESTION**:

Please provide the estimated annual nominal bill impact for a residential customer (for both 1,000kWh/month and 1200 kWh/month usage) for the period 2017 through 2025.

# **<u>RESPONSE</u>**:

The estimated annual nominal bill impact for a residential customer for both 1,000 kWh/month and 1,200 kWh/month usage for the period 2017 through 2025 is shown on the chart below.

ESTIMATED RESIDENTIAL BILL											
\$ PER KWH											
YEAR	1,000	KWH	1,200	KWH							
2017	\$	(0.10)	\$	(0.12)							
2018	\$	(0.12)	\$	(0.14)							
2019	\$	(0.22)	\$	(0.26)							
2020	\$	(0.19)	\$	(0.23)							
2021	\$	(0.25)	\$	(0.30)							
2022	\$	(0.28)	\$	(0.33)							
2023	\$	(0.26)	\$	(0.32)							
2024	\$	(0.34)	\$	(0.40)							
2025	\$	(0.36)	\$	(0.44)							

Florida Power & Light Company Docket No. 160154-EI Staff's First Set of Interrogatories Interrogatory No. 22 Page 1 of 1

#### **QUESTION**:

Why is the return on equity used in Exhibit TLH-4, page 1 of 1, 11.5 percent as opposed to FP&L's allowed return on equity of 10.5 percent?

#### **RESPONSE**:

As the ICL transaction is expected to close effective January 1, 2017, FPL utilized an 11.50% return on equity to be consistent with the return on equity requested for the 2017 test year as part of its rate case filing in Docket No. 160021-EI.

Florida Power & Light Company Docket No. 160154-EI Staff's First Set of Interrogatories Interrogatory No. 23 Page 1 of 1

#### **QUESTION:**

Please discuss whether FERC or another federal agency's approval is necessary to complete the proposed purchase of the ICL facility. Please detail the timeline for these approvals and any potential barriers to approval.

#### RESPONSE:

Federal Energy Regulation Commission ("FERC") approval under section 203 of the Federal Power Act ("FPA") is required to consummate the proposed transaction. Accordingly, on July 13, 2016 in Docket No. EC16-148-000, FPL filed a FPA section 203 application seeking FERC authorization to purchase all of the upstream ownership interests in Palm Power, LLC and Toyan Enterprises, LLC currently held by Calypso Energy Holdings, LLC. FPL requested that FERC act on the application by September 13, 2016 but FERC is not bound by FPL's request. On July 14, 2016, FERC issued a notice of FPL's application establishing an August 3, 2016 deadline to file comments/interventions. While FPL expects supportive comments to be filed by the Florida Keys Electric Cooperative Association, Inc. and Lee County Electric Cooperative, Inc., FPL's two long-term wholesale requirements customers with formula rates on file at FERC, to date, no comments have been filed. FPL is not aware of any barriers to approval.

Pursuant to the Hart-Scott-Rodino Antitrust Improvements Act of 1976 (U.S.C. § 18a), FPL is required to file a premerger notification at the Federal Trade Commission ("FTC") and the Department of Justice. Accordingly, on July 1, 2016, FPL filed the required notification and early termination of the waiting period was granted by the FTC, on behalf of both agencies, on July 13, 2016.

Florida Power & Light Company Docket No. 160154-EI Staff's First Set of Interrogatories Interrogatory No. 24 Page 1 of 1

### **QUESTION**:

Please discuss how the ICL facility handles coal ash disposal and other combustion by- products. Please detail facility, if any, used for long term storage of coal ash and other combustion by products, and whether FPL would be subject to any penalties or liabilities relating to coal ash and other combustion coal by products in long-term storage facilities.

#### **RESPONSE:**

Coal combustion residual (ash) is collected dry, stored in a silo (fly ash) or bunker (bottom ash), and then transported offsite for disposal at a solid waste landfill. All ash is disposed of off-site.

Bottom ash and the majority of the fly ash are disposed of with the Waste Management landfill, in Okeechobee, Florida. A small part of the fly ash is used to stabilize wet scrubber sludge and another small fraction is beneficially used in producing a biosolids product.

Since the ash is disposed of in accordance with currently applicable law, or used in accordance with applicable law, FPL does not foresee any penalties of liabilities relating to coal ash.

Florida Power & Light Company Docket No. 160154-EI Staff's First Set of Interrogatories Interrogatory No. 25 Page 1 of 1

#### **QUESTION:**

Please describe the reliability impact to FPL's system of acquiring the ICL facility, and retiring at the end of 2017, specifically in regard to FPL's reserve margin and whether it accelerates the company's need for additional generation capacity.

#### **RESPONSE**:

The reliability impact to FPL's system of acquiring the ICL Facility will not accelerate the company's need for additional generation capacity. The only impact is the need for a short-term purchase in 2023 (140-MW) in order to maintain FPL's summer reserve margin criteria.

For clarification, the ICL Facility will not be fully decommissioned in 2017. ICL will be placed in "Reserve-Standby" status through 2019 where it will not be expected to run, or operate, but will contribute to FPL's reserve margin criteria. In 2020, when the PPA can be extinguished, the ICL Facility will be decommissioned.

Florida Power & Light Company Docket No. 160154-EI Staff's First Set of Interrogatories Interrogatory No. 27 Page 1 of 1

<u>QUESTION</u>: What, if any, obligations does FPL have to the steam off-takers after the acquisition of the ICL facility?

# **RESPONSE**:

None. All existing contractual commitments to the existing steam off-taker expire at the end of 2016.

FPL Response to Staff's 1<sup>st</sup> ROG No. 1

POD\_FC ICL to 2025.xls

FPL's Response to Staff's 1<sup>st</sup> ROG No. 2

160154 - Staff's 1st INT No. 2 - Attachment No. 1.xls 160154 - Staff's 1st INT No. 2 - Attachment No. 2.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 3.xls 160154 - Staff's 1st INT No. 2 - Attachment No. 4.xls 160154 - Staff's 1st INT No. 2 - Attachment No. 5.xls 160154 - Staff's 1st INT No. 2 - Attachment No. 6.xls 160154 - Staff's 1st INT No. 2 - Attachment No. 7.xls 160154 - Staff's 1st INT No. 2 - Attachment No. 8.xls 160154 - Staff's 1st INT No. 2 - Attachment No. 9.xls 160154 - Staff's 1st INT No. 2 - Attachment No. 10.xls 160154 - Staff's 1st INT No. 2 - Attachment No. 11.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 12.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 13.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 14.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 15.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 16.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 17.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 18.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 19.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 20.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 21.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 22.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 23.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 24.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 25.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 26.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 27.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 28.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 29.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 30.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 31.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 32.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 33.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 34.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 35.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 36.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 37.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 38.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 39.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 40.xlsx 160154 - Staff's 1st INT No. 2 - Attachment No. 41.xlsx

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160154 - Staff's 1st INT No. 2 - Attachment No. 53.xlsx
160154 - Staff's 1st INT No. 2 - Attachment No. 54.xlsx
160154 - Staff's 1st INT No. 2 - Attachment No. 55.xlsx

# 11

# FPL's Responses to Staff's Second Set of Interrogatories (Nos. 28-32 and 34-39)

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 160154-EI EXHIBIT: 11 PARTY: STAFF (DIRECT) DESCRIPTION: Barrett (31, 32, 35, 36)Fuentes (37, 38) Hartman (28-30, 32, 34,

160154 Hearing Exhibits 041

Florida Power & Light Company Docket No. 160154-EI Staff's Second Set of Interrogatories Interrogatory No. 28 Page 1 of 1

### **QUESTION**:

Please refer to Witness Hartman's testimony page 8, lines 11 through 22.

- a. Is FPL's commodity, transportation, and delivered fuel price forecasts (exclusive of hedging) for both coal and natural gas used in support of FPL's Indiantown Cogeneration L.P. (ICL) petition the most recent forecast available?
- b. Similarly with subpart (a.), is FPL's emission cost forecast still the most recent forecast available?
- c. If the response to subpart (a.) and/or (b.) is negative, please provide an updated cumulative present value of revenue requirements (CPVRR) utilizing the company's most current forecasts of fuel and/or emissions performed in the same manner as in Witness Hartman's testimony.
- d. If the response to subpart (a.) and/or (b.) is negative, and an updated analysis as requested in subpart (c.) is provided, please discuss any difference between the results of the original and updated CPVRR analyses

#### **RESPONSE:**

- a. Yes. The commodity, transportation and delivered fuel price forecast for both coal and natural gas used to support FPL's ICL petition is the most recent long-term fuel forecast. While FPL periodically prepares short- and medium-term forecasts for internal purposes, the long term forecast used to support the ICL Transaction is the most recent in its possession.
- b. Yes. FPL's emissions cost forecast used to support the ICL petition is the most recent forecast in FPL's possession.
- c. Not Applicable.
- d. Not Applicable.

Florida Power & Light Company Docket No. 160154-EI Staff's Second Set of Interrogatories Interrogatory No. 29 Page 1 of 1

# **QUESTION**:

Please refer to Witness Hartman's Exhibit TLH-4. Please provide a version of Exhibit TLH-4 revised to reflect each of the return on equities listed in the table below using the company's most current forecasts of fuel and emissions.

#### **RESPONSE:**

Please see Attachment No. 1 for the versions of Exhibit TLH-4 reflecting the return on equities and resulting customer savings tabled below.

	Customer
ROE	Savings
9.5%	\$ 167 MM
10.0%	\$ 157 MM
10.5%	\$ 148 MM
11.0%	\$ 138 MM
11.5%	\$ 129 MM

Florida Power & Light Company Docket No. 160154-EI Staff's Second Set of Interrogatories Interrogatory No. 29 Attachment No. 1 Page 1 of 5

#### Indiantown Cogeneration Results of FPL's Economic Evaluation<sup>(1)</sup> <u>Sensitivity Analysis: ROE = 9.5%</u>

	(dollars in millions)	 2017	2018	2019	2020	2021	2022	2023	2024	2025	Nominal Total	sent ue <sup>(9)</sup>
Α	Discount Factor <sup>(2)</sup>	0.9 <b>7</b>	0.90	0.85	0.79	0.74	0.69	0.65	0.60	0.56		
в	Amortization <sup>(3)</sup>	\$ 50	\$ 50	\$50	\$ 50	\$ 50	\$50	\$ 50	\$ 50	\$ 50	\$ 451	\$ 339
С	Operating Expenses <sup>(4)</sup>	11	13	2	2	1	1	1	1	1	34	30
D	Asset Retirement Obligation <sup>(5)</sup>	3	3	3	3	-	-	-	-	-	11	9
Е	Interest Expense <sup>(6)</sup>	4	4	3	1	3	2	2	1	0	20	16
F	Return on Equity <sup>(7)</sup>	24	22	19	16	8	6	4	2	1	103	87
G	Income Tax	 15	14	12	10	5	4	3	2	0	65	55
Н	Cost of Transaction	 107	105	90	83	67	63	60	56	53	685	536
I	FPL System Impact <sup>(8)</sup>	(22)	(24)	(18)	(10)	(8)	(7)	(0)	(4)	(4)	(98)	(82)
J	Capacity Payment and Bonus	(57)	(56)	(55)	(53)	(52)	(51)	(50)	(49)	(48)	(471)	(357)
к	O&M Payment	(36)	(37)	(38)	(39)	(39)	(40)	(41)	(42)	(43)	(356)	(264)
L	Total Avoided Costs of PPA	 (93)	(93)	(93)	(92)	(92)	(91)	(91)	(91)	(91)	(827)	 (621)
м	Net Customer Costs/(Savings)	\$ (8)	\$ (11)	\$ (20)	\$ (20)	\$ (33)	\$ (35)	\$ (32)	\$ (39)	\$ (42)	\$ (240)	\$ (167)

1) \$451 MM acquisition value includes \$233 MM equity price and \$218 MM of acquired debt

2) Discount Factor is based on weighted average cost of capital of 6.96% discounted to January 1, 2017

3) Reflects amortization of regulatory asset

4) Operating Expenses include operations and maintenance and expensed portion of rail lease. Estimates of Net Working Capital are not reflected in the model.

5) Reflects amortization of ARO Asset and accretion of ARO Liability

Interest expense assumes 2.90% market rate on acquired debt and 5.21% on incremental FPL debt, and 40.4% debt to capital ratio

7) Assumes after-tax return on equity of 9.5% and 59.6% equity to capital ratio

8) Includes incremental system fuel costs, start-up costs, variable O&M, environmental compliance costs, and short-term purchases

Florida Power & Light Company Docket No. 160154-EI Staff's Second Set of Interrogatories Interrogatory No. 29 Attachment No. 1 Page 2 of 5

#### Indiantown Cogeneration Results of FPL's Economic Evaluation<sup>(1)</sup> <u>Sensitivity Analysis: ROE = 10.0%</u>

	(dollars in millions)	-	2017	2018	2019	2020	2021	2022	2023	2024	2025	Nominal Total	Pre: Valu	
A	Discount Factor <sup>(2)</sup>		0.97	0.90	0.84	0.78	0.73	0.68	0.63	0.59	0.55			
В	Amortization <sup>(3)</sup>	\$	50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 451	\$	335
С	Operating Expenses <sup>(4)</sup>		11	13	2	2	1	1	1	1	1	34		30
D	Asset Retirement Obligation <sup>(5)</sup>		3	3	3	3	-	-	-	÷.,	-	11		9
Е	Interest Expense <sup>(6)</sup>		4	4	3	1	3	2	2	1	0	20		16
F	Return on Equity <sup>(7)</sup>		26	23	20	17	8	6	4	3	1	108		91
G	Income Tax		16	14	13	11	5	4	3	2	1	68		57
Н	Cost of Transaction		109	107	92	84	67	64	60	57	53	693		539
1	FPL System Impact <sup>(8)</sup>		(22)	(24)	(18)	(10)	(8)	(7)	(0)	(4)	(4)	(98)		(81)
J	Capacity Payment and Bonus		(57)	(56)	(55)	(53)	(52)	(51)	(50)	(49)	(48)	(471)		(353)
ĸ	O&M Payment		(36)	(37)	(38)	(39)	(39)	(40)	(41)	(42)	(43)	(356)		(261)
L	Total Avoided Costs of PPA	-	(93)	(93)	(93)	(92)	(92)	(91)	(91)	(91)	(91)	(827)		(614)
М	Net Customer Costs/(Savings)	\$	(6)	\$ (9)	\$ (19)	\$ (18)	\$ (33)	\$ (35)	\$ (31)	\$ (39)	\$ (42)	\$ (231)	\$	(157)

1) \$451 MM acquisition value includes \$233 MM equity price and \$218 MM of acquired debt

2) Discount Factor is based on weighted average cost of capital of 7.25% discounted to January 1, 2017

3) Reflects amortization of regulatory asset

4) Operating Expenses include operations and maintenance and expensed portion of rail lease. Estimates of Net Working Capital are not reflected in the model.

5) Reflects amortization of ARO Asset and accretion of ARO Liability

6) Interest expense assumes 2.90% market rate on acquired debt and 5.21% on incremental FPL debt, and 40.4% debt to capital ratio

7) Assumes after-tax return on equity of 10.0% and 59.6% equity to capital ratio

8) Includes incremental system fuel costs, start-up costs, variable O&M, environmental compliance costs, and short-term purchases

Florida Power & Light Company Docket No. 160154-EI Staff's Second Set of Interrogatories Interrogatory No. 29 Attachment No. 1 Page 3 of 5

#### Indiantown Cogeneration Results of FPL's Economic Evaluation<sup>(1)</sup> Sensitivity Analysis: ROE = 10.5%

	(dollars in millions)		2017	2018	2019	2020	2021	2022	2023	2024	2025	Nominal Total	sent ue <sup>(9)</sup>
		-	2011	2010	2010	2020							
А	Discount Factor <sup>(2)</sup>		0.96	0.90	0.83	0.78	0.72	0.67	0.62	0.58	0.54		
В	Amortization <sup>(3)</sup>	\$	50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 451	\$ 331
С	Operating Expenses <sup>(4)</sup>		11	13	2	2	1	1	1	1	1	34	30
D	Asset Retirement Obligation <sup>(5)</sup>		3	3	3	3	-	-	-	-	-	11	9
Е	Interest Expense <sup>(6)</sup>		4	4	3	1	3	2	2	1	0	20	16
F	Return on Equity <sup>(7)</sup>		27	24	21	18	8	7	5	3	1	114	95
G	Income Tax		17	15	13	11	5	4	3	2	1	71	60
Н	Cost of Transaction		111	109	93	86	68	64	60	57	53	702	541
I	FPL System Impact <sup>(8)</sup>		(22)	(24)	(18)	(10)	(8)	(7)	(0)	(4)	(4)	(98)	(81)
J	Capacity Payment and Bonus		(57)	(56)	(55)	(53)	(52)	(51)	(50)	(49)	(48)	(471)	(349)
к	O&M Payment		(36)	(37)	(38)	(39)	(39)	(40)	(41)	(42)	(43)	(356)	(258)
L	Total Avoided Costs of PPA		(93)	(93)	(93)	(92)	(92)	(91)	(91)	(91)	(91)	(827)	(608)
М	Net Customer Costs/(Savings)	\$	(4)	\$ (7)	\$ (17)	\$ (17)	\$ (32)	\$ (34)	\$ (31)	\$ (38)	\$ (41)	\$ (222)	\$ (148)

1) \$451 MM acquisition value includes \$233 MM equity price and \$218 MM of acquired debt

2) Discount Factor is based on weighted average cost of capital of 7.55% discounted to January 1, 2017

3) Reflects amortization of regulatory asset

4) Operating Expenses include operations and maintenance and expensed portion of rail lease. Estimates of Net Working Capital are not reflected in the model.

5) Reflects amortization of ARO Asset and accretion of ARO Liability

6) Interest expense assumes 2.90% market rate on acquired debt and 5.21% on incremental FPL debt, and 40.4% debt to capital ratio

7) Assumes after-tax return on equity of 10.5% and 59.6% equity to capital ratio

8) Includes incremental system fuel costs, start-up costs, variable O&M, environmental compliance costs, and short-term purchases

Florida Power & Light Company Docket No. 160154-EI Staff's Second Set of Interrogatories Interrogatory No. 29 Attachment No. 1 Page 4 of 5

#### Indiantown Cogeneration Results of FPL's Economic Evaluation<sup>(1)</sup> Sensitivity Analysis: ROE = 11.0%

	(dollars in millions)	 2017	2018	2019	2020	2021	2022	2023	2024	2025	Nominal Total	Pres Valu	
А	Discount Factor <sup>(2)</sup>	0.96	0.89	0.83	0.77	0.71	0.66	0.61	0.57	0.53			
В	Amortization <sup>(3)</sup>	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 451	\$	328
С	Operating Expenses <sup>(4)</sup>	11	13	2	2	1	1	1	1	1	34		29
D	Asset Retirement Obligation <sup>(5)</sup>	3	3	3	3	-	-	-	-	-	11		9
Е	Interest Expense <sup>(6)</sup>	4	4	3	1	3	2	2	1	0	20		16
F	Return on Equity <sup>(7)</sup>	28	25	22	19	9	7	5	3	1	119		99
G	Income Tax	 18	16	14	12	6	4	3	2	1	75		62
Н	Cost of Transaction	114	111	95	87	69	65	61	57	53	711		543
I	FPL System Impact <sup>(8)</sup>	(22)	(24)	(18)	(10)	(8)	(7)	(0)	(4)	(4)	(98)		(80)
J	Capacity Payment and Bonus	(57)	(56)	(55)	(53)	(52)	(51)	(50)	(49)	(48)	(471)		(346)
ĸ	O&M Payment	(36)	(37)	(38)	(39)	(39)	(40)	(41)	(42)	(43)	(356)		(255)
L	Total Avoided Costs of PPA	(93)	(93)	(93)	(92)	(92)	(91)	(91)	(91)	(91)	(827)		(601)
М	Net Customer Costs/(Savings)	\$ (2)	\$ (6)	\$ (15)	\$ (15)	\$ (31)	\$ (34)	\$ (31)	\$ (38)	\$ (41)	\$ (213)	\$	(138)

1) \$451 MM acquisition value includes \$233 MM equity price and \$218 MM of acquired debt

2) Discount Factor is based on weighted average cost of capital of 7.85% discounted to January 1, 2017

3) Reflects amortization of regulatory asset

4) Operating Expenses include operations and maintenance and expensed portion of rail lease. Estimates of Net Working Capital are not reflected in the model.

5) Reflects amortization of ARO Asset and accretion of ARO Liability

6) Interest expense assumes 2.90% market rate on acquired debt and 5.21% on incremental FPL debt, and 40.4% debt to capital ratio

7) Assumes after-tax return on equity of 11.0% and 59.6% equity to capital ratio

8) Includes incremental system fuel costs, start-up costs, variable O&M, environmental compliance costs, and short-term purchases

Florida Power & Light Company Docket No. 160154-EI Staff's Second Set of Interrogatories Interrogatory No. 29 Attachment No. 1 Page 5 of 5

Indiantown Cogeneration Results of FPL's Economic Evaluation<sup>(1)</sup> <u>Sensitivity Analysis: ROE = 11.5%</u>

	(dollars in millions)	 2017	2018	2019	2020	2021	2022	2023	2024	2025	Nominal Total	Pre: Valu	sent ue <sup>(9)</sup>
А	Discount Factor <sup>(2)</sup>	0.96	0.89	0.82	0.76	0.70	0.65	0.60	0.56	0.51			
В	Amortization <sup>(3)</sup>	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 451	\$	324
С	Operating Expenses <sup>(4)</sup>	11	13	2	2	1	1	1	1	1	34		29
D	Asset Retirement Obligation <sup>(5)</sup>	3	3	3	3	-	-	-	-	-	11		9
Е	Interest Expense <sup>(6)</sup>	4	4	3	1	3	2	2	1	0	20		16
F	Return on Equity <sup>(7)</sup>	29	27	23	20	9	7	5	3	1	125		103
G	Income Tax	 19	17	15	12	6	4	3	2	1	78		64
Н	Cost of Transaction	116	113	97	89	69	65	61	57	53	720		546
I,	FPL System Impact <sup>(8)</sup>	(22)	(24)	(18)	(10)	(8)	(7)	(0)	(4)	(4)	(98)		(80)
J	Capacity Payment and Bonus	(57)	(56)	(55)	(53)	(52)	(51)	(50)	(49)	(48)	(471)		(342)
ĸ	O&M Payment	(36)	(37)	(38)	(39)	(39)	(40)	(41)	(42)	(43)	(356)		(253)
L	Total Avoided Costs of PPA	(93)	(93)	(93)	(92)	(92)	(91)	(91)	(91)	(91)	(827)		(594)
М	Net Customer Costs/(Savings)	\$ -	\$ (4)	\$ (14)	\$ (14)	\$ (31)	\$ (33)	\$ (30)	\$ (38)	\$ (41)	\$ (205)	\$	(129)

1) \$451 MM acquisition value includes \$233 MM equity price and \$218 MM of acquired debt

2) Discount Factor is based on weighted average cost of capital of 8.15% discounted to January 1, 2017

3) Reflects amortization of regulatory asset

4) Operating Expenses include operations and maintenance and expensed portion of rail lease. Estimates of Net Working Capital are not reflected in the model.

5) Reflects amortization of ARO Asset and accretion of ARO Liability

6) Interest expense assumes 2.90% market rate on acquired debt and 5.21% on incremental FPL debt, and 40.4% debt to capital ratio

7) Assumes after-tax return on equity of 11.5% and 59.6% equity to capital ratio

8) Includes incremental system fuel costs, start-up costs, variable O&M, environmental compliance costs, and short-term purchases

Florida Power & Light Company Docket No. 160154-EI Staff's Second Set of Interrogatories Interrogatory No. 30 Page 1 of 1

#### **QUESTION**:

Please refer to Witness Barrett's testimony page 4, lines 5 through 19. How much natural gas transportation capacity would operation of the ICL Facility avoid during peak periods?

#### **RESPONSE**:

Witness Barrett's testimony refers to the reliability increase provided by the fact the ICL Facility provides energy and capacity independent of the two existing natural gas pipelines into peninsular Florida. Additionally, of course, the ICL Facility does not offset pipeline firm transportation capacity, since such capacity is fixed under long term contracts.

Nonetheless, a pipeline capacity offset can be estimated based on the capacity avoided by the ICL Facility. The ICL Facility's dispatch avoids the use of an estimated 7.5 million MMBtu of natural gas and 53 thousand barrels of heavy oil on FPL's system over the course of a year. By taking the peak monthly fuel demands avoided by the ICL Facility and converting to natural gas daily transportation capacity, one can interpret that the ICL Facility offsets the equivalent of 44,000 MMBtu per day of natural gas transportation.

Florida Power & Light Company Docket No. 160154-EI Staff's Second Set of Interrogatories Interrogatory No. 31 Page 1 of 2

# **QUESTION**:

Please refer to Witness Barrett's testimony page 4, lines 22 through 23 and page 5, line 1, specifically "... the ICL Facility would not be needed for system reliability."

- a. Please clarify if this remark refers to the company's planning reserve margin criteria and/or planning generation-only reserve margin criteria.
- b. Please provide seasonal reserve margins for the life of the PPA with the ICL Transaction including assumed retirement and without the ICL Transaction.

#### **RESPONSE:**

- a. The remark, outlined above, from Witness Barrett's testimony is a reference to both of FPL's planning reserve margin criteria: the 20% reserve margin, and the 10% generation-only reserve margin.
- b. The tables below display the seasonal reserve margins. Please note that FPL's response to OPC's 2nd Set of Interrogatories No. 5, goes into detail regarding the summer reserve margin of 20% for years 2017 and 2018.

	IC	L	Without ICL							
Year	Summer RM	Winter RM	Summer RM	Winter RM	_ Ye					
2017	20.0%	45.5%	20.0%	45.5%	20					
2018	20.0%	44.9%	20.0%	44.9%	20					
2019	24.6%	43.5%	24.6%	43.5%	20					
2020	22.2%	48.5%	20.8%	46.9%	20					
2021	23.0%	48.0%	21.6%	46.4%	20					
2022	22.5%	48.7%	21.1%	47.1%	20					
2023	21.2%	47.8%	20.4%	46.2%	20					
2024	26.5%	46.5%	25.2%	44.9%	_ 20					
2025	24.8%	53.1%	23.5%	51.5%	20					

#### 20% Reserve Margin Criteria
Florida Power & Light Company Docket No. 160154-EI Staff's Second Set of Interrogatories Interrogatory No. 31 Page 2 of 2

### 10% Generation-Only Reserve Margin Criteria

	ICL		Without ICL		
Year	Summer RM	Winter RM	Summer RM	Winter RM	
2017	10.5%	35.7%	10.5%	35.7%	
2018	10.3%	34.8%	10.3%	34.8%	
2019	14.4%	33.4%	14.4%	33.4%	
2020	12.1%	38.0%	10.8%	36.5%	
2021	12.7%	37.5%	11.4%	36.0%	
2022 [	12.0%	37.9%	10.7%	36.4%	
2023	10.7%	36.9%	10.0%	35.4%	
2024 [	15.5%	35.6%	14.2%	34.2%	
2025	13.8%	41.7%	12.6%	40.2%	

Florida Power & Light Company Docket No. 160154-EI Staff's Second Set of Interrogatories Interrogatory No. 32 Page 1 of 1

### **QUESTION:**

Please refer to Witness Barrett's testimony page 5, lines 11 through 18.

a. What are the economic benefits to customers are associated with FPL's control of the facility?

b. What are the economic benefits to customers are associated with FPL's ownership of the site?

### **RESPONSE**:

- a. Witness Barrett's testimony contrasts the benefits of the proposed transaction as opposed to buying out the power purchase agreement ("PPA") as an alternative to mitigate FPL's current above market PPA with the ICL Facility. In the case of a PPA buyout, FPL's ability to dispatch the Facility or to obtain, at its sole discretion, all the capacity and energy from the Facility would disappear at the time of closing. In the case of this transaction, FPL's customers would continue to benefit from the availability of energy and capacity from the Facility until the Okeechobee Clean Energy Center enters service in mid-2019 and ICL is no longer needed for system reliability. Additionally, since the Facility is projected to remain operationally viable beyond 2019, FPL's customers would be able to benefit from additional capacity and energy from the Facility should circumstances change and the Facility need to be operated for either reliability or economic reasons, although currently it is not expected to be economically attractive. None of these benefits options are available in the case of a PPA buyout.
- b. Upon shutdown and dismantlement of the plant, the site still remains and would be owned by FPL. The site has a substation interconnected to FPL's transmission network, is close to a major gas transmission line, and has rail access. The site could be retained for future development of a natural gas plant or a solar plant, for example. The site also is in close proximity to FPL's Martin site giving any future generation at the site a significant cost advantage in operating as part of FPL's power generation fleet. Alternatively, if FPL determines that it is in the best interests of FPL's customers, the site could be sold.

Florida Power & Light Company Docket No. 160154-EI Staff's Second Set of Interrogatories Interrogatory No. 34 Page 1 of 1

### **QUESTION**:

Please refer to Witness Barrett's testimony page 6, lines 10 through 20. Please describe whether there is any major (in excess of \$1 million) maintenance projects planned for the ICL Facility until the end of the PPA. If so, please describe each project and the anticipated start and end dates.

### **RESPONSE**:

There are no such projects planned or anticipated for the ICL Facility after the close of the transaction through the remaining term of the PPA.

Florida Power & Light Company Docket No. 160154-EI Staff's Second Set of Interrogatories Interrogatory No. 35 Page 1 of 1

### **QUESTION**:

Please refer to Witness Barrett's testimony page 6, lines 10 through 20. Is FPL seeking a return on the value of the land acquired in the ICL Transaction? Please explain your response.

### **RESPONSE**:

Yes. FPL is seeking to recover a return on the value of the acquired land. Once the plant is decommissioned, FPL likely will hold it for future use. As indicated in the testimony of Witness Barrett, the site is suitable for future gas or solar generation given the transmission infrastructure and proximity to a natural gas pipeline.

Florida Power & Light Company Docket No. 160154-EI Staff's Second Set of Interrogatories Interrogatory No. 36 Page 1 of 1

### **QUESTION:**

Please refer to FPL Witness Barrett's testimony page 6, lines 22 through page 7, line 4. Has the Commission approved recovery of a similar transaction outside of a settlement? If so, please provide a list of Orders for similar transactions.

### RESPONSE:

No. The Commission has not approved a similar transaction outside of a settlement. However, recently the Commission approved the settlement agreement for the substantially similar Cedar Bay Transaction in Order No. PSC-15-0401-AS-EI.

Florida Power & Light Company Docket No. 160154-EI Staff's Second Set of Interrogatories Interrogatory No. 37 Page 1 of 1

### **QUESTION**:

Please refer to Witness Fuentes' testimony page 5, lines 7 through 8. Please explain how FPL plans on maintaining the Qualifying Facility (QF) status of the ICL Facility. What costs are associated with maintaining QF status and is FPL seeking recovery of these costs?

#### RESPONSE:

Maintaining QF status requires a filing at the FERC regarding the new ownership structure, as well as maintaining QF operational standards. The key operational requirement is the use of reject heat from the power production process to meet the operating standard in 18 C.F.R 292.205(a) of 5% of the energy input during a 12-month period.

The ICL Facility has two potential uses of reject thermal energy: steam sales to the adjacent citrus processing facility, and operation of the Facility to clean up water from the Taylor estuary.

While the existing contract for sale of steam to the citrus processor expires at the end of 2016, should the transaction close FPL will open discussions on the facility's interest in continuing to receive steam on an as-available basis at a price for steam that offsets the production cost. If these discussions are successful, the revenue from steam sales will offset any costs associated with the steam production so it will have no effect on FPL's customers.

Alternatively, ICL has the right to withdraw water from the Taylor estuary under the authority of the South Florida Water Management district. This estuary accounts for 3 to 4% of the total water inflows to Lake Okeechobee, but is the source of approximately 20% of the phosphorous loading in the lake. ICL would use waste steam from power production to concentrate the phosphorous in reject water that is not used in the plant. This waste is then fed to the Spray Dryer Absorber to evaporate the reject water and produce dry concentrated phosphorous, which can be safely landfilled. Waste heat from the thermal process of the ICL Facility is used in this process, as well as existing equipment at the ICL Facility. The only incremental cost associated with compliance is disposal of the phosphorous, which at a 5% capacity factor is estimated to be approximately 187 lbs. per year, and hence of de minimus cost.

FPL has not included any amounts associated with maintaining the QF status of the ICL Facility in this proceeding. However, if FPL were to incur such costs, those costs would be included in FPL's base O&M.

Florida Power & Light Company Docket No. 160154-EI Staff's Second Set of Interrogatories Interrogatory No. 38 Page 1 of 1

### **QUESTION**:

Please refer to Witness Fuentes' testimony page 6, lines 1-4. Please give a detailed forecast for the cost of the ash removal and dismantlement separately.

### RESPONSE:

FPL does not have a detailed forecast that provides the cost of the ash removal and dismantlement separately. The \$9.9 million asset retirement obligation is a high level estimate that was completed by FPL's Power Generation Technical Services Team, and specific itemized costs are not available at this time.

Florida Power & Light Company Docket No. 160154-EI Staff's Second Set of Interrogatories Interrogatory No. 39 Page 1 of 1

### **QUESTION:**

In its response to Staff's First Interrogatory, No.8, FPL indicated that the types of emissions that comprise the emissions costs displayed in the table of witness Hartman's testimony, page 11, line 1 - 2 are SO2, NOX, and CO2. In its response to Staff's First Interrogatory, No.7, FPL indicated that to create CO2 Emission Prices for the High (Low) Case Emissions, it increased (decreased) the CO2 prices in the Base Case by 20%.

a. Did FPL use a same SOx emission prices for High Case, Base Case and Low Case Emissions scenarios CPVRR analysis? If not, please explain how the High and Low SOx emission prices were derived.

b. Did FPL use a same NOx emission prices for High Case, Base Case and Low Case Emissions scenarios for CPVRR analysis? If not, please explain how the High and Low NOx emission prices were derived.

**RESPONSE:** 

a. Yes.

b. Yes.

# 12

FPL's Responses to Staff's First Request for Production of Documents (No. 3 (CONFIDENTIAL))

> FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 160154-EI EXHIBIT: 12 PARTY: STAFF (DIRECT) DESCRIPTION: Hartman

> > 160154 Hearing Exhibits 059

Florida Power & Light Company Docket No. 160154-EI Staff's First Request for Production of Documents Request No. 3 Page 1 of 1

**QUESTION**:

Provide the bond covenants cited on page 4 of the Petition.

### **RESPONSE**:

Please refer to Section 5.14 of the Trust Indenture and Sections 2.6 and 2.8 of the First Supplemental Indenture, both of which are provided. Please note these documents are confidential.

# 13

# FPL's Responses to OPC's First Set of Interrogatories (Nos. 1-3)

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 160154-EI EXHIBIT: 13 PARTY: STAFF (DIRECT) DESCRIPTION: Fuentes (1) Hartman (1-3)

160154 Hearing Exhibits 061

Florida Power & Light Company Docket No. 160154-EI OPC's First Set of Interrogatories Interrogatory No. 1 Page 1 of 1

**QUESTION**:

With respect to the Asset Retirement Obligation (ARO) of \$9.9 million that FPL proposes to book per Exhibit LF-1, Page 1 of 2 and intends to amortize through 2024 according to Exhibit TLH-4:

- a. What will be the estimated amount of the ARO on December 31, 2016?
- b. How did FPL account for the ARO in the purchase price and transaction?

RESPONSE:

- a. FPL assumes this question is referring to the estimated amount of the ARO FPL will recognize as part of the proposed transaction. The amount FPL estimates on December 31, 2016 is the same amount it expects to recognize on the date of the transaction, which is \$9.9 million on January 1, 2017.
- b. When FPL was negotiating the final purchase price, we included an estimated value of asset retirement costs as part of our pricing analysis. Once FPL signed the purchase and sale agreement, FPL completed a detailed review in order to determine a more precise ARO obligation (\$9.9 million).

FPL must comply with ASC 410 - Asset Retirement and Environmental Obligations, which requires FPL to recognize the obligation to dismantle the acquired Indiantown facility upon retirement. As reflected on Exhibit LF-1, FPL has recognized the fair value of this obligation, \$9.9 million, as a debit to an asset and a credit to a liability for the same amount. The asset will amortize and the liability will accrete from the purchase date until the point in time in which dismantlement occurs.

Florida Power & Light Company Docket No. 160154-EI OPC's First Set of Interrogatories Interrogatory No. 2 Page 1 of 1

### **QUESTION**:

With respect to Mr. Hartman's testimony on page 3, lines 10-13, that steam is sold to an adjacent citrus processing facility:

- a. Will the contract for steam be renewed on January 1, 2017?
- b. How will FPL account for the future steam revenue in the purchase transaction if it is renewed?

**RESPONSE**:

- a. FPL has not opened discussions with the steam host regarding extending the contract. The facility has an alternate steam host arrangement which removes phosphate from a stream entering Lake Okeechobee. FPL intends to rely on this process, with the option of opening discussions with the existing steam host if it is economically and operationally advantageous for FPL's customers.
- b. In the transaction, FPL included no revenue from steam sales in the economic analysis. Should ICL obtain steam sales revenue, it will offset fuel costs and effectively be credited to customers through the fuel clause.

Florida Power & Light Company Docket No. 160154-EI OPC's First Set of Interrogatories Interrogatory No. 3 Page 1 of 1

### **QUESTION**:

What is the average cost rate on the existing bonds financing the Indiantown Cogeneration project mentioned on Page 6 of Mr. Hartman's testimony? What is the total value of the bonds that FPL will assume on January 1, 2017?

### RESPONSE:

The weighted-average stated cost rate on the existing bonds financing Indiantown Cogeneration is 5.18%. The face value of these bonds, as of January 1, 2017, will be \$197.6 MM. In accordance with GAAP, FPL is required to record the bonds at fair value as part of the purchase accounting. As such, FPL estimates the fair value, at the expected transaction close date of January 1, 2017, to be \$217.8 MM, based on an estimated weighted-average market rate of 2.90%.

# 14

# FPL's Responses to OPC's Second Set of Interrogatories (Nos. 4-6)

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 160154-EI EXHIBIT: 14 PARTY: STAFF (DIRECT) DESCRIPTION: Barrett

160154 Hearing Exhibits 065

Florida Power & Light Company Docket No. 160154-EI OPC's Second Set of Interrogatories Interrogatory No. 4 Page 1 of 1

**QUESTION**:

What is FPL's current projected "reserve margin" for calendar year 2017 and 2018?

### **<u>RESPONSE</u>**:

/

FPL's current projected summer reserve margin for 2017 and 2018 is 20.0% for both years.

Florida Power & Light Company Docket No. 160154-EI OPC's Second Set of Interrogatories Interrogatory No. 5 Page 1 of 1

### **QUESTION**:

What would FPL's projected reserve margin be for 2017 and 2018 if FPL ceased operations of the ICL facility on January 1, 2017?

### **RESPONSE**:

With ICL available for limited operation in 2017 and 2018, the summer reserve margin is projected to be 20.0% for both years. If ICL is not available to meet reserve margins in these two years, and the lost capacity is not made up, the resulting reserve margin would be 18.5% for both 2017 and 2018. However, FPL would take action to bring the reserve margin back up to 20.0%, most likely in the form of short term purchase power agreements.

Florida Power & Light Company Docket No. 160154-EI OPC's Second Set of Interrogatories Interrogatory No. 6 Page 1 of 1

### **QUESTION:**

If FPL ceased operations of the ICL facility on January 1, 2017, would the overall customer cost savings increase or decrease in calendar year 2017 and 2018? Please provide a detailed explanation of the monetary change and why it would occur.

### **RESPONSE**:

If FPL ceased operations of the ICL facility on January 1, 2017, FPL would avoid operations and maintenance (O&M) costs of approximately \$5.3 million in 2017 and \$11.8 million in 2018. However, FPL would incur costs for making up the lost ICL capacity in the form of short-term capacity purchases, which would be needed to maintain FPL's 20% summer reserve margins in these two years. The cost of these short-term capacity purchases would be approximately \$11.9 million in 2017 and \$12.9 million in 2018. The net impact to FPL's customers of ceasing operation of ICL in 2017 and 2018 is a net increase in costs of \$6.6 million and \$1.1 million in 2017 and 2018, respectively.

# 15

# FPL's Responses to OPC's First Request for Production of Documents (No. 1)

# See Staff Exhibit CD for responsive files

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 160154-EI EXHIBIT: 15 PARTY: STAFF (DIRECT) DESCRIPTION: Hartman

160154 Hearing Exhibits 069

Florida Power & Light Company Docket No. 160154-EI OPC's First Request for Production of Documents Request No. 1 Page 1 of 1

### **QUESTION**:

Please provide all electronic or hard copy worksheets supporting the calculations and numbers shown on Exhibit TLH-4.

### **RESPONSE**:

Please see files "CL Support for TLH-4 20160620," "POD\_FC ICL to 2016," and "POD\_FC ICL to 2025" provided in FPL's response to FIPUG's First Request for Production of Documents No. 1.

FPL's response to OPC's 1<sup>st</sup> POD, No. 1

CCR 2017.xlsx CCR 2018.xlsx CCR 2019.xlsx CCR 2020.xlsx CCR 2021.xlsx CCR 2022.xlsx CCR 2023.xlsx CCR 2024.xlsx CCR 2025.xlsx CL Support for TLH-4 20160620.xlsm ECR 2017.xlsx ECR 2018.xlsx ECR 2019.xlsx ECR 2020.xlsx ECR 2021.xlsx ECR 2022.xlsx ECR 2023.xlsx ECR 2024.xlsx ECR 2025.xlsx

POD\_FC ICL to 2016.xls POD\_FC ICL to 2025.xls

(21 Files)

# 16

# FPL's Responses to OPC's Second Request for Production of Documents (No. 2)

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 160154-EI EXHIBIT: 16 PARTY: STAFF (DIRECT) DESCRIPTION: Hartman

160154 Hearing Exhibits 071

### **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In re: Petition for approval of a purchase and sale agreement between Florida Power & Light Company and Calypso Energy Holdings, LLC, for the ownership of the Indiantown Cogeneration LP and related Power purchase agreement. DOCKET NO. 160154-EI

FILED: August 10, 2016

### CITIZENS' SECOND REQUEST TO PRODUCE DOCUMENTS DIRECTED TO FLORIDA POWER & LIGHT COMPANY (No. 2)

1

The Citizens of the State of Florida, through the Office of Public Counsel, request Florida Power & Light Company (FPL) to produce the following documents for inspection and copying at the Office of Public Counsel, Claude Pepper Building, 111 West Madison Street, Room 812, Tallahassee, Florida 32399-1400, or at such other mutually agreed place, within ten (10) days of this request or on such other date as may be agreed to by parties or established by the Prehearing Officer.

#### **DEFINITIONS**

1. The terms "document" and "documents" are meant to have the broadest possible meaning under applicable law and includes, but is not necessarily limited to, any written, recorded, filmed or graphic matter, whether produced, reproduced, or on paper, e-mail, cards, tapes, film, electronic facsimile, computer storage device or any other media, including, but not limited to, memoranda, notes, minutes, records, photographs, correspondence, telegrams, diaries, bookkeeping entries, financial statements, tax returns, checks, check stubs, reports, studies, charts, graphs, statements, notebooks, handwritten notes, applications, agreements, books, pamphlets, periodicals, appointment calendars, records and recordings of oral conversations, work papers, and notes, any of which are in your possession, custody, or control.

### **DOCUMENTS REQUESTED**

2. Please provide the latest dismantlement study for the ICL Facility.

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<u>s/Danielle M. Roth</u> Danielle M. Roth Associate Public Counsel

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Office of Public Counsel c/o The Florida Legislature 111 West Madison Street Room 812 Tallahassee, FL 32399 (850) 488-9330

Attorney for the Citizens of the State of Florida

# INDIANTOWN COGEN DISMANTLEMENT

On June 6th, 2016 FPL commenced efforts to determine a budgetary value to remove the assets from the site

June 14h, 2016 RWV

FPL 00118

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Indiantown Co-Gen – Budgetary Dismantlement cost estimate

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## General:

Indiantown Co-Gen Date of Trip: June 6<sup>th</sup>, 2016 Purpose: Provide budgetary cost estimate of cost of dismantlement FPL was very well supported by:

Mr. Todd Shirley – Power Plant Management Services Projects General Manager

Mr Gary Willer – NAES Plant Manager

Randal Voyles – FPL PGD CM Projects GM

During the trip our list of requested documents was provided in E-format for our use including a Document index for further references as needed. They answered and responded to all of our questions and we were provided access to the site for our visual observation.

Conveyed September 22, 1992; GPS coordinates 27.042090, -80.513819, address 19140 Warfield BLVD, Indiantown, FL.

26-39-38-001-000-00011-9 27-39-38-000-000-00041-2 34-39-38-001-000-00010-4

19140 SW WARFIELD BV, INDIANTOWN 19140 SW WARFIELD BV, INDIANTOWN 13303 SW SILVER FOX LN, INDIANTOWN

The Facility went COD December 1995

The Facility is owned by the Indiantown Cogeneration, Limited Partnership ("ICLP"), which is now wholly owned by Energy Investment Funds ("EIF"), and is operated and maintained under contract by North American Energy Services ("NAES"). Currently is a Qualifying Facility ("QF") under the Public Utilities Regulatory Policies Act ("PURPA"). The Facility supplies process steam to the Louis Dreyfus Citrus processing facility and dispatches electricity to the Florida Power & Light Company ("FP&L") grid.

Operates as a Zero Discharge conventional pulverized coal facility generating nominally 330 MW net of parasitic loads. Although my day trip was limited and allowed only visual observations, the facility appeared to be in very good condition, well maintained, reliable and capable of achieving the net designed generational capabilities and meeting their external obligations. This in part is due to the type and location of the coal sourcing (big sandy KY and WV) and classification (Appalachian-Bit) and the maintenance regime adopted coupled with the lower than full load dispatching. The plant does not cycle off at night and as such typically remains at a nominal 100MW min load. EFOR from 2009 to 2013 was approximately 1.33%.

Power Purchase Agreement with Florida Power and Light ("FP&L"), expires in 2025

Indiantown Co-Gen – Budgetary Dismantlement cost estimate

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The intent is to return the site to a "brownfield". In this case there is not expected to be any residual environmental constituents in excess of industrial limits with the exception of those that may be naturally occurring. For our purposes the following is provided to define Brownfield.

#### Brown Field

A formally used land site, typically an industrial facility which if used for a new facility would require efforts to avoid left structures and equipment either above or below grade, and in many definitions has constituents of concern far in excess of residential standards.

#### Green field

Unencumbered by any residual former facility, components and Improvements to the property can proceed without any significant effort or consideration, with the exception of naturally occurring features.

### **General description of site features:**

The site consists of a number of features including

- Settlement, cooling storage and storm water ponds
- Wells
- Preserved wetlands uplands
- Coal handling and storage area
- Fuel and limestone
- Power Block
- Cooling water Supply from Taylor Creek/Nubbin Slough
- Laydown warehousing
- Ash limestone handling
- Steam and condensate Louis Dreyfus Citrus (QF-PURPA)
- General Administration structures roads
- Clarifier, reverse osmosis, and water treatment
- Cooling Tower cooling water
- Switchyard and easement

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#### Site Data

Total Site Area:	216.5 Ac.	
Existing Zoning:	PUD	
Existing Future Land Use:	Indu	strial
Existing Use:	Power	Plant
Impervious Area:	77.9 Ac.	36%
Buildings / Cooling Towers / Operational Equipment:	3.5 Ac.	2%
Pavement:	11.25 Ac.	5%
Switchyard:	1.3 Ac.	1%
Shellrock Areas:	8.5 Ac.	4%
Railroad, Railroad Access & Service Areas:	9.0 Ac.	4%
Waste Water Basin:	8.2 Ac.	4%
Active Coal Storage:	5.0 Ac.	2%
Coal Storage Runoff Basin: Cooling Water Storage Pond:	3.0 Ac. 28.1 Ac.	1% 13%
Pervious Area: (Open Space)	138.6 Ac.	64%
Wetlands:	23.2 Ac.	11%
Upland Preserve Area:	59.0 Ac.	27%
Storm Water Management:	5.9 Ac.	3%
Other Open Areas:	50.5 Ac.	23%

# Lucido & Associates

Land Planning / Landscape Architecture 701 E Ocean Blvd., Stuari, Florida 34954 (772) 220-2100, Fax (772) 223-0220 100 Avenue A Sulte 2A, Fort Plerce, Fordia 34950 (772) 467-1301, Fax (772) 467-1303 27 North Thombon Avenue, Orlando, Florida 32603 (407) 869-9765

Key / Location:



### **Dismantlement approach:**

The site is a conventional pulverized coal plant with typical features, equipment and components consistent with industry standards for the era of its design and construction. As such normal means and methods will be employed to systematically approach the Dismantlement Work. If this proceeds the expectation is it will commence sometime in 2020 or perhaps sooner dependent upon obtaining a favorable agreement, approvals and generation load forecasts factoring in the economics. At a high level the following outlines the next level of equipment and components contained within the general features and as described it's expected "as-left" state following dismantlement.

### Settlement, cooling storage and storm water ponds

### These consist of:

- 2 unlined Storm water ponds 2.5 and 1.4 ac
- 1 lined Storm water pond 2.0 ac
- 1 dual Split layout Waste water Basin 8.2ac
- 1 lined Coal storage runoff Basin 3.0 ac
- 1 lined dual split cooling water storage 28.1\*2 = 56.2 ac total

Typically these are required and will be used during the dismantlement activities to store, retain, and manage the plant water as they are gradually decommissioned. As such they will be the last of the areas addressed during the execution. There is no planned effort for the unlined storm water ponds. These are expected to be clean of constituents of concern. The lined ponds will likely contain some constituents of concern and the plan will be to excavate and scrap clean these ponds and transport to local approved landfill sites, pumping the water to adjacent ponds as needed through approved filter

Indiantown Co-Gen – Budgetary Dismantlement cost estimate

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media and ultimately discharged into one of the current unlined storm water ponds. The most challenging will be the coal Storage Runoff Basin and the dual Split layout waste water basin 8.2ac. During my visit on June 6<sup>th</sup> the plant was proceeding with removal of the sediments in the Waste water basins and planned to implement cures for a number of leaks past the liner. The presences of constituents were initially detected via the monitoring wells. Upon detection the plant notified the appropriate regulatory bodies and initiated further action to locate the leak paths.

The plant is in the process of excavating and landfilling the sediments from the waste water basin and making liner repairs, validating the success and returning the pond to service. At the conclusion of our efforts each of the 60 mil liners would be removed and landfilled. The basins/ponds would essentially be left as is and expected to gradually reach and state similar to the unlined storm water management basins. For this to be successful the residual runoff into these areas must be confirmed clean. This will require all waste generation to have ceased, the coal and its impacted areas to be removed, lubricants, oils, large petroleum fuel storage, chemicals prior to liner removal and redirection of effluent.

The intake/discharge to the cooling water storage pond will be removed including the pumps, valves, associated piping, power supplies and foundations down to about 4 feet below grade. Assuming the concrete is of value it will either be sold to a recycler or used to fill site features and other voids created during the dismantling efforts.

### Wells

The site has two Lower Floridian aquifer wells which are available, but not in current use due to poor water quality and require proper abandonment.

There are currently four wells that back-up water can be withdrawn from in the event the water level in Taylor Creek drops below the pumping threshold during drought conditions. These wells are labeled IPW-1, IPW-2, ICW-3 and ICW-4.

- Well IPW-1 was drilled during facility construction (total depth of 1,340 ft. with an open hole from 495 ft. to depth). The well was originally drilled for ongoing dust control, irrigation and other miscellaneous plant uses during construction. In correspondence dated May 29, 1996, ICLP requested that this well be utilized as a permanent industrial well under general water use permit No. 43-00736-W.
- Well ICW-2 is a 10-inch diameter well that is drilled to 1,265 feet (open hole from 750 ft. to 1,265 ft.).
- Wells ICW-3 and ICW-4 are 15-inch diameter wells that are 1,350 feet deep (open hole from 750 ft. to 1,350 ft.).

The cost to properly abandon the two Lower Floridian wells is estimated at \$115,000. The cost to properly abandon these 4 Upper Floridian wells is estimated at \$160,000. The plan will be to remove the associated piping, foundations, and pumps and properly abandon them. The Lower Floridian back-up wells have not been utilized since at least 2000 due to the water being corrosive. Recommend properly

Indiantown Co-Gen – Budgetary Dismantlement cost estimate

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abandoning these two wells at a cost of \$57,500.00 per well. Total cost to abandon all six Floridian (upper and lower) wells is \$275,000.00.

### Preserved wetlands - uplands

There are a number of areas scattered throughout the site which will not require any significant effort other than to ensure they are no impacts to those areas. Adequate signage and markings will be placed and added to the site orientation to notify/inform the transient workers of its existence.

- 7 Wetland areas 2.7, 5.4, 3.1, 8.0, 3.2, 0.3 and 0.5 = 23.2 ac
- 8 upland preserve 17.0, 1.5, 0.6,17.6, 1.4, 3.8, 2.4, 1.9 plus others = 59.0 ac Presuming FPL were to retain the property an ongoing observation and documentation effort will be required until changed.

### **Coal handling and storage area**

This consists of an unloading structure, horizontal car vibrators, deep dump pit, conveyors to the coal storage barn – capable of approximately 30,000 T, 5.0 ac active lined coal storage capable of approximately 70,000T a run off basin, stacker – reclaimer, coal crushers and conveyors to the power block coal silos. The operational plan will be to "burn-down" the residual site coal to the extent possible. There is anticipated to be approximately 1,000T or less residual coal. This will either be trucked to another plant or most likely landfilled.

Upon successful removal of the residual coal the approximately 2 feet of sand liner covering the 5.0 ac active area (16,133 CY) will be removed and landfilled. Following this activity the liner will be removed and landfilled. The area under the liner will be sampled to determine cleanliness and compliance with environmental standards. Should an issue be discovered an action plan will be developed at that time.

The coal conveyors, crushers, and supporting apparatus will be removed and to the extent possible marketed on the grey market.

### **Fuel and limestone**

The coal is delivered via unit trains to the plant and unloaded into the coal unloading pit and as needed vibratory assistance added via the stationary equipment. The coal unloading pit is approximately 40 feet deep and several rail cars long and will require filling after the structures are removed. The intent presuming the concrete is acceptable is that the lower areas of the coal unloading pit will be breached to allow drainage and then filled with crushed concrete.

The limestone is delivered pre-pulverized and is transported pneumatically to its storage silo for use in the dry scrubber operations.

The Facility owns three unit-trains of 100 cars each and at full load requires approximately one train every 10 days. Lime is also received by rail.

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The rail beds, rails, point switches, and so forth will be left in place. An inspection will be conducted to ensure that there are no residual features or issues requiring or creating problems.

Natural gas or via two 30,000 gallon onsite propane tanks is used as a start-up fuel for the Main and the two auxiliary boilers with propane used as a back-up fuel.

Moisture%	>10%	
Ash%	<13.5%	
Sulfur	<1.2%	
BTU/Lb	>12,200 Btu/Lb	
Ash Softening (reducing F)	>2600F	
Volatile Matter	>30.5	
HGI	42-45	
Deliver size	50%<3″	

Typical coal: Most actuals are better than these values

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### **Power Block**

The Power Block is essentially the heart of the plant and consists of:

- Coal Silos, Pulverizers
- Limestone silo
- Primary, secondary, and induced draft fans
- Boiler
- Selected catalytic converter
- Air heater
- Dry scrubber, contact towers,
- High energy piping valves
- Feed water heaters, pumping, piping, valves
- Turbine Generator-exciter lubrication systems hydrogen cooling
- Transformers, cabling, Breakers, MCC, protection and controls
- Ash handling, sootblowers, Baghouse, blowers, fans, conveyors
- Open and closed cooling cooling tower, pumps, piping valves, Condenser
- Water treatment and waste management systems
- Fire detection, fire suppression, firefighting systems
- Foundations, slabs, piling, piers, retaining walls
- Utilities service compressed air instrument air, utility water
- Condensate and cooling water
- Cranes
- Stack

Please refer to the google map picture that follows for a slightly better perspective





FPL 001194 Indiantown Cogen 160154 Hearing Exhibits 084



There are 4 sets of Foster Wheeler MBF 22.5 coal pulverizers feeding coal to 2 opposed Foster wheeler low Nox burner firing decks with Over fire air for the initial stage of Nox control. The furnace has division walls and other supporting surfaces to produce the required steaming conditions. The air supply consists of individual Primary air fans for each pulverized with coal air discharge temperature controlled via a damper system. Two sets of secondary and induced fans are used to balance the boiler draft and provide the required air flow to the unit. The unit is capable of achieving full load on 3 pulverizes with the current fuel.

The gases from the furnace are treated further for Nox reduction with several differing layers of catalyst arranged in a 3 tier platform. The plant uses 29% aqueous ammonia vaporized to the injection point requiring a gas temperature of approximately 750F for optimal control. The catalyst will require involvement and proper disposal by a certified recycling contractor. This likely will be via the OEM as there is usually a method to recycle the materials for application and reselling to other SCR users.

The flue gas is passed through a dry scrubber utilizing 4 high speed atomizers and contact towers. From the discussion 3 of the 4 can be used to maintain the appropriate Sox control levels. Fly ash is collected via a reverse gas cleaning bag house and the boiler bottom ash is collected and conveyed to a storage locations via a wet bottom conveyor.

#### BOILER

Foster Wheeler opposed wall-fired pulverized coal boiler Design Pressure 2875 psig 2,500,000 MCR @1005 F Total furnace volume 218,366 ft3, furnace area 33,645 ft2 Furnace dimension: 134' H x 48' W x 40' D Steam Drum 66" diameter x 55'-7" long Superheater (SH)- heat recovery area (HRA), primary SH, division wall SH and finishing SH. Economizer- Two-stage (lower & upper horizontal banks) bare tube economizer. Ljunhstrom air preheater

#### TURBINE No. 270T261

GE Tandem-Compound, opposed flow high pressure-reheat section with double-flow low-18 stage pressure section 377 MW rating Mark V plus electro-hydraulic control (EHC) Inlet pressure 2400 psig @ 1000 F code type D-5 2.65" Hg backpressure TC2F-33.5 LSB 3600 rpm

Indiantown Co-Gen – Budgetary Dismantlement cost estimate

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GENERATOR NO. 280T261 Hydrogen cooled generator @ 65 psig GE ATB 2 pole 476,400 kVA, 3600 rpm, 24000 volts, 0.83 pf, 377MW

#### DESIGN DATA PER AUX BOILER (2)

Designed by Victory Energy Operations, LLC (VEO) Boiler has an 48" ID Upper (steam ) drum and a 24" ID lower (mud) drum Capacity- 136,000 lbs/hr saturated steam @ 250 psig (406 F) Design pressure 350 psig Primary fuel- Natural Gas Secondary fuel- Propane Total furnace volume- 2029 ft3 Total heating surface - 8,855 ft2 Furnace dimension 15'-5" H x 12'-2" W x 35' L Single burner (made by Todd Combustion) with 174 mmbtu/hr heat input

Indiantown Co-Gen – Budgetary Dismantlement cost estimate



Description - Building/Structure	Height	Width	Length
Boiler	216	166	179
Auxiliary Boilers	42	32	35
Turbine Building	85	166	120
Steam Lines (Export) and 20" dia. & 8" dia Stear	m 6" dia. Condensate Ret	turn from Caulkin	s Condensat
Condenser Tube Pull Space	30	25	35
Spray Dryer Absorbers	130	53 dia.	
Baghouse	90	96	178.5
J.D. Fans	18	6	27
Stack	495	46 dia.	
Lime Silo	120	36 dia.	
Auxiliary Stack	215 6.5 d	215 6.5 dia. (at base)	
Lime Slurry Plant	60	50	75
Fly Ash Storage Silo	230	55 dia.	
Recycle Ash Silo (Future)	90	16 dia.	
Bottom Ash Bunker	16	25	70
Aqueous Ammonia Storage Tank		11 dia	52
Propane Tanks		11 dia.	46.75
Diesel Tank		4	10
Coal unloading Building	57	47	62
Conveyor/Tubular Gallery		11 dia	1550
Crusher House	70	27	37
Electrical Equipment Room	12	36	30
Transfer Tower	96	30	36
Active Coal Storage	90	150	500
Emergency Stackout	25	106 dia.	
Outdoor Coal Storage	25	553	264
Coal Silo Bay & Conveyor Gallery	186	32	125
Fuel Oil Storage	20	60 dia.	
Tank (Future)			
Softener	15	68dia	
Gravity Filters	10	10	40
Clearwell	28	38 dia.	
Sludge Thickener	11	36 dia.	
Soda Ash Silo/Lime Silo	55160	12 dia.	
Circ Water Sodium	14	1 dia.	
Hypochlorite	TBD		
Condensate Storage tank		42 dia	
Water Storage Tank		30 dia	

The table below was extracted from PUD document and contains a relative list of site components

Indiantown Co-Gen – Budgetary Dismantlement cost estimate



Description - Building/Structure	Height	Width	Length
Neutralization Tank	18	22 dia	
Waste Water Equalization	30	27.5 dia	
Demin Acid/Caustic Storage Tanks		8 dia.	
Spray Dryer Dilution Water Tank	17	17.5 dia.	
Makeup Acid Storage Tank		5 dia.	9.5
Demineralizer Feed tank	23.5	20 dia.	
Circulating Water Pump	5	51	60
Intake Structure	TBD		
Water Treatment Building	23	50	102
Softener Building	20	50	74
Evaporator System Area	80	55	110
Administration Building warehouse	25	100	110
Main Transformer	25	varies	varies
Switchyards		160	320
Startup/Auxiliary	23	varies	varies
Transformer	TBD		
Cooling	13	14	47
Tower Electrical Equipment Module	TBD		
Administration	33	30	67
Building Extension	TBD		
Baghouse Electrical	13	14	42
Equipment Module	TBD		
Warehouse	33	60	120
Note: ALL DIMENSIONS ARE APPROXIMATE	1		

Indiantown Co-Gen – Budgetary Dismantlement cost estimate

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## **Cooling water Supply from Taylor Creek/Nubbin Slough**

A 20 x 15 x 20 foot deep pump house intake structure will require removal. A single approximately 19 mile, 24 inch HDPE Piping is depicted on COG - 7001 and runs parallel to State road 710 and is typically 18 feet from the CSXT railroad 2 to 4 feet deep.



### Steam and condensate - Louis Dreyfus Citrus (QF-PURPA)

The steam supply to Louis Dreyfus Citrus is targeted to ensure that the Facility meets QF status. The Facility is capable of supplying 210,000 lb/hr at two pressures of steam to Louis Dreyfus Citrus throughout the year. Cogeneration steam is extracted from two locations: up to 35,000 pounds per hour from the 6th feed water heater steam turbine extraction at 150 psig (currently the actual HP cogeneration steam usage ranges from 18,000 lb/h to 20,000 lb/h) and up to 175,000 pounds per hour from the 5th feedwater heater steam turbine extraction which is sent to a reboiler to produce 40-50 psig steam (actual LP steam supply ranges from 150,000 lb/h to 170,000 lb/h). The cogeneration supply is limited to the juicing season, which lasts from November to June.

Approximately 80% of the condensate water is returned and used in the reboiler system. The QF status is a regulatory requirement in order keep the power sales agreement in force. The plant reports that the cogeneration steam load is more consistent than it was in the past because Dreyfus shut down another facility and is doing all its juice production at the Indiantown facility. Steam is delivered at an annual rate of approximately 500,000,000 pounds. The station has backup/auxiliary boilers to supply steam if the plant is down. The low steam supply months are July, August, September, and October. If the Facility trips or is shutdown for a period of time, the auxiliary boilers are started to supply the required process steam to Louis Dreyfus Citrus. The Facility is expected to meet QF status as long as the fruit processing steam host continues to be a viable business.

Indiantown Co-Gen – Budgetary Dismantlement cost estimate



## Switchyard and easement

The FPL switch yard will be left as is with the exception that the existing plant string buss will be removed.

Indiantown Co-Gen – Budgetary Dismantlement cost estimate



# Historical and current metals pricing trends.

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### SteelBenchmarker<sup>TM</sup> Scrap Price

#### USA, delivered to steel plant

(AMM scrap price data, Jan, 2001 - Jan, 2007: SteelBenchmarker data begins Feb. 2007)



May 23, 2016

Indiantown Co-Gen – Budgetary Dismantlement cost estimate



#### **Execution strategy:**

Market and Sell all equipment on the site to the extent possible first as systems and secondary at the component level. The ability to minimize the final cost of this effort is highly dependent upon the need of other similar power producers and the timing of their need. This will be in parallel and followed by dismantlement activities using optimal methods, the value of the materials that can be scrapped, and the distance to the end users. We would actively auction or Bid the entire site as an EPC approach to support us in this effort. This has demonstrated to provide us with the lower risk and highest market value. Our experience stems from Cape, Rivera, Port Everglades, Cutler, Sanford, Turkey Point unit 2, Putnam and numerous ancillary supporting systems in the NEE portfolio.

#### **Duration - Schedule:**

Recommend this effort take 24-36 months from notice to proceed to complete. Although this can be substantially shorter; time has shown that the longer durations typically result in a lower end cost. This works in two ways, it allows us to locate viable buyers in need, or time the salvage market to recover the highest salvage value attainable.

Indiantown Co-Gen – Budgetary Dismantlement cost estimate



## **Estimated quantities**

Item/Description	Qty	Units
Steel		
Boiler	7,500	tons
Preheater	600	tons
Dust Collector	1,200	tons
Turbine Generator	750	tons
Condenser	400	tons
Tanks & Silos	1,000	tons
Ducts	350	tons
Feed Water Heaters	200	tons
Mechanical Equipment	900	tons
Misc. Structure	3,320	tons
Pipe	500	tons
Conveyors	1,000	tons
Buildings	100	tons
Coal Storage Bldg.	1,200	tons
Other - Misc	600	tons
Concrete		
Stack	6,000	tons
Slabs	7,000	tons
Foundations	25,000	tons
Other - Misc		
Asphalt	1,000	tons
HDPE Pipe 19 Miles 2-4' below grade	100,000	feet
Backfill basements	2,000	CY
Cooling Tower	1,200,000	Cu ft
Pond Liners	3,200,000	Sq ft
Wells	6	Ea
Project OH, contractor SG&A, Profit, Contingency, other Misc	1	Ea

Indiantown Co-Gen – Budgetary Dismantlement cost estimate



#### **Budgetary cost:**

The recommended cost of this effort is:

A P90 cost of \$9,940,000 this is considered to be conservative due to the current timing and that the plant will continue to operate for several more years using more of its equipment/component life, cost of escalation of the resource pool, volatility of the salvage market, and the potential for whole sale the equipment on the international market. There is of course equal potential for upside or down side. Dependent upon the level of upside there is potential that the marketability of the large portion of plant could result in a much reduced cost.

Or as another consideration the scrap salvage markets have trended downward since peaking in 2008-2016 time period. The majority of the returns are in the steel, cooper, stainless steel areas. Scrap Steel has somewhat returned from its recent lows late last year to the higher level due to the reduction in inventory and the same trend is expected yet has not materialized yet for the other metals. Additionally, since this is a budgetary effort and not a great deal of effort was put forth to estimate with a high level of accuracy the amount and distribution of the specific type materials thus the resulting weights in a favorable category may increase providing further savings.

#### Basis of Estimate: Current Day June 2016

Exclusions:

- Limited foundation removal to 4 feet below grade and concrete is adequate for fill or recycling.
- No fill brought on site
- No hazardous waste removal e.g. asbestos, lead Paint, mercury or other metals contamination
- Removal of the coal, limestone, ash inventories cleaning of silos
- Environmental remediation or extensive sampling initiatives
- All equipment on site is included in the dismantlement either as salvage or potential cost offset
- Includes all mobile equipment
- All small waste has been gathered up in a central location by plant personnel
- All stored lubricants have been brought to a central location by plant personnel
- Excludes plant personnel salary, incentives, benefits and other discharge costs
- Excludes licenses termination costs, and early contract terminations costs e.g. landfilling, operations management and maintenance services, existing capital parts contracts, rail car leases, fuels, limestone, and etcetera.
- Dismantlement may be achieved by any optimal means
- Excludes standard utilities costs e.g. sewage, potable water, networks
- Excludes guard services we will lock gates

Indiantown Co-Gen – Budgetary Dismantlement cost estimate



## **Overall Site Picture**



Indiantown Co-Gen – Budgetary Dismantlement cost estimate





Indiantown Co-Gen – Budgetary Dismantlement cost estimate



# **Coal Yard Picture**



Indiantown Co-Gen – Budgetary Dismantlement cost estimate



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Indiantown Co-Gen – Budgetary Dismantlement cost estimate



## **Exhibits**

Exhibit A ICLP Site Survey Exhibit B ICLP Master Plan

Indiantown Co-Gen – Budgetary Dismantlement cost estimate



# Exhibit A

Indiantown Co-Gen – Budgetary Dismantlement cost estimate





#### 160154 Hearing Exhibits 102



# Exhibit **B**

Indiantown Co-Gen – Budgetary Dismantlement cost estimate



160154 Hearing Exhibits 104



# Attachments

# **Attachment 1 Photos**

Indiantown Co-Gen – Budgetary Dismantlement cost estimate



Indiantown Cogen



Indiantown Cogen 160154 Hearing Exhibits 107





Indiantown Cogen 160154 Hearing Exhibits 108



FPL 001219 Indiantown Cogen 160154 Hearing Exhibits 109



Indiantown Cogen 160154 Hearing Exhibits 110



Indiantown Cogen 160154 Hearing Exhibits 111



Indiantown Cogen 160154 Hearing Exhibits 112



Indiantown Cogen 160154 Hearing Exhibits 113



Indiantown Cogen 160154 Hearing Exhibits 114



Indiantown Cogen 160154 Hearing Exhibits 115





Indiantown Cogen 160154 Hearing Exhibits 116



160154 Hearing Exhibits 117



Indiantown Cogen 160154 Hearing Exhibits 118



FPL 001229 Indiantown Cogen 160154 Hearing Exhibits 119



Indiantown Cogen 160154 Hearing Exhibits 120





Indiantown Cogen 160154 Hearing Exhibits 121


Indiantown Cogen 160154 Hearing Exhibits 122



Indiantown Cogen 160154 Hearing Exhibits 123



Indiantown Cogen 160154 Hearing Exhibits 124



Indiantown Cogen 160154 Hearing Exhibits 125



# 17

# FPL's Responses to FIPUG's First Set of Interrogatories (Nos. 1-9 and 12)

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 160154-EI EXHIBIT: 17 PARTY: STAFF (DIRECT) DESCRIPTION: Barrett (8, 9)Fuentes (9) Hartman (1-7, 9, 12)

160154 Hearing Exhibits 127

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**QUESTION**:

When did FPL first realize that the Purchased Power Agreement (PPA) between FPL and ICL was unfavorable?

# **RESPONSE**:

By 2008, FPL was aware that the contract was unfavorable. FPL's response to FIPUG's First Set of Interrogatories No. 2 outlines FPL's actions in response to this recognition.

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### **QUESTION**:

What specific steps did FPL take to mitigate the high costs being incurred under the PPA and when were each these steps taken?

### **RESPONSE**:

In 2008, FPL opened discussions with Goldman Sachs, owner of both the Indiantown and Cedar Bay facilities about the potential to mitigate the high costs under both contracts. Goldman Sachs' priority at that time was to first negotiate any changes to Cedar Bay, then work on Indiantown. Related discussions with Goldman Sachs regarding the mitigation of high costs being incurred under the PPAs continued through early 2010.

In January 2013, FPL had discussions with Indiantown Cogeneration Limited Partnership (ICL) after ownership of the ICL Facility was transferred from Goldman Sachs to Energy Investors Fund. These discussions involved exploring the ability of the Facility to burn additional natural gas in order to reduce coal consumption, which would thereby lower the energy cost of the unit.

In early 2014, FPL approached ICL to discuss the potential for buying out the PPA in order to mitigate its high costs.

In late 2015, Energy Investors Fund (now the upstream owner of Calypso Energy Holdings and affiliated with Ares Management, LLC) called to compliment FPL regarding the closing of the Cedar Bay purchase. During that discussion, the potential for a similar deal was broached, ultimately leading to the current transaction.

Please also see FPL's response to FIPUG's First Set of Interrogatories No. 3.

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## **QUESTION**:

What was the outcome of each of the steps taken by FPL to mitigate the impact of the PPA prior to a decision to enter into the Purchase and Sale agreement (Agreement)?

### **RESPONSE:**

The parties were unable to reach an agreement in the 2008 negotiations with respect to Cedar Bay or ICL; and since Goldman Sachs was better incented to complete a Cedar Bay transaction over an ICL transaction (because Goldman Sachs lost more money at Cedar Bay whenever the facility operated), any ICL-related discussions were terminated.

The potential to burn additional natural gas, discussed in 2013, would have reduced the energy price, but also would have resulted in the loss of QF status since the efficiency standards could not have been met. Therefore, the discussions on this topic were terminated at that time.

After some very preliminary discussions in 2014, Energy Investors Fund, the owner of ICL, was not interested in a buyout of the PPA due to the potential problems with the non-callable bonds.

The late 2015 discussion with Energy Investors Fund led to the current ICL Transaction.

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## **QUESTION**:

Did FPL seek to renegotiate the terms of the PPA prior to commencing discussions that ultimately resulted in the Agreement? If so, please document when the renegotiations occurred and the results of each renegotiation. If not, please explain why not.

### **RESPONSE**:

Please see FPL's responses to FIPUG's First Set of Interrogatories Nos. 1, 2, and 3. The 2008 and 2013 discussions were attempts to modify the PPA. The 2014 discussions were an attempt to buyout and cancel the PPA.

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# **<u>QUESTION</u>**:

When did the discussions that ultimately led to the Agreement commence and who initiated them?

### **RESPONSE**:

The discussions regarding the current transaction started in October 2015 during a phone call between Energy Investor's Fund and FPL. Energy Investor's Fund initiated the call.

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### **QUESTION**:

Has FPL determined that the Agreement would not violate FERC's market power tests? Please explain why or why not.

### **RESPONSE:**

Yes. As discussed in Section V.A. of FPL's application for FERC authorization under Section 203 of the Federal Power Act ("FPA") (see Docket No. EC16-148-000), the transaction proposed by the Agreement raises no market power concerns. As explained in the affidavit submitted by Julie Solomon, see Attachment No. 1 to this response (Attachment 6 of the Section 203 application), since FPL already contractually controls the output of the ICL Facility under an existing long-term power purchase agreement, consummation of the proposed transaction will merely change ownership of the ICL Facility and have no effect on horizontal market power concentrations in the relevant geographic market. For this reason, FERC authorization of the proposed transaction does not require submission of the market power tests set forth in "Appendix A" of FERC's regulations for FPA Section 203 applications. Likewise, since the transaction does not raise any vertical market power concerns.

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### **ATTACHMENT 6**

Affidavit of Julie R Solomon

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# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

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Florida Power & Light Company

Docket No. EC16-\_\_\_-000

### AFFIDAVIT OF JULIE R. SOLOMON

### INTRODUCTION

My name is Julie R. Solomon. I am a Managing Director of Navigant Consulting ("Navigant"). My business address is 1200 19<sup>th</sup> Street, NW, Suite 700, Washington, DC 20036. A large portion of my consulting activities involves electric utility industry restructuring and the transition from regulation to competition. I have been involved extensively in consulting on market power issues concerning mergers, other asset transactions and market rate applications for the past 15 years. I frequently file testimony and affidavits before the Federal Energy Regulatory Commission ("FERC" or "Commission") in connection with electric utility mergers, the purchase and sale of jurisdictional assets, applications for market-based rates, and triennial updates. My resume is included as Exhibit JRS-1.

I have been asked by counsel to evaluate the potential competitive impact on relevant electricity markets of a transaction under which Florida Power & Light Company ("FPL" or "Applicant") will acquire the Indiantown Cogeneration L.P. ("ICL") facility ("ICL Facility" or "the Facility") from its upstream owner, Calypso Energy Holdings LLC (the "Transaction"). The ICL Facility is a 330 MW<sup>1</sup> coal-fired cogeneration facility, which is a Qualifying Facility ("QF") under the Public Utility Regulatory Policies Act ("PURPA"), located in Indiantown, Florida.

My analysis considers the potential horizontal market power effects arising from the combination of generation assets owned by FPL and ICL that theoretically could create or enhance

Ratings referenced here are based on summer ratings reported in the Energy Information Administration Form EIA-860, <u>http://www.eia.gov/electricity/data/eia860/</u>. They may not precisely match ratings used for other purposes.

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FPL's ability to increase prices in relevant wholesale electricity markets, focusing on the FPL balancing authority area ("FPL BAA") where FPL owns generation and where the ICL Facility is located.

### ANALYSIS AND CONCLUSION

The proposed Transaction clearly will not have an adverse effect on horizontal competition in any relevant market.

The key relevant fact here is that all of the capacity and electricity output of the ICL Facility has been committed under a long-term power purchase agreement ("PPA") with FPL since 1990.<sup>2</sup> The PPA between FPL and ICL, which currently extends to December 2025, also is being acquired by FPL as part of the Transaction. This long-term purchase of the output of the ICL Facility has, as appropriate, been reflected as an FPL resource in prior market power analyses I have conducted on behalf of FPL, in the context of both Section 203 and Section 205 filings.<sup>3</sup> It also has been included in the company's annual Ten Year Power Plant Site Plan filed with the Florida Public Service Commission ("FPSC") as an FPL resource that is used to meet its load and reserve margin requirements.<sup>4</sup>

The Commission typically treats capacity subject to a long-term agreement as attributable to the buyer. In conducting a Delivered Price Test ("DPT") such as would be required under the

<sup>&</sup>lt;sup>2</sup> Steam output is sold to the steam host, Louis Dreyfus Citrus, Inc., which owns a fruit processing and juice concentrating operation.

<sup>&</sup>lt;sup>3</sup> See, for example, my testimony in connection with Florida Power & Light Company, Docket No. ER16-628-001, December 23, 2015 and March 21, 2016, Florida Power & Light Company, 155 FERC ¶ 61,192 (2016) (marketbased rate application); Florida Power & Light Company, Docket No. ER10-1852-008, June 30, 2014 (triennial market power update for the Southeast Region); and Florida Power & Light Company, Docket No. EC13-91, April 12, 2013 (section 203 application for acquisition of facilities owned by City of Vero Beach, Florida). See, also, Asset Appendix for PPAs, River Bend Solar, LLC, Docket No. ER16-1913, June 10, 2016 (market-based rate application for FPL affiliate).

<sup>&</sup>lt;sup>4</sup> See Florida Power & Light Company, 2016-2025 Ten Year Power Plant Site Plan, April 1, 2016, (Table I.B.1: Purchase Power Resources by Contract (as of December 31, 2015)), <u>http://www.psc.state.fl.us/Files/PDF/Utilities/Electricgas/TenYearSitePlans/2016/Florida%20Pow%20and%20</u> <u>Light.pdf</u>.

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Revised Filing Requirements Under Part 33 of the Commission's Regulations,<sup>5</sup> the regulations indicate that "generating capacity...must be adjusted by subtracting capacity committed under long-term firm sales contracts and adding capacity acquired under long-term firm purchase contracts (*i.e.*, contracts with a remaining commitment of more than one year)."<sup>6</sup> While consideration is given to who "controls" the generation output, the Commission typically has considered long-term power purchase agreements as a firm commitment in evaluating market power.<sup>7</sup> Here, this Transaction clearly involves a change of ownership of the ICL Facility but no change in the disposition of its output or its treatment as a resource controlled by FPL.<sup>8</sup> As such, there is no horizontal effect of the Transaction, and no need to submit an Appendix A analysis under the Commission's regulations.<sup>9</sup>

<sup>6</sup> 18 C.F.R. § 33.3(c)(4)(i)(A).

<sup>&</sup>lt;sup>5</sup> Revised Filing Requirements Under Part 33 of the Commission's Regulations, FERC Stats. & Regs. §31,111 (2000) ("Order No. 642"), order on reh'g, 94 FERC §61,289 (2001).

<sup>&</sup>lt;sup>7</sup> See, e.g., The AES Corporation, 137 FERC ¶ 61,122 at P 24 (2011) (indicating it is proper to consider "contractual commitments, as consistent with the Commission's requirements for calculating supplier's presence in the market, as found in 18 C.F.R. § 33.3(c)(4)(i)(A)"). See also Milford Wind Corridor Phase II, LLC and Milford II Holdings, LLC, 135 FERC ¶ 62,060, at 64,149 (2011); Front Range Power Co., 133 FERC ¶ 62,179, at 64,390 (2010); NaturEner Montana Wind Energy, LLC, 125 FERC ¶ 62,078, at 64,347 (2008).

<sup>&</sup>lt;sup>8</sup> The facts here are similar to *Florida Power & Light Company*, 152 FERC §61,013 at P 19 (2015), a transaction in which FPL was acquiring a generating unit that was already under long-term contract to FPL ("We find that the Proposed Transaction will not have an adverse effect on horizontal competition. FPL has a long-term Power Purchase Agreement for the entire output of the Facility and thus already contractually controls the output of the Facility. While the Proposed Transaction will result in a change in ownership of the Facility, there will be no change in the disposition of its output.") (footnotes omitted), citing to *Cleco Power LLC*, 144 FERC §62,162 (2013) (finding no impact on concentration where purchaser of facility already controlled its output); *Pub. Serv. Co. of Colorado*, 132 FERC § 62,032 (2010); *Black Hills Wyoming. Inc.*, 123 FERC § 62,236 (2008); *Virginia Elec. & Power Co.*, 110 FERC § 62,077 (2005).

<sup>&</sup>lt;sup>9</sup> Florida Power & Light Company, 152 FERC § 61,013 at n. 30 ("[W]e agree with FPL that there is also no need for an Appendix A analysis, also referred to as a Delivered Price Test or Competitive Screen Analysis. See Supplemental Merger Policy Statement, FERC Stats. & Regs. § 31,253 at n.57 (no need to perform complete Appendix A analysis where overlap in combined relevant geographic market is de minimis)."

Florida Power & Light Company Docket No. 160154-E1 FIPUG's First Set of Interrogatories Interrogatory No. 6 Attachment NEXhibit JRS-1 Page 5 of 17

# Julie R. Solomon

Julie R. Solomon Managing Director

Navigant Consulting Suite 700 1200 19th Street NW Washington, DC 20036 Tel: 202-481-8492 Fax: 202 973-2401

NAVIGANT

### julie.solomon@navigant.com

#### **Professional History**

- Managing Director, Navigant Consulting - 2010-Present
- Vice President, Charles River Associates - 2001-2010
- Senior Vice President, Putnam, Hayes and Bartlett, Inc. and PHB Hagler Bailly, Inc., Washington, DC -1986-2000
- Economist, Economic Consulting Services, Inc., Washington, DC -1979-1986
- Economist, U.S. Department of Labor, Washington, DC - 1976-1979

#### Education

- M.B.A. Finance, The Wharton School University of Pennsylvania
- B.A. Economics, Connecticut College

#### Testimony

 Written testimony provided in more than 150 regulatory proceedings Julie Solomon is a Managing Director at Navigant Consulting, Inc. in the Energy Practice's Power Systems, Markets & Pricing group. She has more than 20 years of consulting experience, specializing in the areas of regulatory and utility economics, financial analysis and business valuation. Ms. Solomon has participated in analysis of proposed regulatory reforms, supply options and utility industry restructuring in the gas and electric industries. She also has advised utility clients in corporate strategy and corporate restructuring, and consulted to legal counsel on a variety of litigation and regulatory matters, including antitrust litigation and contract disputes. She has filed testimony in numerous proceedings before the Federal Energy Regulatory Commission. Much of her current practice focuses on regulatory and market power issues concerning mergers and acquisitions and compliance filings in the electricity market.

- » Advised clients in the electric and gas utility industry on competition issues, including the impact of mergers on competition. Directed a large number of analytic studies relating to obtaining merger approval from regulatory authorities.
- » Advised clients in the electric utility industry on restructuring strategies, including potential mergers and acquisitions, functional unbundling and cost savings.
- Consulted in the electric and gas utility industries in a variety of regulatory and competition matters, including rate proceedings, prudence reviews, proposed regulatory reforms, privatization and restructuring

analysis of supply options, privatization and restructuring.

- » Advised utility and non-utility clients on many aspects of the competitive independent power industry, including strategic and financial consulting assignments.
- » Consulted legal counsel on a variety of litigation matters, including the development of expert testimony on liability issues and the calculation of damages in a variety of industries.
- » Provided strategic and economic analyses for clients in trade regulatory proceedings such as dumping and subsidies.
- » Provided financial and business valuation analyses in a number of transactions, including fair market value for taxation purposes and valuation of family-owned businesses.

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# NAVIGANT

Julie R. Solomon

### **Professional Experience**

### Electric and Gas Utilities

### Mergers and Acquisitions (Market Power and Competition Issues)

- » Advised clients and conducted analytic studies in connection with a large number of major electric and electric-gas mergers and asset transactions of regulated companies. Provided testimony to FERC for a number of these types of transactions.
- » Advised clients and provided confidential pre-screening analyses for potential mergers and acquisitions.
- » Conducted numerous analytic studies in connection with FERC market-based rate applications and compliance filings for electricity sellers. Provided testimony to FERC for a number of these types of transactions.
- » Conducted numerous analytic studies in connection with FERC market-based rate applications and compliance filings for gas storage facilities. Provided testimony to FERC for a number of these types of transactions.

### Utility Restructuring and Stranded Cost

- » Conducted analytic studies and provided litigation support in connection with state stranded cost proceedings in Ohio (Cincinnati Gas & Electric and Dayton Power & Light); West Virginia (Monongahela Power and Potomac Edison); Maryland (Potomac Edison) and Pennsylvania (West Penn Power).
- » Provided analytic support evaluating the benefits of Public Service of Colorado's proposed DC transmission line between Colorado and Kansas in support of a regulatory proceeding.
- » Assisted in studies relating to privatization of the electricity industry in the United Kingdom, including development of a computer model to simulate electricity dispatch and project future prices, capacity needs and utility revenues under various scenarios. During temporary assignment to London office.
- » Participated in antitrust litigation involving a utility and a cogenerator, including preparation of an expert report on liability and damage issues, preparation of expert witnesses for deposition, and assistance in preparation for depositions of opposing expert and in-house witnesses.
- » Assisted in the valuation of the interests of several firms in various cogeneration projects for the purpose of combining these interests into a new entity or selling interests to third parties.
- » Analyzed the financial feasibility and viability of a large number of cogeneration projects, assisted in the preparation of presentations and filings and presented testimony to the relevant public utility commission. Ms. Solomon also assisted in the development of a PC-based financial model to analyze various cogeneration projects.

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### Julie R. Solomon

- » Participated in a study to analyze the financial effects of a variety of restructuring options for a utility, including transfer and/or sale of assets and subsequent sale-leasebacks, and debt restructuring alternatives. In addition, she developed a PC-based financial model with applications to utility restructuring plans.
- » Provided litigation support in major utility rate proceedings, including assisting in the preparation of responses to interrogatories and data requests, preparation of company and outside expert witnesses for deposition and hearings, and assistance in the deposition and crossexamination of intervenor witnesses.
- » Participated in proceedings involving regulation of an oil pipeline, which included evaluating the business risks faced by the company.

### **Business Valuation**

NAVIGANT

- » Participated in a valuation study involving the fair market value of a privately held company for purposes of an IRS proceeding.
- » Participated in a valuation study in a divorce proceeding, where the assets being valued included a privately held business.
- » Participated in two strategic engagements that developed business plans and identified potential acquisition candidates for the client.
- » Provided advice to a client concerning the benefits and potential risks of developing a partnership with a competitor.

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# NAVIGANT

### Julie R. Solomon

### Testimony or Expert Report Experience (2013-July 2016)

- » Supplemental Affidavit on behalf of Dynegy Inc. et al., Docket Nos. EC16-93 and -94, July 8, 2016.
- » Affidavit on behalf of Arlington Valley, LLC et al., Docket No. ER10-2756 et al., market-based rate triennial filing, June 30, 2016.
- » Affidavit on behalf of Sundevil Holdings et al., Docket No. ER16-2107 et al., market-based rate triennial filing, June 30, 2016.
- » Affidavit (with Matthew E. Arenchild) on behalf of BHE Northwest Companies, Docket No. ER10-3246 et al., market-based rate triennial filing, June 30, 2016.
- » Affidavit on behalf of BHE Renewables, LLC, Docket No. ER13-520 et al., market-based rate triennial filing, June 30, 2016.
- » Affidavit on behalf of Atlantic Renewable Projects II LLC et al., Docket No. ER10-2822 et al., market-based rate triennial filing, June 30, 2016.
- » Affidavit on behalf of the Calpine MBR Sellers, Docket No. ER10-2042 et al., market-based rate triennial filing, June 30, 2016.
- » Affidavit on behalf of the NorthWestern Corporation, Docket No. ER11-1858, market-based rate triennial filing, June 29, 2016.
- » Affidavit on behalf of the ArcLight Energy Marketing et al., LLC, Docket No. ER16-2014 et al., market-based rate triennial filing, June 24, 2016.
- » Affidavit on behalf of River Bend Solar, LLC Docket No. ER16-1913, application for market-based rates, June 10, 2016.
- » Affidavit (with Matthew E. Arenchild) on behalf of Nevada Power Company et al., Docket No. EC16-130, application for authorization of disposition of jurisdictional facilities, June 7, 2016.
- » Affidavit on behalf of Apple Energy, LLC, Docket No. ER16-1887, application for market-based rates, June 6, 2016.
- » Affidavit on behalf of Marshall Solar, LLC, Docket No. ER16-1872, application for market-based rates, June 3, 2016.
- » Affidavit on behalf of the Dominion Companies, Docket No. ER13-2109 et al., notice of change in status filing, May 25, 2016.
- » Affidavit on behalf of Eastern Shore Solar LLC, Docket No. ER16-1750, application for marketbased rates, May 20, 2016.
- » Affidavit on behalf of Roswell Solar LLC and Chaves County Solar, LLC, Docket No. ER16-1440 and ER16-1672, applications for market-based rates, May 20, 2016 and May 17, 2016.
- » Affidavit on behalf of Exelon MBR Entities, Docket No. ER10-2997 et al., notice of change in status filing, April 22, 2016.

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# NAVIGANT

### Julie R. Solomon

- » Affidavit on behalf of Live Oak Solar LLC, White Oak Solar, LLC, and White Pine Solar, LLC, Docket No. ER16-1354, ER16-1293 and ER16-1277, applications for market-based rates, April 6, 2016, March 30, 2016 and March 25, 2016.
- » Affidavit on behalf of Atlas Power Finance, LLC, Dynegy Inc., Energy Capital Partners III, LLC, and GDF SUEZ Energy North America, Inc., Docket No. EC16-93, application for authorization of disposition of jurisdictional facilities, March 25, 2016.
- » Affidavit on behalf of Dynegy Inc. and Energy Capital Partners III, LLC, Docket No. EC16-94, application for authorization of disposition of jurisdictional facilities, March 25, 2016.
- » Affidavit on behalf of Grande Prairie Wind, LLC, Docket No. ER16-1258, application for marketbased rates, March 22, 2016.
- » Affidavit on behalf of Florida Power & Light Company, Docket No. ER16-628-001, application for market-based rates, March 21, 2016.
- » Affidavit on behalf of Essential Power, LLC, Docket No. EC16-82, application for authorization of disposition of jurisdictional facilities, February 29, 2016.
- » Affidavit on behalf of Duke Energy Florida, LLC, Docket No. EC16-69, application for authorization of disposition of jurisdictional facilities, February 10, 2016.
- » Affidavit on behalf of Nassau Energy, LLC, Docket No. ER16-806, application for market-based rates, January 21, 2016.
- » Affidavit on behalf of ECP MBR Sellers, Docket No. ER16-72, market-based rate triennial filing, December 31, 2015.
- » Affidavit on behalf of SDG&E Sellers, Docket No. ER14-474, market-based rate triennial filing, December 30, 2015.
- » Affidavit on behalf of New Harquahala Generating Company, Docket No. ER15-2013, marketbased rate triennial filing, December 30, 2015.
- » Affidavit on behalf of Exelon SPP Entities, Docket No. ER14-474, market-based rate triennial filing, December 29, 2015.
- » Affidavit on behalf of Florida Power & Light Company, Docket No. ER16-628-000, application for market-based rates, December 23, 2015.
- » Affidavit on behalf of ENGIE Portfolio Management, LLC et al, Docket No. ER16-581 et al., application for market-based rates, December 18, 2015.
- » Affidavit on behalf of Marshall Wind Energy, LLC, Docket No. ER16-438, market-based rate triennial filing, December 18, 2015.
- » Affidavit on behalf of Marshall Wind Energy, LLC, Docket No. ER16-438, application for marketbased rates, December 1, 2015.
- » Affidavit on behalf of Calpine Granite Holdings, LLC, Docket No. EC16-19, application for authorization of disposition of jurisdictional facilities, October 27, 2015.

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# NAVIGANT

### Julie R. Solomon

- » Affidavit on behalf of Berkshire Hathaway, Inc., Docket No. EC16-10, application for authorization of disposition of jurisdictional facilities, October 8, 2015.
- » Affidavit on behalf of Panda Patriot, LLC, Docket No. ER15-2472, application for market-based rates, September 29, 2015.
- » Affidavit on behalf of Talen Energy Corporation, Docket No. EC14-112, Motion to Amend Mitigation Plan, September 25, 2015.
- » Affidavit on behalf of BHE MBR Sellers, Docket No. ER12-162, notification of change in status, September 25, 2015.
- » Affidavit on behalf of Talen Energy Corporation, Docket No. EC14-112, Motion to Amend Mitigation Plan, September 8, 2015.
- » Affidavit on behalf of BHE MBR Sellers, Docket No. ER13-521, response to Commission Staff Deficiency Letter and Request for Additional Information, September 24, 2015.
- » Affidavit on behalf of BHE MBR Sellers, Docket No. ER13-521, supplemental filing, September 8, 2015.
- » Affidavit on behalf of GDF SUEZ MBR Sellers, Docket No. ER14-1699, notice of change, August 31, 2015.
- » Affidavits on behalf of PacifiCorp and NV Energy, Docket No. ER15-2283, EIM analysis, July 27, 2015.
- » Affidavit on behalf of NorthWestern Corporation and Beethoven Wind, LLC, Docket No. EC15-176, application for authorization of disposition of jurisdictional facilities, July 24 2015.
- » Affidavit on behalf of MidAmerican Energy Services, LLC, Docket No. ER15-2211, application for market-based rates, July 24, 2015.
- » Affidavit on behalf of The Empire District Electric Company, Docket No. ER10-2738, marketbased rate triennial filing, June 30, 2015.
- » Affidavit on behalf of Exelon MBR Sellers, Docket No. ER10-2172 *et al.*, market-based rate triennial filing, June 30, 2015.
- » Affidavit on behalf of Oklahoma Gas & Electric, Docket No. ER11-2105, market-based rate triennial filing, June 30, 2015.
- » Affidavit on behalf of LG&E Energy Marketing, Inc., Docket No. ER10-1714, market-based rate triennial filing, June 30, 2015.
- » Affidavit on behalf of Westar Energy, Inc., Docket No. ER10-2507, market-based rate triennial filing, June 29, 2015.
- » Affidavit on behalf of the Alabama Power Company, *et al.*, Docket No. EL15-39, *et al.*, response to show cause order, June 26, 2015.
- » Affidavit on behalf of Wisconsin Electric Power Company, Docket No. ER15-2019 market-based rate triennial filing, June 26, 2015.

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# NAVIGANT

## Julie R. Solomon

- » Affidavit on behalf of Panda Liberty LLC, Docket No. ER15-1841, market-based rate application, June 2, 2015.
- » Affidavit on behalf of CCI U.S. Asset Holdings LLC, Docket No. EC15-108, application for authorization of disposition of jurisdictional facilities, March 31, 2015.
- » Affidavit on behalf of Florida Power & Light Company, Docket No. EC15-102, application for authorization of disposition of jurisdictional facilities, March 23, 2015.
- » Affidavit on behalf of Osprey Energy Center, LLC, Docket No. EC15-96, application for authorization of disposition of jurisdictional facilities, March 13, 2015.
- » Affidavit on behalf of the Berkshire Hathaway Energy MBR Sellers, Docket No. EL15-22, *et al.*, response to show cause order, February 9, 2015.
- » Affidavit on behalf of ECP MBR Sellers, Docket No. ER13-2477, notice of change in status, January 20, 2015.
- » Affidavit on behalf of NorthWestern Corporation, Docket No. ER11-1859, market-based rate triennial filing, December 30, 2014.
- » Affidavit on behalf of Exelon, Docket No. ER12-2178, market-based rate triennial filing, December 23, 2014.
- » Affidavit on behalf of Dynegy Inc., Docket No. ER14-1569, market-based rate triennial filing, December 23, 2014.
- » Affidavit on behalf of Northern Indiana Public Service, Docket No. ER10-1781, market-based rate triennial filing, December 23, 2014.
- » Affidavit on behalf of AES Corp, Docket No. ER10-3415, market-based rate triennial filing, December 22, 2014.
- » Affidavit on behalf of Ameren Illinois Company, Union Electric Company, and AmerenEnergy Medina Valley Cogen, L.L.C. Docket No. ER10-1119, ER10-1123, and ER10-1103, market-based rate triennial filing, December 19, 2014.
- » Affidavit on behalf of Duke Energy MBR Sellers, Docket No. ER10-1325, market-based rate triennial filing, December 19, 2014.
- » Affidavit on behalf of Duke Energy Progress, Inc., Docket No. EC15-9, application for authorization of disposition of jurisdictional facilities, October 10, 2014.
- » Comments of Julie R. Solomon and Matthew E. Arenchild regarding NOPR on market-based rate authority, Docket No. RM14-14, September 23, 2014.
- » Affidavit on behalf of Dynegy Resource I, LLC, Docket No. EC14-141, application for authorization of disposition of jurisdictional facilities, September 11, 2014.
- » Affidavit on behalf of Dynegy Inc., Docket No. EC14-140, application for authorization of disposition of jurisdictional facilities, September 11, 2014.
- » Affidavit on behalf of Calpine Fore River Energy Center, LLC, Docket No. EC14-135, application for authorization of disposition of jurisdictional facilities, September 5, 2014.

Florida Power & Light Company Docket No. 160154-EI FIPUG's First Set of Interrogatories Interrogatory No. 6 Attachment No. 1 Page 12 of 17

# NAVIGANT

### Julie R. Solomon

- » Affidavit on behalf of Seiling Wind, LLC; Seiling Wind II, LLC; Mammoth Plains Wind Project, LLC; and Palo Duro Wind Energy, LLC, Docket No. ER14-2707-10, market-based rate applications, August 26, 2014.
- » Affidavit on behalf of ECP MBR Sellers, Docket No. ER10-2302, notification of change in status, August 18, 2014.
- » Affidavit on behalf of Millennium Power Partners, L.P., Docket No. ER10-3286, notification of change in status, August 4, 2014.
- » Affidavit on behalf of Granite Acquisition, Inc., Docket No. EC14-125, application for authorization of disposition of jurisdictional facilities, August 15, 2014.
- » Testimony (Direct and Rebuttal), on behalf of Duke Energy Florida, Inc., Docket No. 140111-EI before the Florida Public Service Commission, Petition for Determination of Cost Effective Generation Alternative to Meet Need Prior to 2018, May 27, 2014 and August 5, 2014.
- » Affidavit on behalf of LS Power Development, LLC, Docket No. ER13-2318, notification of change in status, August 4, 2014.
- » Supplemental Affidavit on behalf of Powerex Corp., Docket No. ER11-2664, market-based rate triennial filing, July 25, 2014.
- » Supplemental Affidavit on behalf of Berkshire Hathaway Energy, Docket No. ER13-1266, notification of change in status, August 17, 2014.
- » Affidavit on behalf of RJS Power Holdings LLC and PPL Corporation, Docket No. EC14-112, application for authorization of disposition of jurisdictional facilities, July 15, 2014.
- » Affidavit on behalf of South Carolina Electric & Gas Company, Docket No. ER10-2498, marketbased rate triennial filing, July 14, 2014.
- » Affidavit on behalf of Consumers Energy Company, Docket No. EC14-110, application for authorization of disposition of jurisdictional facilities, July 1, 2014.
- » Affidavit on behalf of J.P. Morgan Sellers, Docket No. ER10-2331, market-based rate triennial filing, June 30, 2014.
- » Affidavit on behalf of Duke Energy MBR Sellers, Docket No. ER10-1325, market-based rate triennial filing, June 30, 2014.
- » Affidavit on behalf of PPL Southeast Companies, Docket No. ER10-1511, market-based rate triennial filing, June 30, 2014.
- » Affidavit on behalf of NextEra Companies, Docket No. ER10-1852, market-based rate triennial filing, June 30, 2014.
- » Affidavit on behalf of NextEra Companies, Docket No. ER10-1838, market-based rate triennial filing, June 30, 2014.
- » Affidavit on behalf of Brookfield Companies, Docket No. ER11-2292, market-based rate triennial filing, June 30, 2014.

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# NAVIGANT

### Julie R. Solomon

- » Affidavit on behalf of Calpine Corp, Docket No. ER10-1944, market-based rate triennial filing, June 30, 2014.
- » Affidavit on behalf of LS Northeast MBR Sellers, Docket No. ER13-2318, market-based rate triennial filing, June 30, 2014.
- » Affidavit on behalf of GDF SUEZ Northeast MBR Sellers, Docket No. ER10-2670, market-based rate triennial filing, June 30, 2014.
- » Affidavit on behalf of Safe Harbor Water Power Corp., Docket No. ER13-395, market-based rate triennial filing, June 27, 2014.
- » Affidavit on behalf of ECP MBR Sellers, Docket No. ER13-2477, market-based rate triennial filing, June 23, 2014.
- » Affidavit on behalf of Rockland Sellers, Docket No. ER12-1436, market-based rate triennial filing and notification of change in status, June 19, 2014.
- » Affidavit on behalf of Exelon Corp and Pepco Holdings, Inc., Docket No. EC14-96, application for authorization of disposition of jurisdictional facilities, May 30, 2014.
- » Affidavit on behalf of Nevada Power Co and Nevada Sun-Peak Limited Partnership, Docket No. EC14-83, application for authorization of disposition of jurisdictional facilities, May 2, 2014.
- » Affidavit on behalf of Nevada Power Co and Las Vegas Cogeneration Limited Partnership, Docket No. EC14-84, application for authorization of disposition of jurisdictional facilities, May 2, 2014.
- » Affidavit on behalf of NatGen Southeast Power LLC, Docket No. EC14-81, application for authorization of disposition of jurisdictional facilities, April 28, 2014.
- » Surrebuttal Testimony on Behalf of Commonwealth Edison Company, Illinois Commerce Commission, Application for a Certificate of Public Convenience and Necessity, No. 13-0657, April 9, 2014.
- » Affidavit on behalf of KMC Thermo, LLC, Docket No. ER14-1468, market-based rate application, March 12, 2014.
- » Affidavit on behalf of Trailstone Power, LLC, Docket No. ER14-1439, market-based rate application, March 6, 2014.
- » Affidavit on behalf of MACH Gen, LLC et al., Docket No. EC14-61, application for authorization of disposition of jurisdictional facilities, March 4, 2014.
- » Affidavit on behalf of MidAmerican Geothermal, LLC, et al., Docket No. EC14-59, application for authorization of disposition of jurisdictional facilities, February 20, 2014.
- » Affidavit on behalf of Green Mountain Power Corporation, Docket No. ER11-1933, market-based rate triennial filing, February 7, 2014.
- » Affidavit on behalf of NorthWestern Corporation, et al., Docket No. EC14-41, application for authorization of disposition of jurisdictional facilities, January 10, 2014.

Florida Power & Light Company Docket No. 160154-EI FIPUG's First Set of Interrogatories Interrogatory No. 6 Attachment No. 1 Page 14 of 17

# NAVIGANT

Julie R. Solomon

- » Affidavit on behalf of NorthWestern Corporation, Docket No. ER11-1858, notification of change in status, January 10, 2014.
- » Affidavit on behalf of MidAmerican Energy, Docket No. ER10-2475, notification of change in status, January 2, 2014.
- » Affidavit on behalf of Powerex Corp., Docket No. ER11-2664, market-based rate triennial filing, December 31, 2013.
- » Affidavit on behalf of TransAlta, Docket No. ER10-2847, market-based rate triennial filing, December 31, 2013.
- » Affidavit on behalf of Duquesne Light Company, Docket No. ER10-1910, market-based rate triennial filing, December 31, 2013.
- » Affidavit on behalf of Constellation Energy Nuclear Group, Docket No. ER10-2179, market-based rate triennial filing, December 30, 2013.
- » Affidavit on behalf of Exelon, Docket No. ER12-2178, market-based rate triennial filing, December 30, 2013.
- » Affidavit on behalf of Dominion, Docket No. ER13-434, market-based rate triennial filing, December 30, 2013.
- » Affidavit on behalf of Brookfield Companies, Docket No. ER10-2895, market-based rate triennial filing, December 30, 2013.
- » Affidavit on behalf of Oklahoma Gas & Electric, Docket No. ER14-882, notification of change in status/tariff filing, December 30, 2013.
- » Affidavit on behalf of AES Corp, Docket No. ER10-3415, market-based rate triennial filing, December 26, 2013.
- » Affidavit on behalf of JPMorgan, Docket No. ER10-2331, market-based rate triennial filing, December 23, 2013.
- » Affidavit on behalf of Northeast Utilities, Docket No. ER10-1801, market-based rate triennial filing, December 20, 2013.
- » Affidavit on behalf of Iberdrola, Docket No. ER10-2822, market-based rate triennial filing, December 20, 2013.
- » Affidavit on behalf of PHI, Docket No. ER10-2997, market-based rate triennial filing, December 20, 2013.
- » Affidavit on behalf of Essential Power, Docket No. ER12-952, market-based rate triennial filing, December 20, 2013.
- » Affidavit on behalf of Empire District, Docket No. ER14-793, notification of change in status/tariff filing, December 20, 2013.
- » Affidavit on behalf of Westar Energy, Inc., Docket No. ER14-724, notification of change in status/tariff filing, December 19, 2013.

Florida Power & Light Company Docket No. 160154-E1 FIPUG's First Set of Interrogatories Interrogatory No. 6 Attachment No. 1 Page 15 of 17

### Julie R. Solomon

» Affidavit on behalf of Alpha Gen Power, LLC, Docket No. ER14-630, market-based rate application, December 16, 2013.

NAVIGANT

- » Affidavit on behalf of Black Bear Hydro Partners, LLC, Docket No. EC14-28, application for authorization of disposition of jurisdictional facilities, November 14, 2013.
- » Affidavit on behalf of Sierra Pacific Power Company, Docket No. ER10-2474, notification of change in status, November 4, 2013.
- » Affidavit on behalf of ECP, Docket No. ER11-3859, notification of change in status, September 30, 2013.
- » Affidavit on behalf of Steele Flats Wind Project, LLC, Docket No. ER13-2474, market-based rate application, September 27, 2013.
- » Affidavit on behalf of Tuscola Wind II, LLC, Docket No. ER13-2458, market-based rate application, September 26, 2013.
- » Affidavit on behalf of Pheasant Run Wind, LLC and Pheasant Run Wind II, LLC, Docket Nos. ER13-2461-2, market-based rate applications, September 26, 2013.
- » Affidavit on behalf of TPF II and USPG Holdings, LLC, Docket No. EC13-154, application for authorization of disposition of jurisdictional facilities, September 25, 2013.
- » Affidavit on behalf of Seneca Generation, LLC et al., Docket Nos. ER13-2316-9, market-based rate applications, September 4, 2013.
- » Affidavit on behalf of Seneca Generation, LLC et al., Docket No. EC13-143, application for authorization of disposition of jurisdictional facilities, September 4, 2013.
- » Supplemental Affidavit on behalf of MidAmerican Energy (Silver Merger Sub, Inc.), Docket No. EC13-128, application for authorization of disposition of jurisdictional facilities, August 17, 2013.
- » Affidavit on behalf of Desert Sunlight 250, LLC and Desert Sunlight 300, LLC, Docket Nos. ER13-1991-2, market-based rate applications, July 17, 2013.
- » Affidavit on behalf of MidAmerican Energy (Silver Merger Sub, Inc.), Docket No. EC13-128, application for authorization of disposition of jurisdictional facilities, July 12, 2013.
- » Affidavit on behalf of Calpine Southwest MBR Sellers, Docket No. ER10-1942, market-based rate triennial filing, July 1, 2013.
- » Affidavit on behalf of NextEra Companies, Docket No. ER10-1847, market-based rate triennial filing, July 1, 2013.
- » Affidavit on behalf of Wayzata Entities, Docket No. ER10-1777, market-based rate triennial filing, July 1, 2013.
- » Affidavit on behalf of AES MBR Affiliates, Docket No. ER10-3415, market-based rate triennial filing, July 1, 2013.
- » Affidavit on behalf of Sierra Pacific Power Company, et al. under ER10-2474, Docket No. ER10-24744, market-based rate triennial filing, July 1, 2013.

Florida Power & Light Company Docket No. 160154-E1 FIPUG's First Set of Interrogatories Interrogatory No. 6 Attachment No. 1 Page 16 of 17

### Julie R. Solomon

» Affidavit on behalf of NorthWestern Corporation, Docket No. ER11-1858, market-based rate triennial filing, July 1, 2013.

NAVIGANT

- » Affidavit on behalf of SGOC Southwest MBR Sellers, Docket No. ER10-2864, market-based rate triennial filing, June 28, 2013.
- » Affidavit on behalf of GWF Energy LLC, et al. Docket No. ER10-3301, market-based rate triennial filing, June 28, 2013.
- » Affidavit on behalf of NV Energy, Inc., application for approval of internal reorganization, Docket No. EC13-113, May 31, 2013.
- » Affidavit on behalf of Midwest Generation, LLC, Docket No. EC13-103, application for authorization of disposition of jurisdictional facilities, May 6, 2013.
- » Affidavit of behalf of Nevada Power Company (with Matthew E. Arenchild), Docket No. EC13-96, application for authorization of disposition of jurisdictional facilities, April 17, 2013.
- » Affidavit of behalf of Dynegy Inc., Docket No. EC13-93, application for authorization of disposition of jurisdictional facilities, April 16, 2013.
- » Application on behalf of Florida Power & Light Company, Docket No. EC13-91, application for authorization of disposition of jurisdictional facilities, April 12, 2013.
- » Affidavit on behalf of Blythe Energy LLC, et al., Docket No. EC13-89, application for authorization of disposition of jurisdictional facilities, April 2, 2013.
- » Affidavit on behalf of New Harquahala Generating Company, LLC, Docket No. ER10-3310, market-based rate triennial filing, March 29, 2013.
- » Affidavit on behalf of Dominion Energy Brayton Point, et al., Docket No. EC13-82, application for authorization of disposition of jurisdictional facilities, March 21, 2013.
- » Affidavit on behalf of Duke Energy Carolinas, LLC et al., Docket No. ER10-2566, et al., notice of change in status, January 29, 2013.
- » Affidavit on behalf of CCI Roseton LLC, Docket No. ER13-773, market-based rate application, January 17, 2013.
- » Affidavit on behalf of CCI Roseton LLC, Docket No. EC13-63, application for authorization of disposition of jurisdictional facilities, January 16, 2013.

Florida Power & Light Company Docket No. 160154-EI **FIPUG's First Set of Interrogatories Interrogatory No. 6** Attachment No. 1 Page 17 of 17

# UNITED STATES OF AMERICA

### **BEFORE THE**

### FEDERAL ENERGY REGULATORY COMMISSION

Florida Power & Light Company

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EC16-- -000

### AFFIDAVIT

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**District of Columbia** 

JULIE R. SOLOMON being duly sworn, deposes and states: that she prepared the Affidavit and Exhibits of Julie R. Solomon and that the statements contained therein and the Exhibits attached hereto are true and correct to the best of her knowledge and belief.

Julie R. Solomon

SUBSCRIBED AND SWORN TO BEFORE ME, this 1/2/ day of July 2016

Notary Public, District of Columbia

Print Name: <u>Janet P. Cashion</u> My Commission Expires: <u>JUIY 14</u>, 2017



Florida Power & Light Company Docket No. 160154-EI FIPUG's First Set of Interrogatories Interrogatory No. 7 Page 1 of 1

# **QUESTION**:

What is the expected useful life of the Indiantown facility:

- a. When the facility was first planned and designed?
- b. When the PPA was negotiated and implemented?
- c. Based on the most recent depreciation study?

### **RESPONSE**:

- a. FPL has no such knowledge.
- b. FPL has no such knowledge.
- c. The expected useful life of the Indiantown facility was not part of the most recent FPL depreciation study. However, FPL currently uses a 50 year useful life for coal fired generation. The justification and support for this assumption is extensively discussed in the rebuttal testimony of witnesses Allis and Ferguson in Docket Number 160021-EI. Although their testimony directly addresses the life of Scherer 4 and SJRPP, ICL is of a similar vintage and technology so the expected life would be the same.

Florida Power & Light Company Docket No. 160154-EI FIPUG's First Set of Interrogatories Interrogatory No. 8 Page 1 of 1

### **QUESTION**:

With respect to the land value of the Indiantown:

- a. How does the land value compare with the corresponding land values of FPL power plants?
- b. How does the land value compare with the assessed valuation by state and local authorities?

### **RESPONSE**:

a. The book values of land at FPL power plants are not relevant points of comparison because the recorded book value might vary substantially based on location, size and date of purchase.

However, as a simplistic means of comparison, the Martin County Property Appraiser has assessed FPL's Martin plant at a taxable value (as distinct from market value) of \$35,112 per acre, which is comparable to the County's assessed value for the ICL Facility which is \$32,380 per acre.

b. According to the website of the Martin County Property Appraiser's Office, the Indiantown land is assessed at a value of \$6,914,900, whereas Duff & Phelps has estimated the fair market value to be \$8,500,000.

Florida Power & Light Company Docket No. 160154-EI FIPUG's First Set of Interrogatories Interrogatory No. 9 Page 1 of 2

## QUESTION: Referring to Exhibit TLH-4:

- a. Please identify all assumptions used to project the operating expenses.
- b. Please explain how any changes how Indiantown is operated (i.e., increased cycling, operating at a lower minimum capacity as described in Mr. Hartman's testimony) are reflected in the projected operating expenses.
- c. Why is the Asset Retirement Obligation being amortized over five years rather than over the remaining life of the plant (through 2025)?
- d. What is the basis for assuming a 5.21% cost of incremental FPL debt?
- e. What is the basis for assuming an 11.5% after tax cost of equity?
- f. How were the projected "FPL System Impact" amounts determined?
- g. How was the 8.15% discount rate determined?
- h. How does the 8.15% discount rate compare with the discount rate used to determine the value of capacity provided by QFs in FPL's COG rates?

# RESPONSE:

- a. Operating expenses as shown in TLH-4 include projected Operations & Maintenance costs, as well as the expensed portion of the existing rail lease. Operations & Maintenance are based on the 2016 operating budget for ICL, adjusted for reduced dispatch and FPL's operations experience.
- b. Variable O&M costs were reduced proportionately to planned dispatch for the ICL Facility.
- c. The economic analysis assumes that the project will be decommissioned in December 2020. Therefore, the Asset Retirement Obligation is amortized over four years (or 48 months) from January 2017 to December 2020.
- d. The 5.21% incremental cost of debt is based on a 2016 update to FPL's standard methodology for estimating the incremental cost of debt for new projects. This study is based on an average of one-year historic and three-year forecasted bond rates as reported by "Blue Chip Financial Forecasts", plus applicable underwriting costs. The same methodology was used to determine the 5.05% cost of debt assumption for FPL's Cedar Bay filing in Docket No. 150075-EI.
- e. Please refer to FPL's response to Staff's First Set of Interrogatories No. 22.
- f. The projected "FPL System Impact" was determined with the use of FPL's production costing model UPLAN. The UPLAN model projects the variable costs of FPL's system. These variable costs are fuel costs, variable O&M and startup costs, and the costs of air emissions. Two UPLAN simulations were performed. One simulation assumed that ICL is operated through the end of its contract, based on current operating practices which reflect the requirements of the contract. The second simulation was based on the proposed ICL Transaction; in 2017 and 2018, ICL will be limited to operate only in those circumstances

Florida Power & Light Company Docket No. 160154-EI FIPUG's First Set of Interrogatories Interrogatory No. 9 Page 2 of 2

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when it is needed to meet system reliability and will not be available after 2018. The difference between the two simulations resulted in the "FPL System Impact" values.

- g. The 8.15% discount rate is a weighted average cost of capital, calculated as 59.62% equity ratio \* 11.5% cost of equity + 40.38% debt ratio \* 5.21% cost of debt \* (1-38.575% tax rate).
- h. FPL's COG rates were determined using a 7.5% discount rate based on a 10.5% cost of equity and 5.05% cost of debt. The COG rates will be updated in 2017 to reflect the results of FPL's pending rate case.

Florida Power & Light Company Docket No. 160154-EI FIPUG's First Set of Interrogatories Interrogatory No. 12 Page 1 of 1

### **QUESTION:**

How will the QF status of the facility be maintained after the Agreement is executed? Please cite any legal precedents relied upon for the response.

### RESPONSE:

As a cogeneration facility, the ICL Facility must meet all of the requirements of 18 C.F.R. §§ 292.203(b) and 292.205 for operation, efficiency, and use of energy output, and be certified as a QF pursuant to 18 C.F.R. § 292.207. The key requirement for the ICL Facility to retain QF status is maintaining an adequate use of useful thermal energy. The Facility has two potential uses for the thermal output that ICL may employ. First, it can sell steam to the adjacent citrus processing facility. Second, it has a process for removing phosphate from Taylor Creek, which flows into Lake Okeechobee. (See Attachment No. 1 for the Facility FERC Form 556).

Florida Public Service Commission Rule 25-17.080 (3) (d), F.A.C. requires that a cogeneration facility not be owned by a person primarily engaged in the generation or sale of electricity. This criterion is met if less than 50% of the equity interest is owned by a utility. However, FERC Order 671, issued February 2, 2006, removed all such ownership restrictions from QF status requirements. Since 16 U.S.C. 823a-3(f)(1) requires each state within one year of the issuance of PURPA rules (or revisions such as found in FERC Order 671) to implement such rules, the FERC requirements govern. In addition, Cedar Bay represents a current example of a similar facility that has maintained its QF status following acquisition by an entity engaged in the generation or sale of electricity.

Florida Power & Light Company Docket No. 160154-E1 FIPUG's First Set of Interrogatories Interrogatory No. 12 Attachment No. 1 Page 1 of 20

# FEDERAL ENERGY REGULATORY COMMISSION

OMB Control # 1902-0075 Expiration 05/31/2016

WASHINGTON, DC

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

## General

Questions about completing this form should be sent to Form556@ferc.gov. Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, www.ferc.gov/QF. The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

### Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. *See* 18 C.F.R. § 292.203.

# How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button ()) for assistance, or contact Commission staff at Form556@ferc.gov.

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at Form556@ferc.gov to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

# How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

## Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification for comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 (DataClearance@ferc.gov); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 (oira\_submission@omb.eop.gov). Include the Control No. 1902-0075 in any correspondence.

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FERC Form 556

Page 2 - Instructions

# Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at www.ferc.gov/QF and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
Electric	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self- certification of your facility (cogeneration or small power production) as a QF.
	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self- recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do <i>not</i> use this filing type to report new changes to a facility or its ownership; rather, use a self- recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a) (3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.
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### FERC Form 556

### Page 3 - Instructions

# Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

(1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or (2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at <u>www.ferc.gov/QF</u> and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

# Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at <a href="http://www.ferc.gov/QF">www.ferc.gov/QF</a> and clicking the Notice Requirements link.

# What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification by the applicant itself that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

# Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

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### FERC Form 556

Page 4 - Instructions

# Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at www.ferc.gov/QF and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at http://earth.google.com), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

# Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See www.ferc.gov/help/filing-guide/file-ceii.asp for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

**Non-Public**: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines ] indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.

**Public (redacted)**: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This public version of the applicants's Form 556 contains all data <u>except</u> for data from the lines indicated below, which has been redacted.

Privileged: Indicate below which lines of your form contain data for which you are seeking privileged treatment

Critical Energy Infrastructure Information (CEII): Indicate below which lines of your form contain data for which you are seeking CEII status

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from www.ferc.gov/QF. To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

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# FEDERAL ENERGY REGULATORY COMMISSION

OMB Control # 1902-0075 Expiration 5/31/2016

WASHINGTON, DC

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

	a <b>ddress</b> Management, LLC s River Place, 63 Kendrick St	reet	
1c City Needham		1d State/provi	nce
<b>1e</b> Postal code 02494	<b>1f</b> Country (if not United States)		<b>1g Telephone number</b> 781–292–7000
1h Has the instant	facility ever previously been certified as a	QF? Yes 🛛 N	lo 🗌
1i If yes, provide th	e docket number of the last known QF fili	ng pertaining to th	nis facility: QF 90 - 214 - 016
1j Under which cer	tification process is the applicant making	this filing?	
Notice of self- (see note belo		fee; see "Filing Fee	mmission certification (requires filing " section on page 3)
QF status. A no notice of self-ce	self-certification is a notice by the applicar otice of self-certification does not establish ertification to verify compliance. See the " e 3 for more information.	a proceeding, and	d the Commission does not review a
1k What type(s) of	QF status is the applicant seeking for its fa	cility? (check all th	nat apply)
Qualifying sm	all power production facility status 🛛 🔀	Qualifying cogene	eration facility status
	ose and expected effective date(s) of this	-	
	ication; facility expected to be installed by		nd to begin operation on
	a previously certified facility to be effective (s) of change(s) below, and describe chan	and the second sec	laneous section starting on page 19)
🗌 Name cha	nge and/or other administrative change(s)	)	
🗌 Change in	ownership		
🛛 Change(s)	affecting plant equipment, fuel use, powe	r production capa	city and/or cogeneration thermal output
<ul> <li>Supplement or correction to a previous filing submitted on (describe the supplement or correction in the Miscellaneous section starting on page 19)</li> </ul>			
	<ul> <li>Im If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19.</li> </ul>		
previously g	facility complies with the Commission's QI ranted by the Commission in an order dat Miscellaneous section starting on page 1	ted	virtue of a waiver of certain regulations (specify any other relevant waiver
	facility would comply with the Commissio y with this application is granted	n's QF requiremen	ts if a petition for waiver submitted
employmen	facility complies with the Commission's re t of unique or innovative technologies no tration of compliance via this form difficul	t contemplated by	the structure of this form, that make

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FE	RC Form 556		Page 6 - All Facilities	
	2a Name of contact person		2b Telephone number	
	Jessica Friedman		202-298-1800	
Contact Information	2c       Which of the following describes to the following des	yee, owner or partner of a ed with the applicant auth presentative authorized to if applicant is an individua nt, check here and skip to	onship to the applicant? (check one) applicant authorized to represent the applicant orized to represent the applicant on this matter represent the applicant on this matter I, check here and skip to line 2e)	6
	2h Postal code 20007	2i Country (if not United S	States)	
Facility Identification and Location	then you must specify the latitud the following formula to convert degrees + (minutes/60) + (second	ne dicated that no street add e and longitude coordinat to decimal degrees from d ds/3600). See the "Geogra r facility in line 3b, then sp 	Iress exists for your facility by checking the box in line 3b, tes of the facility in degrees (to three decimal places). Use degrees, minutes and seconds: decimal degrees = aphic Coordinates" section on page 4 for help. If you ecifying the geographic coordinates below is optional. Latitude North (+) South (-) degrees	6
Transacting Utilities	<ul> <li>Identify the electric utilities that are constrained.</li> <li>4a Identify utility interconnecting with Florida Power &amp; Light Constrained.</li> <li>4b Identify utilities providing wheelither and the service of the service</li></ul>	th the facility mpany ng service or check here if seful electric power output mpany mentary power, backup po	none 🛛	6

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Full legal names of direct owners	Electric u hold comp Yes X	ling	If Yes, % equity interest
		No 🗔	
	—		100 9
	Yes	No 🗌	4
	Yes 🗌	No 🗌	9
	Yes 🗌	No 🗌	
	Yes 🗌	No 🗌	90
	Yes	No 🗌	9
	Yes 🗌	No 🗌	qr
	Yes 🗌	No 🗌	
	Yes 🗌	No 🗌	
	Yes 🗌	No 🗌	
other, total percent equity interest reported may exceed 100 percent.) eck here if no such upstream owners exist.		subsidia	% equity
	S		interest
			20 %
			35 %
·			55 % 65 %
			100 %
IF Calypso, LLC			80%
IF Calypso II, LLC			20 %
nited States Power Fund III, L.P.			808
nited States Power Fund III, L.P. nited States Power Fund IV, L.P.			80 %
	Check here and continue in the Miscellaneous section starting on page 19 if addities the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) fined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding compares 62(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also pruity interest in the facility held by such owners. (Note that, because upstream owner other, total percent equity interest reported may exceed 100 percent.) eck here if no such upstream owners exist. Full legal names of electric utility or holding company upstream owner indiantown Project Investment Partnership, L.P. Dyan Enterprises LLC haleia, LLC alm Power LLC allypso Energy Holdings, LLC	Yes	Yes       No         Yes       Yes         Yes       Yes         <

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FE	RC Form 556		Page 8 - All Facilities	
	<b>6a</b> Describe the primary energy input: (check	one main category and, if applicable, o	one subcategory)	
	Biomass (specify)	Renewable resources (specify)	Geothermal	
	🔲 Landfill gas	Hydro power - river	🔀 Fossil fuel (specify)	
	Manure digester gas	Hydro power - tidal	🖾 Coal (not waste)	
	Municipal solid waste	Hydro power - wave	Fuel oil/diesel	
	Sewage digester gas	🔲 Solar - photovoltaic	Natural gas (not waste)	
	U Wood	Solar - thermal	Other fossil fuel	
	Other biomass (describe on pag	e 19) 🔲 Wind	(describe on page 19)	
	Waste (specify type below in line 6b)	Other renewable resource (describe on page 19)	Other (describe on page 19)	
	<b>6b</b> If you specified "waste" as the primary en	ergy input in line 6a, indicate the type o	f waste fuel used: (check one)	
	🔲 Waste fuel listed in 18 C.F.R. § 292.20	)2(b) (specify one of the following)		
	Anthracite culm produced price	or to July 23, 1985		
	Anthracite refuse that has an a a a short as a content of 45 percent or m	verage heat content of 6,000 Btu or less nore	s per pound and has an average	
	Bituminous coal refuse that ha average ash content of 25 per	is an average heat content of 9,500 Btu cent or more	per pound or less and has an	
nput	determined to be waste by the (BLM) or that is located on nor	coal produced on Federal lands or on le 2 United States Department of the Interi 1-Federal or non-Indian lands outside of atter coal is an extension of that determ	ior's Bureau of Land Management BLM's jurisdiction, provided that	
Energy Input	BLM or that is located on non-	ral lands or on Indian lands that has bee Federal or non-Indian lands outside of I r is an extension of that determined by f	BLM's jurisdiction, provided that	
ш	Lignite produced in associatio as a result of such a mining op	n with the production of montan wax a eration	nd lignite that becomes exposed	
	Gaseous fuels (except natural)	gas and synthetic gas from coal) (descri	be on page 19)	
		oil wells (describe on page 19 how the l gas; include with your filing any mater 400)		
	Materials that a government a	gency has certified for disposal by com	oustion (describe on page 19)	
	Heat from exothermic reaction	ns (describe on page 19) 🛛 🗌 R	esidual heat (describe on page 19)	
	🗌 Used rubber tires 🗌 P	astic materials 🛛 🗌 Refinery off	-gas 🔲 Petroleum coke	
	facility industry (describe in the Misc	ttle or no commercial value and exists ir cellaneous section starting on page 19; i nce in the absence of the qualifying faci	nclude a discussion of the fuel's	
	6c Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).			
		3 37	Percentage of total	
	Fuel Natural gas	· ·	annual energy input	
	Oil-based fuels	27, 741, 463 Btu/h	<u> </u>	
	Coal	<u>0 Btu/h</u>		
		1,130,111,257 Btu/h	97.6 %	

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(	ndicate the maximum gross and maximum net electric power production capacity of the facility at t delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/ ines 7b through 7e are negligible, enter zero for those lines.		d ir
	<b>7a</b> The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	377,000	kW
	7b Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal nost), do not include any power consumed by the non-power production activities in your reported parasitic station power.	25,000	kW
1	7c Electrical losses in interconnection transformers		kW
	7d Electrical losses in AC/DC conversion equipment, if any		kW
0	<b>7e</b> Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility		kW
1	<b>7f</b> Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	25,000.0	k٧
1	<b>7g</b> Maximum net power production capacity = 7a - 7f	352,000.0	
	capacities for mechanical output, electrical output, or steam generation of the identified equipment of equipment identified, clearly indicate how many pieces of that type of equipment are include		
	<ul> <li>capacities for mechanical output, electrical output, or steam generation of the identified equipment of equipment identified, clearly indicate how many pieces of that type of equipment are include which components are normally operating or normally in standby mode. Provide a description of components operate as a system. Applicants for cogeneration facilities do not need to describe systems that are clearly depicted on and easily understandable from a cogeneration facility's attached balance diagram; however, such applicants should provide any necessary description need the sequential operation of the facility depicted in their mass and heat balance diagram. If addit needed, continue in the Miscellaneous section starting on page 19.</li> <li>The facility consists of a single conventional boiler that is fired pulverized coal, a single extraction condensing turbine generator, a support systems. The facility uses a dry scrubbing system for the resulture oxides, and utilizes selective catalytic reduction to reduce of nitrogen oxides. Use of natural gas (item 6c) is confined to faciliand stabilization and is consistent with the application filed in Do QF90-214-002 (1997); see 79 FERC 62,024. The facility is interconresult.</li> </ul>	hent. For each pied of in the plant, and of how the operations of ached mass and ed to understand cional space is with and associate removal of the emission ility start-to ocket No.	d ed

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FERC Form 5	56
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Page 10 - Small Power Production

# Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

	Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) <i>as amended by</i> Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).	
	<b>8a</b> Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest.	
Ce	Check here if no such facilities exist.	2
tification of Complian with Size Limitations	Facility locationRoot docket #Maximum net power(city or county, state)(if any)Common owner(s)production capacity	
oml tati	1) QF kW	
imi I	2) QF kW	
e Li	3) QF kW	
Siz	Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed	
Cer	<ul> <li>8b The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act?</li> <li>Yes (continue at line 8c below)</li> <li>No (skip lines 8c through 8e)</li> <li>8c Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994? Yes No</li> <li>8d Did construction of the facility commence on or before December 31, 1999? Yes No</li> <li>8e If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction? Yes No</li> <li>If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.</li> </ul>	-
of Compliance Requirements	Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.	
	9a Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel:	
on o Use	Applicant certifies that the facility will use fossil fuels <i>exclusively</i> for the purposes listed above.	
Certification o with Fuel Use F	<ul> <li>9b Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually:</li> <li>Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25</li> <li>percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.</li> </ul>	-

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FERC Form 556

Page 11 - Cogeneration Facilities

# Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal ī. energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a toppingcycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production. 10a What type(s) of cogeneration technology does the facility represent? (check all that apply) Z X Topping-cycle cogeneration Bottoming-cycle cogeneration 10b To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements. Check to certify compliance with indicated requirement Requirement Diagram must show orientation within system piping and/or ducts of all prime movers, General Cogeneration heat recovery steam generators, boilers, electric generators, and condensers (as  $\boxtimes$ applicable), as well as any other primary equipment relevant to the cogeneration process Information Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f,  $\boxtimes$ 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation. Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All X specifications of fuel inputs should use lower heating values.  $\boxtimes$ Diagram must specify average gross electric output in kW or MW for each generator. Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power  $\boxtimes$ generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output. At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is liquid only (no vapor at any  $\boxtimes$ point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/ (lb\*R) or 4.195 kJ/(kg\*K). Diagram must specify working fluid flow conditions at input to and output from each  $\boxtimes$ steam turbine or other expansion turbine or back-pressure turbine. Diagram must specify working fluid flow conditions at delivery to and return from each  $\boxtimes$ thermal application.  $\boxtimes$ Diagram must specify working fluid flow conditions at make-up water inputs.

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FERC Fo	orm 556 Page 12 - Cogeneration Facilities
	EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.
	11a Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes 🛛 No 🗌 🥑
	11b Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes No
se	If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.
ntal Us acilitie	<b>11c</b> With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?
n Fa	Yes (continue at line 11d below)
EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities	No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be Subject to to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.
s for oger	<b>11d</b> Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?
ement from C	Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.
Requir	No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.
05 IV C	<b>11e</b> Will electric energy from the facility be sold pursuant to section 210 of PURPA?
ct 20 nerg	Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.
EPAc of Er	No. Applicant certifies that energy will <i>not</i> be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) <i>before</i> selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.
	<b>11f</b> Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?
	Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.
	No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.

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FERC F	orm 556	Page 13 - Cogeneration Facilities
	Lines 11g through 11k below guide the applicant through the process of demo requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 2 lines on this page if the instructions on the previous page direct you to do so.	292.205(d)(2). Only respond to the
	18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mec cogeneration facility is used fundamentally for industrial, commercial, resident not intended fundamentally for sale to an electric utility, taking into account te and variable thermal energy requirements, as well as state laws applicable to sa qualifying facility to its host facility. If you were directed on the previous page then your facility is an EPAct 2005 cogeneration facility that is subject to this "fu	tial or institutional purposes and is echnological, efficiency, economic, sales of electric energy from a to respond to the items on this page,
e inued)	The Commission's regulations provide a two-pronged approach to demonstrat requirements for fundamental use of the facility's energy output. First, the Com § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate com Under the fundamental use test, a facility is considered to comply with 18 C.F.R of the facility's total annual energy output (including electrical, thermal, chemic used for industrial, commercial, residential or institutional purposes.	mmission has established in 18 C.F.R. pliance with 18 C.F.R. § 292.205(d)(2). R. § 292.205(d)(2) if at least 50 percent
EPAct 2005 Requirements for Fundamental Use ergy Output from Cogeneration Facilities (contir	Second, an applicant for a facility that does not pass the fundamental use test r of and support for its contention that the facility nonetheless meets the require chemical and mechanical output of an EPAct 2005 cogeneration facility is used commercial, residential or institutional purposes and is not intended fundament taking into account technological, efficiency, economic, and variable thermal e laws applicable to sales of electric energy from a qualifying facility to its host fa	ement that the electrical, thermal, d fundamentally for industrial, antally for sale to an electric utility, energy requirements, as well as state
ion Fa	Complete lines 11g through 11j below to determine compliance with the funda 292.205(d)(3). Complete lines 11g through 11j even if you do not intend to rely u demonstrate compliance with 18 C.F.R. § 292.205(d)(2).	
ents fo enerat	<b>11g</b> Amount of electrical, thermal, chemical and mechanical energy output (me generation plant losses and parasitic loads) expected to be used annually for in commercial, residential or institutional purposes and not sold to an electric util	ndustrial, lity MWh
em.	<b>11h</b> Total amount of electrical, thermal, chemical and mechanical energy expenses sold to an electric utility	ected to be MWh
equire rom C	<b>11i</b> Percentage of total annual energy output expected to be used for industric commercial, residential or institutional purposes and not sold to a utility = 100 * 11g /(11g + 11h)	rial, 0 %
5 R ut f	11j Is the response in line 11i greater than or equal to 50 percent?	
EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities (continued)	<ul> <li>Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of pas provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understandir</li> <li>the fundamental use test as a basis for complying with 18 C.F.R. § 292.20 comply with the fundamental use test both in the 12-month period beg produces electric energy, and in all subsequent calendar years.</li> </ul>	ng that, if it is to rely upon passing 05(d)(2), then the facility must
	No. Your facility does not pass the fundamental use test. Instead, you m section starting on page 19 a narrative explanation of and support for w requirement that the electrical, thermal, chemical and mechanical output facility is used fundamentally for industrial, commercial, residential or in intended fundamentally for sale to an electric utility, taking into accoun and variable thermal energy requirements, as well as state laws applicat QF to its host facility. Applicants providing a narrative explanation of wl comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with th review paragraphs 47 through 61 of Order No. 671 (accessible from the www.ferc.gov/QF), which provide discussion of the facts and circumstar explanation. Applicant should also note that the percentage reported a that facility must comply with, both for the 12-month period beginning produces electric energy, and in all subsequent calendar years. <i>See</i> Order the applicant should make sure that it reports appropriate values on line	why your facility meets the but of an EPAct 2005 cogeneration institutional purposes and is not int technological, efficiency, economic, ble to sales of electric energy from a why their facility should be found to ne fundamental use test may want to Commission's QF website at inces that may support their above will establish the standard that with the date the facility first ler No. 671 at paragraph 51. As such,

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# Information Required for Topping-Cycle Cogeneration Facility

FERC Form 556

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.

12a Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use *in separate rows*.
Average annual rate of

		Name of entity (thermal host) taking thermal output	Thermal host's relationship to facility; Thermal host's use of thermal output	thermal output attributable to use (net of heat contained in process return or make-up water)
	1)	Louis Dreyfus Citrus,	Independent purchaser	
	"	Inc.	Other com. use (describe in line 12b)	29,197,936 Btu/h
	2)	South Florida Water	Other (describe in line 12b)	
<u>e</u>	21	Management District	Other com. use (describe in line 12b)	35,657,545 Btu/h
, XC	3)		Select thermal host's relationship to facility	
ц Ч	5)		Select thermal host's use of thermal output	Btu/h
pu	4)		Select thermal host's relationship to facility	
bp			Select thermal host's use of thermal output	Btu/h
To To	5)		Select thermal host's relationship to facility	
ness of Topping Thermal Output	5)		Select thermal host's use of thermal output	Btu/h
ess	6)		Select thermal host's relationship to facility	
l ⊑ È			Select thermal host's use of thermal output	Btu/h
Usefulness of Topping-Cycle Thermal Output		Check here and continue in	the Miscellaneous section starting on page 19 if a	dditional space is needed
Us	the Ho not app is n out dat	ermal output identified above. In wever, if your facility's use of ther t reasonably clear, then you must olication may be rejected and/or nade. (Exception: If you have pre- tput related to the instant facility, the and docket number to the orde	f thermal output: At a minimum, provide a brief de some cases, this brief description is sufficient to de mal output is not common, and/or if the usefulnes provide additional details as necessary to demons additional information may be required if an insuffi- viously received a Commission certification approvi then you need only provide a brief description of er certifying your facility with the indicated use. Su I deviation from the previously authorized use.) If	emonstrate usefulness. so of such thermal output is strate usefulness. Your ficient showing of usefulness ving a specific use of thermal that use and a reference by uch exemption may not be

Louis Dreyfus Citrus, Inc. (LD Citrus) utilizes facility steam in fruit processing and juice concentrating operations. In Indiantown Cogeneration, L.P., 60 FERC ¶ 62,133 (1992), the Commission found the application of the facility's thermal output for these purposes to be common and therefore presumptively useful under the criteria set forth in Electrodyne Research Corp., 32 FERC ¶ 61,102 (1985).

continue in the Miscellaneous section starting on page 19.

A description of South Florida Water Management District's use of the facility's thermal output is contained in Miscellaneous section.

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Applicats for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and (applicable efficiency standard. Section 292205(a)(1) the Commission's regulations (18 C.F.R. § 292205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 4.5 percent of the total energy output. Section 292205(a)(1) (15 C.F.R. § 292205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities or which installation commenced on or after March 13, 1980: the useful power output of the facility plus on-that the useful thermal energy output must (A) be no less than 4.25 percent of the total energy output of the facility. To demonstrate that your facility is event from the efficiency standard, sort odemonstrate that your facility is event from the efficiency standard, sort odemonstrate that your facility is event from the efficiency standard based on the date that installation commenced, respond to lines 13 a through 131 below.         If you indicated in line 10a that your facility represents <i>both</i> topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13 a through 131 below considering only the energy inputs and outputs attributable to the topping-cycle porter from the efficiency standard based on the date that installation commenced, respond to lines 13 a through 131 below considering only the energy inputs and outputs attributable to the host(b), net of any heat contained in condensate return or make-up water         13b Indicate the annual average rate of neteful energy output made available to the host(b), net of any heat contained in condensate return or make-up water       64, 855, 481 Btu/h         13c Multipy line 13b by 2544 to convert from kW to Btu/h       118, 171, 208 Btu/h       118 <th>FERC Fo</th> <th>rm 556</th> <th>Page 15 - Topping-Cycle Cogeneration</th> <th>n Facilities</th>	FERC Fo	rm 556	Page 15 - Topping-Cycle Cogeneration	n Facilities
cogeneration system.       I3a indicate the annual average rate of useful thermal energy output made available to the host(s), ent of any heat contained in condensate return or make-up water       64, 855, 481 Btu/h         13b Indicate the annual average rate of net electrical energy output       122, 559 kW         13c Multiply line 13b by 3,412 to convert from kW to Btu/h       418, 171, 308 Btu/h         13d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production       0 hp         13e Multiply line 13d by 2,544 to convert from hp to Btu/h       0.0 Btu/h         13f Indicate the annual average rate of energy input from natural gas and oil       0 Btu/h         13g Topping-cycle operating value = 100 * 13a / (13a + 13c + 13e)       13.4 %         13d Indicate with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?       Yes (complies with operating standard)         13j Did installation of the facility in its current form commence on or after March 13, 1980?       Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency standard. Skip lines 13k and 13l.         13k Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value? If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 1		cycle operating standard and, if applicable, efficiency standard. regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating s the useful thermal energy output must be no less than 5 percen (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for installation commenced on or after March 13, 1980: the useful p thermal energy output must (A) be no less than 42.5 percent of facility; and (B) if the useful thermal energy output is less than 12 be no less than 45 percent of the total energy input of natural gi compliance with the topping-cycle operating and/or efficiency s exempt from the efficiency standard based on the date that inst 13I below. If you indicated in line 10a that your facility represents <i>both</i> topp technology, then respond to lines 13a through 13I below consid attributable to the topping-cycle portion of your facility. Your m	Section 292.205(a)(1) of the Commission's standard for topping-cycle cogeneration fa t of the total energy output. Section 292.2 topping-cycle cogeneration facilities for w bower output of the facility plus one-half to the total energy input of natural gas and o 5 percent of the total energy output of the as and oil to the facility. To demonstrate standards, or to demonstrate that your fac allation commenced, respond to lines 13a boing-cycle and bottoming-cycle cogenerate tering only the energy inputs and outputs hass and heat balance diagram must make	acilities: 205(a)(2) /hich he useful il to the facility, ility is through tion clear
13a       Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water       64, 855, 481       Btu/h         13b       Indicate the annual average rate of net electrical energy output       122,559       KW         13c       Multiply line 13b by 3,412 to convert from kW to Btu/h       418, 171, 308       Btu/h         13d       Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (his value is usually zero)       0       hp         13f       Indicate the annual average rate of energy input from natural gas and oil       0       hp         13f       Indicate the annual average rate of energy input from natural gas and oil       0       Btu/h         13g       Topping-cycle operating value = 100 * 13a / (13a + 13c + 13e)       13.4 %       i         13g       Topping-cycle efficiency value = 100 * (0.5*13a + 13c + 13e) / 13f       100 %       i         13i       Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?       i       Yes (complies with operating standard)       No (does not comply with operating standard)         13j       Did installation of the facility in its current form commence on or after March 13, 1980?       i       i         Yes (complies with efficiency standard (for low op			for which portion (topping or bottoming)	) of the
Provide of the host(s), net of any heat contained in condensate return or make-up water       64,855,481 Btu/h         13b Indicate the annual average rate of net electrical energy output       122,559 kW         13c Multiply line 13b by 3,412 to convert from kW to Btu/h       418,171,308 Btu/h         13d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)       0 hp         13f Indicate the annual average rate of energy input from natural gas and oil       0.0 Btu/h         13f Indicate the annual average rate of energy input from natural gas and oil       0 Btu/h         13g Topping-cycle operating value = 100 * 13a / (13a + 13c + 13e)       13.4 %         13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?       13a Ves (complies with operating standard)         13j Did installation of the facility in its current form commence on or after March 13, 1980?       Image: Compliance with the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13, a sapplicable, below.         No. Your facility is subject to the efficiency value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13g is greater than or equal to 45%;         Is compliance with efficiency standard (for high operating value). If the operating value shown in line 13g is greate			output made available	
13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?	-	to the host(s), net of any heat contained in condensate return or	make-up water 64,855,4	81 Btu/h
13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?		13b Indicate the annual average rate of net electrical energy ou		114
13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?	g g	<b>13c</b> Multiply line 13b by 3 412 to convert from kW to Btu/b	122,5	
13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?	ula ula		418,171,3	08 Btu/h 🧐
13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?	rat alci		put taken directly off	
13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?	U be		power production	a ha
13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?	OP			
13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?	cle 'alı		0	.0 Btu/h 🥝
13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?	5 Y V V	13f Indicate the annual average rate of energy input from natur	ral gas and oil	0 Btu/h
13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?	<b>13g</b> Topping-cycle operating value = 100 * 13a / (13a + 13c + 13e) <b>13h</b> Topping-cycle efficiency value = 100 * (0.5*13a + 13c + 13e) / 1			1.96
13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?				.4 /0 0
13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?	Ъ			00 %
13j Did installation of the facility in its current form commence on or after March 13, 1980?       ✓         Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.       ✓         No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.       13k Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%:         ✓ Yes (complies with efficiency standard)       No (does not comply with efficiency standard)         13l Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:		13i Compliance with operating standard: Is the operating value	e shown in line 13g greater than or equal t	o 5%?
<ul> <li>Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.</li> <li>No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.</li> <li><b>13k</b> Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%:</li> <li>Yes (complies with efficiency standard)</li> <li><b>13l</b> Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 45%:</li> </ul>		$\bigotimes$ Yes (complies with operating standard) $\square$ N	o (does not comply with operating standa	ard)
<ul> <li>compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.</li> <li>No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.</li> <li><b>13k</b> Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%:</li> <li>Yes (complies with efficiency standard)</li> <li><b>13l</b> Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:</li> </ul>		13j Did installation of the facility in its current form commence	on or after March 13, 1980?	1
13k Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%:         Image: Compliance with efficiency standard       Image: Compliance with efficiency standard         13l Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:		$\boxtimes$ Yes. Your facility is subject to the efficiency requirement compliance with the efficiency requirement by respond	ts of 18 C.F.R. § 292.205(a)(2). Demonstrat ing to line 13k or 13l, as applicable, below.	e
than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%:         Yes (complies with efficiency standard)         I3I Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:		No. Your facility is exempt from the efficiency standard.	Skip lines 13k and 13l.	
13I Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:				
greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:		$\bigotimes$ Yes (complies with efficiency standard) $\square$ N	o (does not comply with efficiency standa	rd)
Yes (complies with efficiency standard) No (does not comply with efficiency standard)		greater than or equal to 15%, then indicate below whether the e		
		Yes (complies with efficiency standard)	lo (does not comply with efficiency standa	rd)

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FERC Form 556	Page 16 - Bottoming-Cycle Cogeneration Facilities

# Information Required for Bottoming-Cycle Cogeneration Facility

Usefulness of Bottoming-Cycle

**Thermal Output** 

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)), the thermal energy output of a qualifying bottoming-cycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below.

12



 1)
 Select thermal host's relationship to facility
 Yes
 No

 2)
 Select thermal host's process type
 Yes
 No

 2)
 Select thermal host's relationship to facility
 Yes
 No

 3)
 Select thermal host's process type
 Yes
 No

 3)
 Select thermal host's relationship to facility
 Yes
 No

 3)
 Select thermal host's process type
 Yes
 No

 Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed
 Select in the section starting on page 19 if additional space is needed

**14b** Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

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FERC FO	Page 17 - Bottoming	g-Cycle Cogeneration Facilities					
g and ion	Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.						
	If you indicated in line 10a that your facility represents <i>both</i> topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).						
lat	15a Did installation of the facility in its current form commence on or after March 13, 1980?						
Bottoming-Cycle Operating and Efficiency Value Calculation	Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.						
	No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.						
	15b Indicate the annual average rate of net electrical energy output	kW					
	<b>15c</b> Multiply line 15b by 3,412 to convert from kW to Btu/h	0 Btu/h					
	<b>15d</b> Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp					
	15e Multiply line 15d by 2,544 to convert from hp to Btu/h	0 Btu/h					
	<b>15f</b> Indicate the annual average rate of supplementary energy input from natural gas or oil	Btu/h					
	<b>15g</b> Bottoming-cycle efficiency value = 100 * (15c + 15e) / 15f	0 %					
	<b>15h</b> Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:						
	Yes (complies with efficiency standard) No (does not comply with efficiency standard)						

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FERC Form 556

Page 18 - All Facilities

# Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems)

- He or she has read the filing, including any information contained in any attached documents, such as cogeneration mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents.
- He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief.
- He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one)
  - The person on whose behalf the filing is made
  - □ An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made
  - An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made
  - A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign

He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19.

He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will , interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the

facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information.

Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below.

Your Signature	Your address	Date	
Jessica C. Friedman Van Ness Feldman, LLP	1050 Thomas Jefferson St., NW Washington, DC 20007	11/19/2015	

dit Notes			

Florida Power & Light Company Docket No. 160154-EI FIPUG's First Set of Interrogatories Interrogatory No. 12 Attachment No. 1 Page 19 of 20

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### Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to*. You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

### Section 1h/i continued:

On August 22, 1990, Indiantown Cogeneration, L.P. (Applicant) filed a notice of selfcertification of qualifying facility (QF) status under the Public Utility Regulatory Policies Act of 1978 (PURPA) in Docket No. QF90-214-000 for Applicant's cogeneration facility located in Indiantown, Florida (Facility). The Commission subsequently certified the Facility as a QF by order dated August 21, 1992, issued in Docket No. QF90-214-001. Indiantown Cogeneration, L.P., 60 FERC 1 62,133 (1992). The Commission recertified the Facility as a QF by order dated April 19, 1997, issued in Docket No. QF90-214-002, to reflect changes in the Facility's operating characteristics. Indiantown Cogeneration, L. P., 79 FERC ¶ 62,024 (1997). The Commission again recertified the Facility as a QF by order dated October 17, 1997, issued in Docket No. QF90-214-003 to reflect changes in Applicant's ownership and management of the Facility. Indiantown Cogeneration, L.P., 81 FERC ¶ 62,067 (1997). On September 19, 1997, July 30, 1998, August 20, 1998, November 16, 1998, June 4, 1999, September 21, 1999, November 24, 1999, December 16, 2003, and January 28, 2005, Applicant filed notices of self-recertification in Docket Nos. QF90-214-004, QF90-214-005, QF90-214-006, QF90-214-007, QF90-214-008, QF90-214-009, QF90-214-010, QF90-214-011, and QF90-214-012, respectively, to reflect changes in the ownership of Applicant. The Commission subsequently recertified the Facility as a QF by order dated September 23, 2005, in Docket No. QF90-214-013 to reflect a change in Applicant's upstream ownership and an additional thermal process use of high pressure steam by the Facility's thermal host. Indiantown Cogeneration, L.P., 112 FERC ¶ 62,239 (2005). On October 4, 2007, December 14, 2007, and September 14, 2011, Applicant filed notices of self-recertification in Docket Nos. QF90-214-014, QF90-214-015, and QF90-214-016 to reflect additional changes to Applicant's ownership.

This notice is being filed to report an additional thermal output application, which does not affect the Facility's existing QF status.

### Section 5b continued:

Applicant directly owns the Facility. Applicant is indirectly owned by EIF Calypso, LLC (EIF Calypso) (80%) and EIF Calpyso II, LLC (EIF Calypso II) (20%). EIF Calypso is a wholly-owned subsidiary of United States Power Fund III, L.P. (USPF III) or one or more of USPF III's affiliates under common management and control with USPF III (together, USPF Funds). EIF Calypso II is a wholly-owned subsidiary of United States Power Fund IV, L.P. (USPF IV). Ares EIF Management, LLC (AEIF) has the exclusive management interest in several private equity investment funds including the USPF Funds and USPF IV (collectively, AEIF Funds), which invest in power projects in the United States.

None of the AEIF Funds or any of their affiliates currently is directly or indirectly engaged in the generation or sale of electric power in the United States, other than from QFs or eligible facilities of exempt wholesale generators (EWGs). Further, none of the AEIF Funds or their affiliates currently owns a 10% or greater voting interest in, operates, or controls any electric facilities in the United States other than QFs or eligible facilities of EWGs.

Section 12b continued:

Florida Power & Light Company Docket No. 160154-EI FIPUG's First Set of Interrogatories Interrogatory No. 12 Attachment No. 1 Page 20 of 20

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# Miscellaneous (continued)

South Florida Water Management District

Applicant withdraws nutrient rich water from the Taylor estuary under the authority of South Florida Water Management District (SFWMD) as part of its electrical and thermal energy production. This estuary accounts for approximately 3-4% of the water inflows of Lake Okeechobee, but is the source of roughly 20% of the phosphorus loading into the lake each year. Applicant diverts phosphorus-laden water from Taylor Creek and through a process that sequentially uses the facility's thermal output following electric power production. Applicant concentrates the phosphorus into approximately 21 million gallons of reject water that is not used for any process that generates power.

Applicant utilizes this waste stream in its Spray Dryer Absorber (SDA) to evaporate the reject water and produce a concentrated dried phosphorus product weighing approximately 824 lbs. This process effectively removes the phosphorus, which can be safely landfilled, and permanently diverts it from entering the Lake Okeechobee watershed. The vaporization of the concentrated phosphorus water utilizes waste heat from the combustion process in the SDA. This is undertaken sequentially, following the final electrical production heat recovery process. SFWMD has determined that that the phosphorus removal thermal process is useful in achieving water management goals of improving water quality. As a result of Applicant's phosphorus removal program, both SFWMD and the Florida Department of Environmental Protection have noted in their staff permitting reports that Applicant's usage of the Taylor Creek water provides significant environmental benefits to the water quality of Lake Okeechobee which also benefits the Florida everglades.



William P. Cox Senior Attorney 700 Universe Boulevard Juno Beach, FL 33408-0420 (561) 304-5662 (Telephone) (561) 691-7135 (Facsimile)

September 20, 2016

# VIA ELECTRONIC FILING

Ms. Carlotta S. Stauffer Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

# RE: Docket 160154-EI

FPL's Petition for approval of a purchase and sale agreement between Florida Power & Light Company and Calypso Energy Holdings, LLC, for the ownership of the Indiantown Cogeneration LP and related power purchase agreement

Dear Ms. Stauffer:

Attached for filing in the above docket is the Joint Motion for Approval of Joint Partial Stipulation and Joint Partial Stipulation of Florida Power & Light Company, Florida Industrial Power Users Group, and Office of the Public Counsel. This letter, Joint Motion and Joint Partial Stipulation, and certificate of service are being submitted via the Florida Public Service Commission's Electronic Filing Web Form as a single PDF file.

If there are any questions regarding this transmittal, please contact me at (561) 304-5662.

Sincerely,

By: <u>/s/ William P. Cox</u>

William P. Cox Fla. Bar No. 00093531

Enclosure

cc: Counsel for Parties of Record (w/encl.)

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 160154-EI EXHIBIT: 18 PARTY: FPL, OPC, FIPUG DESCRIPTION: Partial Joint Stipulation



# **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In re: Petition for approval of a purchase and power agreement between Florida Power & Light Company and Calypso Energy Holdings, LLC, for the ownership of the Indiantown Cogeneration LP and related power purchase agreement. Docket No: 160154-EI Date: September 20, 2016

# JOINT MOTION FOR APPROVAL OF PARTIAL STIPULATION

Florida Power & Light Company ("FPL"), the Florida Power Industrial Users Group ("FIPUG"), and the Office of Public Counsel ("OPC") (collectively referred to as the "Signatories") jointly move the Florida Public Service Commission ("Commission") for approval of the Joint Partial Stipulation ("Joint Partial Stipulation") reached by the Signatories. In support of this Joint Motion, the Signatories state:

1. The Signatories have been engaged in negotiations for the purpose of proposing a streamlined hearing process and reaching a settlement of any or all issues in the above-referenced docket, thereby minimizing the need for further expensive, time consuming litigation. These negotiations have culminated in the Joint Partial Stipulation attached hereto as Exhibit 1.

2. The Joint Partial Stipulation provides, among other things, as follows:

a. A streamlined hearing process agreed upon by the Signatories.

b. Stipulated positions of FPL and OPC on Issues 6, 7, and 9 in this docket.

3. Each of the Signatories agrees that it has entered into the Joint Partial Stipulation voluntarily, that it will provide a more efficient, streamlined process for the resolution of the remaining substantive issues in this docket, and therefore serves the public interest.

4. The Signatories believe that the Joint Partial Stipulation is reasonable and in the public interest for the following reasons:

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- a. The Joint Partial Stipulation provides for a streamlined hearing process that will serve to limit unnecessary expenditure of time and Commission resources; and
- b. The Joint Partial Stipulation resolves Issues 6, 7, and 9 as between FPL and OPC.

5. Each of the Signatories agrees with and supports this Joint Motion for approval of the Joint Partial Stipulation. The Signatories request that, following the Commission's review of this Joint Motion and the Joint Partial Stipulation as described above, the Commission grant the Joint Motion in order to provide for an efficient hearing process to resolve the remaining substantive issues and potential bench decision in this proceeding.

WHEREFORE, FPL, FIPUG, and OPC respectfully request that the Commission approve the Joint Partial Stipulation attached hereto as Exhibit 1.

Respectfully submitted,

Bryan S. Anderson, Esq.
Fla. Auth. House Counsel No. 219511
William P. Cox, Esq.
Joel T. Baker, Esq.
700 Universe Boulevard
Juno Beach, Florida 33408-0420
Attorneys for Florida Power & Light Company

By: <u>/s/ William P. Cox</u> William P. Cox

Jon C. Moyle, Jr., Esq. Karen A. Putnal, Esq. Moyle Law Firm, P.A. 118 North Gadsden Street Tallahassee, Florida 32301 Attorneys for Florida Industrial Power Users Group

By: <u>/s/ Jon C. Moyle, Jr.</u> Jon C. Moyle, Jr. The Office of Public Counsel Danielle M. Roth, Esquire Patricia A. Christensen, Esquire Charles J. Rehwinkel, Esquire The Florida Legislature 111 West Madison Street, Room 812 Tallahassee, FL 32399

By: <u>/s/ Danielle M. Roth</u> Danielle M. Roth

# **CERTIFICATE OF SERVICE**

# Docket No. 160154-EI

I HEREBY CERTIFY that a true and correct copy of the foregoing was furnished by electronic mail on this <u>20th</u> day of September, 2016 to the following:

Walt Trierweiler, Esq. Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 wtrierwe@psc.state.fl.us Office of the General Counsel Florida Public Service Commission Jon C. Moyle, Jr., Esq. Karen A. Putnal, Esq. Moyle Law Firm, P.A. 118 North Gadsden Street Tallahassee, Florida 32301 jmoyle@moylelaw.com kputnal@moylelaw.com Attorneys for Florida Industrial Power Users Group

J.R. Kelly, Esq. Charles J. Rehwinkel, Esq. Danielle M. Roth, Esq. Office of Public Counsel 111 West Madison Street, Room 812 Tallahassee, FL 32301 kelly.jr@leg.state.fl.us rehwinkel.charles@leg.state.fl.us roth.danielle@leg.state.fl.us Attorneys for the Citizens of the State of Florida

By: <u>s/William P. Cox</u>

William P. Cox Florida Bar No. 0093531

# EXHIBIT 1

# **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In re: Petition for approval of a purchase and sale agreement between Florida Power & Light Company and Calypso Energy Holdings, LLC, for the ownership of the Indiantown Cogeneration LP and related purchase power agreement. Docket No: 160154-EI

Date: September 20, 2016

# JOINT PARTIAL STIPULATION

WHEREAS, Florida Power & Light Company ("FPL" or the "Company"), the Florida Industrial Power Users Group ("FIPUG"), and the Office of Public Counsel ("OPC") have signed this Joint Partial Stipulation (the "Joint Partial Stipulation" or "Agreement"; unless the context clearly requires otherwise, the term "Party" or "Parties" means a signatory to this Agreement); and

WHEREAS, the Parties have undertaken to resolve the issues expeditiously and to agree to a streamlined hearing process in this docket;

NOW THEREFORE, in consideration of the foregoing and the covenants contained herein, the Parties hereby stipulate and agree as follows:

1. The Parties agree to the following streamlined hearing process in this docket in lieu of conducting a formal evidentiary hearing under Section 120.57(1), Fla. Stat., as noticed by the Commission for October 3-4, 2016:

A. The Parties agree to waive opening statements;

B. FIPUG and OPC agree to waive their rights to cross-examination of the four FPL witnesses who pre-filed direct testimony in this docket;

C. The Parties stipulate to the admissibility of the pre-filed testimony and exhibits of the four FPL witnesses who pre-filed direct testimony on June 20, 2016 in this docket and the Comprehensive Exhibit List to be presented by the Commission Staff at the prehearing conference on September 20, 2016;

D. The Parties stipulate to the excusal of the four FPL witnesses who pre-filed direct testimony from the October 3-4, 2016 evidentiary hearing in this docket;

E. The Parties agree to waive the right to file post hearing briefs in this docket;

F. The Parties do not object to the excusal of FIPUG from the October 3-4, 2016 hearing in this docket; and

G. The Parties do not object to a bench decision by the Commission with an oral recommendation from Commission Staff at the October 3-4, 2016 hearing in this docket, based on the evidentiary record developed up to the date of the hearing.

2. FPL and OPC agree to stipulated positions on Issues 6, 7, and 9 in this docket as follows:

**ISSUE 6:** If the Commission approves FPL's proposed ICL Transaction, what is the proper accounting treatment for the transaction?

# **STIPULATED POSITION:**

FPL has demonstrated that the proper accounting treatment for the ICL Transaction should be as follows:

- (1) The non-fuel costs of operating the ICL Facility should be recorded in base rate accounts.
- (2) FPL should not record any amount as plant in service for the ICL Facility because the Facility has no economic value. However, FPL will record land for \$8.5 million, a rail car lease liability of \$9.0 million, and an asset retirement obligation of \$9.9 million for the future dismantlement of the Facility.

- (3) FPL should establish a regulatory asset for the ICL investment of \$451.5 million.
- **ISSUE 7:** If the Commission approves FPL's proposed ICL Transaction, what is the proper rate of return?

# **STIPULATED POSITION:**

If the Commission approves the ICL Transaction, then the proper rate of return is FPL's overall WACC approved by the Commission that is used for clause investments. The Commission approved this treatment for the Cedar Bay Transaction, a recent transaction substantially similar to the ICL Transaction, in Order No. PSC-15-0401-AS-EI.

**<u>ISSUE 9</u>**: Should FPL be required to file, with the Commission, the actual accounting entries to record the ICL transaction for both FPL and the subsidiary Indiantown within six months of the ICL transaction being consummated?

# **STIPULATED POSITION:**

Yes. Such a requirement is reasonable and appropriate.

- 3. This Agreement may be signed in any number of counterparts, each of which is an original and all of which taken together form one single document.
- 4. This Agreement will become effective on the date the Commission Order approving this Agreement is final.

In Witness Whereof, the Parties evidence their acceptance and agreement with the provisions of

this Agreement by their signature.

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

By: Kenneth A. Hoffman

Florida Industrial Power Users Group 118 North Gadsden Street Tallahassee, Florida 32301

By:

Jon C. Moyle, Jr.

The Office of Public Counsel J.R. Kelly, Esquire The Florida Legislature 111 West Madison Street, Room 812 Tallahassee, FL 32399

By: \_

J.R. Kelly

In Witness Whereof, the Parties evidence their acceptance and agreement with the provisions of

4

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

By:\_

Kenneth A. Hoffman

Florida Industrial Power Users Group 118 North Gadsden Street Tallahassee, Florida 32301

9-2--16 Jon≬ C. Moyle, Jr.

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Βv