BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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In re: Petition for Determination of Need for Citrus County Combined Cycle Power Plant

DOCKET NO. 140110-EI Submitted for filing: August 1, 2014

DUKE ENERGY FLORIDA, INC.'S PREHEARING STATEMENT

Pursuant to the Third Order Establishing Procedure, Order No. PSC-14-0341-PCO-EI,

issued July 3, 2014, (the "Order"), Duke Energy Florida, Inc. ("DEF" or the "Company")

submits its Prehearing Statement and states as follows:

A. APPEARANCES:

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MATTHEW R. BERNIER Florida Bar No. 0059886 DUKE ENERGY FLORIDA, INC. 106 East College Avenue, Ste. 800 Tallahassee, FL 32301-7740 Phone: (850) 222-8738 Facsimile: (850) 222-9768

JAMES MICHAEL WALLS Florida Bar No. 0706272 BLAISE N. GAMBA Florida Bar No. 0027942 CARLTON FIELDS JORDEN BURT, P.A. 4221 W. Boy Scout Boulevard, Suite 1000 Tampa, FL 33607-5780 Phone: (813) 223-7000 Facsimile: (813) 229-4133

B. WITNESSES AND EXHIBITS:

In identifying witnesses and exhibits herein, DEF reserves the right to call such other witnesses and to use such other exhibits as may be identified in the course of discovery and preparation for the final hearing in this matter.

1. WITNESSES.

Direct Testimony.

<u>Witness¹</u>	Subject Matter	Issues
Mark E. Landseidel	Supports DEF's Petition for	2, 5, 7
	Determination of Need for	
	the Citrus County Combined	
	Cycle Power Plant.	
	Describes the site and unit	
	characteristics for the Citrus	
	County Combined Cycle	
	Power Plant. Also, explains	
	the estimated costs and	
	projected in-service date for	
	the Citrus County Combined	
	Cycle Power Plant project.	
Amy Dierolf	Supports DEF's Petition for	2,7
	Determination of Need for	
	the Citrus County Combined	
	Cycle Power Plant.	
	Describes the site and	
	explains the environmental	
	benefits of the site and the	
	Citrus County Combined	
	Cycle Power Plant the	
	Company plans to build and	
	operate at the site. Also	
	generally describes the	
	environmental approval	
	process for the Citrus	
	County Combined Cycle	
	Power Plant project.	
Jeffrey Patton	Supports DEF's Petition for	2, 3, 7
	Determination of Need for	

¹ Indicates proposed order for witness testimony presentation at the final hearing.

	the Citrus County Combined	
	Cycle Power Plant.	
	Describes the firm gas	
	transportation and gas	
	supply plan to support the	
	Citrus County Combined	
	Cycle Power Plant Also	
	describes the Company's	
	fuel transportation and plans	
	to enhance the fuel supply	
	diversity and reliability of	
	the plant	
Kevin Delehanty	Supports DEF's Petition for	1 2 3 7
	Determination of Need for	1, 2, 3, 7
	the Citrus County Combined	
	Cycle Power Plant	
	Describes the process for	
	developing the Fundamental	
	Forecast and explains why	
	the Fundamental Forecast is	
	a reasonable long-term fuels	
	price forecast for the	
	Company to use in its	
	Integrated Resource	
	Dianning ("IDD") process	
Ed Scott	Supports DEE's Patition for	1 2 5 6 7
Ed Scott	Determination of Need for	1, 2, 3, 0, 7
	the Citrus County Combined	
	Cycle Power Plant	
	Provides an overview of the	
	transmission requirements	
	and costs for the Citrus	
	County Combined Cycle	
	Power Plant and also	
	addresses the transmission	
	system impacts associated	
	with the various alternative	
	supply side generation	
	alternatives that the	
	Company evaluated as part	
	of its 2018 Request for	
	Proposals ("2018 REP") for	
	Long-term Power Supply	
	Resources	
Alan S. Taylor, Sedway	Sedway Consulting was	567
Consulting Inc	retained by DEE to provide	5, 0, 7
Consulting, Inc.	retained by DEF to provide	

	independent monitoring and	
	evaluation services in the	
	utility's solicitation for	
	competitive power supplies.	
	Mr. Taylor describes how he	
	helped with the development	
	of the 2018 RFP and	
	associated website, reviewed	
	DEF's solicitation process.	
	and performed a parallel and	
	independent economic	
	evaluation of both DEF's	
	Next Planned Concreting	
	Lucit ("NDCLI") and the	
	Unit (NPGU) and the	
	proposals that were received	
	by DEF in response to the	
	utility's solicitation. Mr.	
	Taylor concludes that DEF's	
	NPGU – the Citrus County	
	Combined Cycle Power	
	Plant described in DEF's	
	RFP – represented the most	
	cost-effective resource for	
	meeting DEF's resource	
	needs for 2018.	
Benjamin M.H. Borsch	Supports DEF's Petition for	1, 2, 3, 4, 5, 6, 7, 8
	Determination of Need for	
	the Citrus County Combined	
	Cycle Power Plant.	
	Provides an overview of the	
	Citrus County Combined	
	Cycle Power Plant that the	
	Company proposes to build.	
	Discusses DEF's IRP	
	process and how that	
	process led the Company to	
	identify the Citrus County	
	Combined Cycle Power	
	Plant as its NPGU Also	
	explains the Company's	
	need for the Citrus County	
	need for the Citrus County Combined Cycle Power	
	need for the Citrus County Combined Cycle Power Plant, and describes the	
	need for the Citrus County Combined Cycle Power Plant, and describes the steps the Company has	
	need for the Citrus County Combined Cycle Power Plant, and describes the steps the Company has	
	need for the Citrus County Combined Cycle Power Plant, and describes the steps the Company has taken to seek out available,	

alternatives through the	
2018 RFP process. Also	
describes the Company's	
2018 RFP for supply-side	
alternatives to its NPGU,	
and provides the Company's	
evaluation of the competing	
proposals received in	
response to that 2018 RFP,	
and explains why the	
Company's NPGU its	
Citrus County Combined	
Cycle Power Plant is the	
most cost-effective	
alternative to meet the	
Company's reliability needs	
commencing in 2018.	

Rebuttal Testimony.²

Witness	Subject Matter	Issues
Benjamin M.H. Borsch	Responds to and rebuts the	1, 2, 3, 4, 5, 6, 7

² Calpine separately filed the same direct testimony of Calpine witnesses Mr. Simpson and Mr. Hibbard in this Docket and in Docket No. 140111-EI, which is the Docket addressing the Company's Petition for Determination of Cost Effective Generation Alternative to Meet Need Prior to 2018 for Duke Energy Florida, Inc. Calpine filed slightly different direct testimony for Calpine witness Mr. Thornton than his direct testimony filed in Docket No. 140111-EI. Even though Calpine submitted a proposal in response to the 2018 RFP, the Calpine witnesses in this Docket do not contend that this bid proposal is more cost effective than the Citrus County Combined Cycle Power Plant. Rather, the Calpine witnesses challenge the Company's selection of its self-build generation projects instead of Calpine's proposal to meet DEF's need prior to 2018. Their only arguments in this Docket challenge the need for the Citrus County Combined Cycle Power Plant in 2018. DEF's rebuttal testimony in this Docket addresses the arguments in their direct testimony that are directed at the need for the Citrus County Combined Cycle Power Plant in 2018. DEF's rebuttal testimony in this Docket addresses the arguments in their direct testimony that are directed at the need for the Citrus County Combined Cycle Power Plant in 2018. DEF's rebuttal testimony in bockets challenging the Company's selection if its self-build generation projects instead of Calpine witness testimony in both dockets challenging the Company's selection if its self-build generation projects instead of Calpine witness testimony in both dockets challenging the Company's selection if its self-build generation projects instead of Calpine's proposal to meet DEF's proposal to meet DEF's need prior to 2018.

NRG filed the exact same direct testimony in this Docket and in Docket No. 140111-EI. NRG filed no bid proposal in response to the 2018 RFP and it cannot and does not advance a proposal as an alternative to the Citrus County Combined Cycle Power Plant in this Docket. NRG witnesses, like the Calpine witnesses, challenge the Company's selection of its self-build generation projects instead of NRG's proposal to meet DEF's need prior to 2018. NRG witnesses, like the Calpine witnesses, appear to only challenge the need for the Citrus County Combined Cycle Power Plant in 2018 in this Docket. DEF's rebuttal testimony in this Docket addresses these arguments in their direct testimony that are directed at the need for the Citrus County Combined Cycle Power Plant in 2018. DEF's rebuttal testimony in Docket No. 140111-EI addresses the NRG witness testimony in both Dockets challenging the Company's selection if its self-build generation projects instead of NRG's proposal to meet DEF's need prior to 2018.

direct testimony, exhibits	
and recommendations of	
intervenor Calpine	
Construction Finance	
Company, L.P. ("Calpine")	
and NRG Florida LP	
("NRG") witnesses in this	
docket.	

2. DIRECT TESTIMONY EXHIBITS.

Exhibit Number	Witness	Description
Exhibit No(MEL-1)	Mark E. Landseidel	A preliminary aerial site plan of the Citrus County Combined Cycle Power Plant site.
Exhibit No(MEL -2)	Mark E. Landseidel	The preliminary general arrangement of the Citrus County Combined Cycle Power Plant at the Citrus County site.
Exhibit No(MEL -3)	Mark E. Landseidel	A copy of the Sargent & Lundy Consulting LLC Citrus County Combined Cycle Station Risk Analysis for Single Fuel Operation
Exhibit No(MEL -4)	Mark E. Landseidel	A table of the major cost items for the Citrus County Combined Cycle Power Plant project.
Exhibit No(MEL -5)	Mark E. Landseidel	The projected schedule and key milestones for completion of the Citrus County Combined Cycle Power Plant project.
Exhibit No(AD-1)	Amy Dierolf	A list of the permits or licenses DEF will obtain for the Citrus County Combined Cycle power plant.
Exhibit No(AD-2)	Amy Dierolf	A copy of the estimated schedule for submittal and approval of the SCA for the Citrus County Combined Cycle Power Plant.

Exhibit No(JP-1)	Jeffrey Patton	A map of the natural gas supply pipelines serving the State of Florida including the Sabal Trail Transmission LLC ("Sabal Trail") pipeline project.
Exhibit No(JP-2)	Jeffrey Patton	A map of the gas pipeline interconnection between Sabal Trail and the Citrus County Combined Cycle Plant and the interconnections between Sabal Trail and the FGT pipeline in Suwannee County and Citrus County, Florida.
Exhibit No(JP-3)	Jeffrey Patton	A map of the gas supply access at Transco Station 85 provided by Sabal Trail.
Exhibit No(JP-4)	Jeffrey Patton	A chart illustrating a forecast of United States dry natural gas production from the 2014 Annual Energy Outlook published by the Energy Information Administration.
Exhibit No(KD-1)	Kevin Delehanty	CONFIDENTIAL - A chart of the Company's base, high, and low natural gas price forecast.
Exhibit No(KD-2)	Kevin Delehanty	CONFIDENTIAL - A chart of the Company's base natural gas price forecast and other industry natural gas price forecasts.
Exhibit No(KD-3)	Kevin Delehanty	United States Energy Information Administration Map of major North American shale basins.
Exhibit No(KD-4)	Kevin Delehanty	United States Potential Gas Committee chart of Total Potential Resources.
Exhibit No. (ES-1)	Ed Scott	A copy of the Florida

		Reliability Coordinating Council ("FRCC") Evaluation of Transmission Impact of the Environmental Protection Agency's Mercury and Air Toxics Standard Transmission Impact Study for Shutdown of Crystal River Units 1 & 2 with retirement of Crystal River Unit 3.
Exhibit No(ES-2)	Ed Scott	CONFIDENTIAL transmission groups evaluated in the Company's transmission screening studies of the 2018 RFP proposals.
Exhibit No(ES-3)	Ed Scott	CONFIDENTIAL description of the transmission system upgrades, modifications, or additions and their costs for the transmission groups evaluated in the Company's transmission screening studies of the 2018 RFP proposals.
Exhibit No(AST-1)	Alan S. Taylor	Document No. 1, Resume of Alan S. Taylor CONFIDENTIAL Document No. 2, Sedway Consulting's Independent Evaluation Report.
Exhibit No(BMHB-1)	Benjamin M.H. Borsch	CONFIDENTIAL the Company's Need Study for the Citrus County Combined Cycle Power Plant.
Exhibit No(BMHB-2)	Benjamin M.H. Borsch	The Company's April 2014 Ten Year Site Plan ("TYSP").
Exhibit No(BMHB-3)	Benjamin M.H. Borsch	DEF's projected summer peak load growth and Reserve Margins with and

		without additional
		generation resources
		through 2018.
Exhibit No(BMHB-4)	Benjamin M.H. Borsch	DEF's projected net energy
		for load growth on DEF's
		system.
Exhibit No(BMHB-5)	Benjamin M.H. Borsch	A comparison of the cost
		efficiency of commercially
		available generation
		technologies including
		combined cycle generation
		technology.
Exhibit No(BMHB-6)	Benjamin M.H. Borsch	A map of the location of
		unconventional shale gas
		developments and major gas
		pipelines in the Southeast
		United States.
Exhibit No(BMHB-7)	Benjamin M.H. Borsch	A chart of the recent,
		current, and future
		production from both
		conventional and
		unconventional North
		American gas supply
		resources.
Exhibit No(BMHB-8)	Benjamin M.H. Borsch	A map showing the location
		of the Sabal Trail natural gas
		pipeline and the other
		natural gas pipelines into the
		State of Florida.
Exhibit No(BMHB-9)	Benjamin M.H. Borsch	A flow chart of the 2018
		RFP evaluation process.
Exhibit No(BMHB-10)	Benjamin M.H. Borsch	A table of the 2018 RFP
		Threshold Requirements.
Exhibit No(BMHB-11)	Benjamin M.H. Borsch	A table of the 2018
		Minimum Technical
		Requirements.
Exhibit No(BMHB-12)	Benjamin M.H. Borsch	A table of the 2018 RFP
		bidder proposal resource
		scenarios evaluated in the
		Company's 2018 RFP
		evaluation process.
Exhibit No(BMHB-13)	Benjamin M.H. Borsch	A table of the results of the
		Company's Initial Detailed
		Evaluation of the 2018 RFP
		bidder proposal resource

		scenarios.
Exhibit No(BMHB-14)	Benjamin M.H. Borsch	A table of the results of the
		Company's Detailed
		Evaluation of the 2018 RFP
		bidder proposal resource
		scenarios and the
		Company's sensitivity
		analyses in its 2018 RFP
		evaluation.

3. **REBUTTAL TESTIMONY EXHIBITS.**³

Exhibit Number	Witness	Description
Exhibit No (BMHB-15)	Benjamin M.H. Borsch	DEF's load forecasts
Exhibit No. (BMHB-16)	Benjamin M.H. Borsch	DEF's analysis of the costs
		and benefits of deferring the
		Citrus County Combined
		Cycle Power Plant one year
		and continuing to operate its
		oldest, coal-fired steam
		generation units, Crystal
		River Unit 1 ("CR1") and
		Crystal River Unit 2
		("CR2") another year, to
		2019

In addition, DEF reserves the right to utilize any exhibits introduced by another party and

to introduce additional exhibits necessary for rebuttal or cross examination at the final hearing of

this matter.

C. DEF'S STATEMENT OF BASIC POSITION:

As explained in more detail below, based on DEF's internal, rigorous process, and the competitive market process of the 2018 RFP, the Citrus County Combined Cycle Power Plant is the most cost effective generation resource (by more than \$470 million as compared to the closest third-party bid proposal resource option), and the right choice for DEF's customers. DEF needs additional generating capacity by the summer of 2018 to maintain system reliability and integrity to reliably serve its customers, and to meet its commitment to maintain a 20 percent Reserve Margin. The Florida Public Service Commission ("FPSC" or the "Commission")

³ Because DEF's rebuttal testimony is due August 5, 2014, four days after the due date for this prehearing statement, DEF may not have finalized all of its rebuttal exhibits at the time of the filing of this prehearing statement on August 1, 2014. Accordingly, DEF expressly reserves the right to include any additional rebuttal exhibits identified in its final rebuttal testimony in its prehearing statement once rebuttal testimony is finalized and filed on August 5, 2014.

established this Reserve Margin threshold for the investor-owned utilities in peninsular Florida in Order No. PSC-99-2507-S-EU. Building the Citrus County Combined Cycle Power Plant allows DEF to satisfy its commitment to maintain a minimum 20 percent Reserve Margin by the summer of 2018 and beyond.

Accordingly, pursuant to Section 403.519, Florida Statutes, and Rules 25-22.080 and 25-22.081, Florida Administrative Code ("F.A.C."), DEF petitioned the Commission on May 27, 2014 for an affirmative determination of need for its Citrus County Combined Cycle Power Plant. The Citrus County Combined Cycle Power Plant will be a state-of-the-art, natural gas-fired, combined cycle power plant with an expected summer rating of 1,640 MegaWatts ("MW") and an expected winter rating of 1,820 MW when completed in December 2018. The Citrus County Combined Cycle Power Plant will be located at a new power plant site adjacent to the Company's Crystal River Energy Complex ("CREC") in Citrus County, Florida.

DEF selected the Citrus County Combined Cycle Power Plant as its NPGU to meet its reliability need in the summer of 2018 after carefully evaluating system needs and planning options through the Company's ongoing resource planning process. DEF plans its resources in a manner consistent with utility industry planning practices, and employs both deterministic and probabilistic reliability criteria in the resource planning process. This planning process is an IRP process in which the Company seeks to optimize its supply-side options along with its demandside options into a final, integrated optimal plan, designed to deliver reliable, cost-effective power to DEF's customers. The Company evaluates the relationship of demand and supply against the Company's reliability criteria to determine if additional capacity is needed during the planning period. The generation plan is optimized after including cost-effective DSM programs to establish the most cost-effective overall plan, which becomes the Company's Integrated Optimal Plan. This optimal plan is presented to the Commission in April each year in the Company's annual TYSP filing.

The IRP process begins with the Company's examination of key planning forecasts and assumptions, including forecasts of customer growth, energy consumption, and peak demand, in order to assess the Company's future generation capacity needs. DEF developed and analyzed forecasts for long-range electric energy consumption, customer growth, peak demand, and system load shape for the next ten years based on its own internal expertise and information from respected, independent, industry sources. These forecasts draw on the collection of certain input data, such as population growth, fuel prices, interest and inflation rates, and the development of economic and demographic assumptions, that are employed in several models and methodologies that incorporate forecasting techniques, such as econometric modeling and direct contact with customers. The Company regularly updates its load forecast during the course of the year and for the development of the resource plan presented in the Company's annual TYSP, as explained in more detail in the Company's 2014 TYSP.

DEF serves approximately 1.7 million retail customers in Florida. Its service area comprises approximately 20,000 square miles in 29 of the state's 67 counties, encompassing the densely populated areas of Pinellas and western Pasco Counties and the greater Orlando area in Orange, Osceola, and Seminole Counties. DEF serves an area that is now recovering from the Great Recession of late 2008 and 2009. Economic conditions now support customer and energy

demand growth and that is what DEF is now experiencing in its service area. As a result, DEF projects that its annual customer growth will average 1.4 percent between 2013 and 2022. The projected ten-year period summer net firm demand growth annual rate is 1.4 percent. DEF expects higher population and economic growth over the next ten years as described in DEF's most recent TYSP.

It is the net impact of the Company's expected load growth and generation facility retirements that drive the need for additional generation capacity on DEF's system by the summer of 2018 to meet the Company's reliability needs. Through the Company's IRP process DEF developed the Company's Base Generation Expansion Plan to meet this need. The Plan includes the addition of the Suwannee Simple Cycle Project, involving the construction of two new combustion turbine units at the existing Suwannee power plant site in 2016, and the Hines Chillers Power Uprate Project at the Hines Energy Complex by 2017. The Plan includes the construction of the Citrus County Combined Cycle Power Plant at the new Citrus County site adjacent to the CREC as the NPGU in 2018.

In selecting the Citrus County Combined Cycle Power Plant as its NPGU, DEF reviewed, evaluated and ultimately rejected other conventional, advanced, and renewable generation resources as potential capacity addition alternatives. DEF pre-screened the options that did not warrant more detailed cost-effectiveness analysis based on industry information and experience and DEF's own information and experience with the generation options. Generation alternatives that passed the initial screening were considered viable generation capacity alternatives and were included in the next step of the IRP process. That step involved an economic evaluation of the generation alternatives in an electric utility industry standard resource optimization program computer model that determined the combination or combinations of future resource additions that meet system reliability criteria while satisfying system constraints at the most cost-effective total production cost for DEF's system measured by the Cumulative Present Value Revenue Requirements ("CPVRR").

Generally, the generation plans with the lowest CPVRR are chosen as resource plan candidates for the Energy Portfolio Management ("EPM") model to further evaluate the production cost results. EPM is a detailed production cost model which models system behavior at an hourly level with more detailed operating constraints. DEF combines the EPM production cost results with the fixed cost outputs from Strategist to create final rankings. Generally, the generation plan with the lowest CPVRR over the study period is chosen as the Base Generation Expansion Plan. In this case, the Base Generation Expansion Plan includes the Citrus County Combined Cycle Power Plant as the NPGU.

Demand-side resources are also generally evaluated in much the same manner as supplyside resources. Strategist is up-dated with the cost and load impact parameters for the potential demand-side resources that survive the initial screening process. The Strategist model screens these demand-side resources on an individual basis against supply-side generation avoided units to determine the benefit or detriment to the DEF system from adding the demand-side resource to DEF's system. The proposed DSM goals will have no impact on the Company's reliability need in 2018 because there are no DSM measures that can offset the need for additional generation capacity beginning in 2018 at a cost effective rate for DEF's customers. After selecting the Citrus County Combined Cycle Power Plant as its NPGU, in accordance with the Commission Bid Rule, Rule 25-22.082, F.A.C., DEF issued the 2018 RFP on October 8, 2013. The 2018 RFP solicited proposals for other generation capacity resources that might prove superior as a supply-side alternative to the Company's Citrus County Combined Cycle Power Plant NPGU.

DEF also retained Alan Taylor with Sedway Consulting, Inc. as an independent monitor for the 2018 RFP to ensure the 2018 RFP process was fair and impartial and that the 2018 RFP solicitation documents were clear, fair, and consistent with the Commission Bid Rule. Mr. Taylor also served as an independent evaluator to ensure that DEF's evaluation of the proposals received in response to the 2018 RFP was fair and impartial and that the Company's selection of the most cost-effective proposal to meet DEF's reliability need in response to the 2018 RFP was reasonable.

No third party bidder in response to the 2018 RFP proposed a plant that came close to matching the benefits of the Citrus County Combined Cycle Power Plant for DEF's customers. The Citrus County Combined Cycle Power Plant is a highly efficient, state-of-the-art, natural-gas fired combined cycle generation plant. This high efficiency yields relatively lower production costs than any other option, creating significant relative fuel savings benefits for DEF's customers. The favorable site location adjacent to the CREC, where site infrastructure can be shared with and existing transmission infrastructure can be used for the Plant, adds substantial benefits to this Plant for DEF's customers. All third party bidder proposals fell short of the Company's reliability needs, and when combined with generic, unplanned and undeveloped plants to meet that need, the closest third party bidder proposal resource plan scenario was over \$470 million less cost effective for DEF's customers. Based on DEF's internal, rigorous IRP process, and the competitive market process of the 2018 RFP, the Citrus County Combined Cycle Power Plant is the most cost effective generation resource and the right choice for DEF's customers.

The Citrus County Combined Cycle Power Plant is estimated to cost \$1,514 million (nominal), including Allowance for Funds Used During Construction ("AFUDC"). The estimated incremental annual fixed operation and maintenance ("O&M") cost for the Citrus County Combined Cycle Power Plant is approximately \$11.3 million and the estimated variable O&M is approximately \$24.8 million, based on the estimate for 2019. The only transmission work that is necessary for the Citrus County Combined Cycle Power Plant is the switchyard and transmission bus line work to actually connect that plant with the existing DEF transmission facilities that are already connected to DEF's transmission system and the electric power grid in Florida. The Plant will be fueled by natural gas as the single fuel source for the Plant supplied by the Sabal Trail pipeline through a gas lateral to the Plant. Other gas pipelines into Florida will be available as additional resources in the event of a supply disruption or curtailment on the Sabal Trail pipeline. The Sabal Trail pipeline allows DEF to access abundant unconventional and conventional on-shore natural gas supplies for the Citrus County Combined Cycle Power Plant. As a result, DEF achieves one of the primary objectives of fuel diversity, namely, ensuring that fuel is readily available at a cost-effective price. DEF's access to these natural gas supplies for the Plant and the gas transportation pipeline interconnections achieves the second primary

objective of fuel diversity too, which is, ensuring a reliable supply in the event of fuel supply interruptions. DEF, therefore, has reasonably achieved the benefits of fuel diversity with the addition of the Citrus County Combined Cycle Power Plant to its system.

In sum, the Citrus County Combined Cycle Power Plant will enable the Company to meet the reliability needs of DEF's customers, it will provide a superior source of efficient, costeffective power to DEF's customers during its life, it will expand the Company's natural gas fuel supply diversity, and it adds flexibility to the energy production resources on the DEF system. There simply is no more cost-effective, viable generation resource to meet DEF's capacity needs beginning in 2018 to provide reliable power to DEF's customers. DEF requests Commission approval of its Petition for Determination of Need for the Citrus County Combined Cycle Power Plant.

D. DEF'S STATEMENT OF ISSUES AND POSITIONS:

The issues listed below are as shown in Appendix A to the Order.

Is the proposed Citrus County combined cycle power plant needed, taking into account the need for electric system reliability and integrity?

DEF Position:

Yes. By the summer of 2018, when the Citrus County Combined Cycle Power Plant is projected to first come on-line, the summer peak demand is projected to grow to 9,439 MW and by the next summer, when the Citrus County Combined Cycle Power Plant is expected to be fully operational, the summer peak demand is projected to reach 9,813 MW. The annual growth in peak summer demand is approximately 1.4 percent over the current ten year forecast period. This peak summer demand growth results in a summer Reserve Margin of 11.7 percent by 2018 without additional resources to DEF's system. DEF's minimum Reserve Margin threshold is 20 percent. DEF maintains its Reserve Margin for both its summer and winter peak demands to ensure that DEF provides reliable electric service to its customers. DEF needs additional generation in the summer of 2018 to meet its 20 percent minimum Reserve Margin commitment. The growth in demand and energy is primarily a result of increasing customer growth and improving economic conditions in Florida following the past recession. Generation facility retirements also contribute to the Company's reliability needs in the summer of 2018. The addition of the Citrus County Combined Cycle Power Plant will increase DEF's summer peak Reserve Margin to about 20.4 percent in 2018 and 23.6 percent in 2019. The Citrus County Combined Cycle Power Plant allows DEF to satisfy its commitment to maintain a minimum 20 percent Reserve Margin by 2018 and beyond 2018. (Borsch, Delehanty, Scott).

Issue 2: Is the proposed Citrus County combined cycle plant needed, taking into account the need for adequate electricity at a reasonable cost?

DEF Position:

Yes. The Citrus County Combined Cycle Power Plant is a highly efficient, state-of-the-art, natural-gas fired combined cycle generation plant. This high efficiency yields relatively lower production costs than any other option, creating significant relative fuel savings benefits for DEF's customers. The favorable site location adjacent to the CREC, where site infrastructure can be shared with and existing transmission infrastructure can be used for the Plant, adds substantial benefits to this Plant for DEF's customers.

The Citrus County Combined Cycle Power Plant total project cost, including the AFUDC and transmission interconnection costs, is \$1,514 million (nominal). EpC and major equipment procurement represents approximately 83% of the project cost (not including AFUDC). Firm/fixed price bids for the major equipment and the EpC have been received from RFPs to qualified bidders. As a result, DEF is confident the costs to build the Citrus County Combined Cycle Power Plant are competitive and will provide generation to DEF's customers at a reasonable cost.

No third party bidder in response to the 2018 RFP proposed a plant that came close to matching the benefits of the Citrus County Combined Cycle Power Plant for DEF's customers. All third party bidder proposals fell short of the Company's reliability needs, and when combined with generic, unplanned and undeveloped plants to meet that need, the closest third party bidder proposal resource plan scenario was over \$470 million less cost effective for DEF's customers. Based on DEF's internal, rigorous IRP process, and the competitive market process of the 2018 RFP, the Citrus County Combined Cycle Power Plant will provide adequate electricity at a reasonable cost for DEF's customers. (Borsch, Landseidel, Dierolf, Patton, Delehanty, Scott).

Issue 3: Is the proposed Citrus County combined cycle plant needed, taking into account the need for fuel diversity and supply reliability?

DEF Position:

Yes. The Citrus County Combined Cycle Power Plant will be fueled by natural gas as the single fuel source for the Plant. Natural gas is a readily available fuel source, given current and projected levels of long-term supply of natural gas. Natural gas, therefore, is and will be a competitively-priced fuel source for the Plant. Natural gas is an attractive economic fuel source for the generation of electricity for DEF's customers compared to the total cost of generation for other types of generation technologies.

Natural gas is also an attractive fuel source because, compared to oil and coal, it is a cleaner burning fuel and does not have the same level of environmental costs and related impacts associated with generation plants using those alternative fuels. This results in a favorable impact on the relative capital cost of constructing generating facilities capable of complying with current and ever increasing environmental regulations. As a result, natural gas is the economic fuel of choice for electric generation for customers at this time.

The increase in the available gas supply and production from conventional and, in particular, unconventional tight gas and shale rock formations in the United States due to improvements in drilling and well stimulation technologies is expected to continue to favorably impact fuel prices. Natural gas is available in sufficiently abundant supply that natural gas is a relatively economic fuel choice for power generation well into the future.

The natural gas will be supplied by the Sabal Trail pipeline through a gas lateral to the Plant. Sabal Trail is a new Greenfield interstate natural gas pipeline project. Sabal Trail provides DEF and the State of Florida direct access to upstream pipelines that have access to abundant onshore conventional and unconventional natural gas supplies, including abundant natural gas shale resources. The abundant supply of unconventional natural gas resources is a significant recent development that provides electric utilities like DEF with natural gas supply diversity to achieve one of the primary objectives of fuel diversity, namely, ensuring that fuel is readily available at a cost-effective price.

The Company can still generate electricity economically in the event of interruptions to one or more of the fuel supply resources available to DEF for the Citrus County Combined Cycle Power Plant. Other gas pipelines into Florida will be available as additional resources in the event of a supply disruption on the Sabal Trail pipeline. DEF will have additional receipt-only interconnects between Sabal Trail and Florida Gas Transmission Company, LLC ("FGT"). In the event of a pipeline disruption or curtailment on Sabal Trail, these interconnects would allow DEF the ability to utilize its FGT contracts or market supply to deliver gas supply to the Citrus County Combined Cycle Plant. DEF's access to these natural gas supplies for the Citrus County Combined Cycle Power Plant and the gas transportation pipeline interconnections achieves the second primary objective of fuel diversity, which is, ensuring a reliable supply in the event of fuel supply interruptions. DEF, therefore, has reasonably achieved the benefits of fuel diversity with the addition of the Citrus County Combined Cycle Plant. (Borsch, Patton, Delehanty).

Issue 4: Are there any renewable energy sources and technologies or conservation measures taken by or reasonably available to Duke Energy Florida that might mitigate the need for the proposed Citrus County combined cycle plant?

DEF Position:

No. Renewable resources such as wind, solar, and bio-mass are not commercially available on a utility-scale for generation capacity at a cost-effective price. DEF has held open a Request for Renewables ("RFR") for renewable generation resources for years and DEF has not received a utility-scale, commercially viable solar or wind proposal that has actually achieved commercial operation. In addition, DEF's 2018 RFP was open to all proposals for additional firm, dispatchable generation capacity and the only proposals DEF received were for gas-fired generation (with the exception of a small, existing municipal waste renewable generation facility). DEF will continue to solicit renewable projects through its RFR, however, large scale, commercially viable and economic generation capacity renewable projects cannot be reasonably expected at this time. There are no demand-side resources reasonably available to DEF to replace or mitigate the need for additional generation capacity in 2018 to meet the Company's reliability needs. DEF included the demand-side resources in its current Demand Side Management ("DSM") Plan, as modified by the Commission in Order No. PSC-11-0347-PAA-EG, and, as further modified by administrative approval in 2012, in its model runs to determine the Base Generation Plan. These DSM programs extend through the end of this year when new DSM goals for the next ten years will be approved by the Commission in Docket No. 130200-EI and when subsequently DEF will submit proposed DSM programs to meet those goals for Commission approval. The Citrus County Combined Cycle Power Plant is needed even if the Company meets all of its proposed DSM program goals. Thus, these conservation measures do not replace or offset the need for additional supply-side generation resources in 2018. (Borsch).

Is the proposed Citrus County combined cycle plant the most cost-effective alternative available to meet the needs of Duke Energy Florida and its customers?

DEF Position:

Yes, it is. The Company conducted a careful screening of various other supply-side alternatives as part of its IRP process before identifying the Citrus County Combined Cycle Power Plant as its NPGU. Further, through the 2018 RFP process, DEF determined that the Citrus County Combined Cycle Power Plant was more cost-effective than any of the proposals.

The Citrus County Combined Cycle Power Plant is a highly efficient, state-of-the-art natural-gas fired combined cycle generation plant. This high efficiency yields relatively lower production costs than any other option, creating significant relative fuel savings benefits for DEF's customers. The high efficiency coupled with the favorable site location adjacent to the CREC where site infrastructure can be shared and existing transmission infrastructure capacity exists adds substantial benefits to this Plant for DEF's customers. No bidder in response to the 2018 RFP proposed a plant that came close to matching the benefits of the Citrus County Combined Cycle Power Plant for DEF's customers. All bidder proposals fell short of the Company's reliability needs, and even when combined with generic, unplanned and undeveloped plants, the closest bidder proposal resource plan scenario was over \$470 million less cost effective for DEF's customers. All bidder proposals combined, which still did not equal DEF's reliability need in 2018 and beyond, was over \$1.2 billion less cost effective than the Citrus County Combined Cycle Power Plant. Based on DEF's internal, rigorous IRP process, and the competitive market process of the 2018 RFP, the Citrus County Combined Cycle Power Plant is clearly the most cost effective generation resource for DEF's customers. (Borsch, Landseidel, Scott, Taylor).

Issues 6: Did Duke Energy Florida reasonably evaluate all alternative scenarios for cost effectively meeting the needs of its customers over the relevant planning horizon?

DEF Position:

Yes, DEF reasonably evaluated all alternative scenarios for meeting the needs of its customers over the relevant time frame.

First, in accordance with the Commission Bid Rule, DEF issued the 2018 RFP on October 8, 2013, soliciting proposals for other generation capacity resources that might prove superior as a supply-side alternative to the Company's Citrus County Combined Cycle Power Plant NPGU. In the 2018 RFP, DEF identified the Citrus County Combined Cycle Power Plant as its NPGU, and invited interested parties to make alternative proposals that offered superior value, based on price and non-price attributes, to the Company's customers. DEF sought reliable, dispatchable, financially and technically sound capacity and energy proposals to meet DEF's reliability need in 2018. DEF evaluated all proposals by systematically following a structured, orderly evaluation process, which was identified in the 2018 RFP, along with the criteria by which the proposals were evaluated.

DEF received bid proposals in addition to the Company's self-build proposal for the Citrus County Combined Cycle Power Plant. None of these proposals met the Company's reliability need for 1,640 MW of summer generation capacity in the year 2018, with a minimum of 820 MW in service no later than May 1, 2018 and the balance of generation capacity in service no later than December 1, 2018. None of the proposals individually met the request for 820 MW in service by May 1, 2018 and in fact, all six proposals combined did not meet the Company's reliability need for generation capacity in 2018. DEF decided to continue its evaluation of these six proposals, however, to see if there was any combination of them that, individually or collectively with other, undeveloped generic Company power plants, provided customers a more cost effective supply-side generation alternative to the Citrus County Combined Cycle Power Plant NPGU. These combinations, or resource combination scenarios, were quantitatively and qualitatively evaluated against the Citrus County Combined Cycle Power Plant.

That evaluation demonstrated that the Citrus County Combined Cycle Power Plant NPGU is the most cost-effective supply-side generation capacity to meet the Company's reliability need in 2018. The Citrus County Combined Cycle Power Plant is approximately \$477 million less expensive than the most realistic least-cost, third-party proposal resource combination scenario. DEF further performed sensitivity analyses, in which DEF assumed either a high gas price forecast case or a zero carbon cost ("CO2") price case, and, in all these cases, the Citrus County Combined Cycle Power Plant is the least cost alternative. These evaluations demonstrate that the selection of the Citrus Country Combined Cycle Power Plant is the right choice for DEF customers.

DEF also retained Alan Taylor with Sedway Consulting, Inc. as an independent monitor/evaluator for the 2018 RFP. DEF retained an independent monitor to ensure the 2018 RFP process was fair and impartial and that the 2018 RFP solicitation documents were clear, fair, and consistent with the Commission Bid Rule. DEF also retained Mr. Taylor as an independent evaluator to ensure that DEF's evaluation of the proposals received in response to the 2018 RFP was fair and impartial and that the Company's selection of the most cost-effective proposal to meet DEF's reliability need in response to the 2018 RFP was reasonable.

The Citrus County Combined Cycle Power Plant is a highly efficient, state-of-the-art, natural-gas fired combined cycle generation plant. This high efficiency yields relatively lower production costs than any other option, creating significant relative fuel savings benefits for DEF's customers. The favorable site location adjacent to the CREC, where site infrastructure can be shared with and existing transmission infrastructure can be used for the Plant, adds substantial benefits to this Plant for DEF's customers. No third party bidder in response to the 2018 RFP proposed a plant that came close to matching the benefits of the Citrus County Combined Cycle Power Plant for DEF's customers. All third party bidder proposals fell short of the Company's reliability needs, and when combined with generic, unplanned and undeveloped plants to meet that need, the closest third party bidder proposal resource plan scenario was over \$470 million less cost effective for DEF's customers. Based on DEF's internal, rigorous IRP process, and the competitive market process of the 2018 RFP, the Citrus County Combined Cycle Power Plant is the most cost effective generation resource and the right choice for DEF's customers. (Borsch, Scott, Taylor).

Issue 7: Based on the resolution of the foregoing issues, should the Commission grant the requested determination of need for the proposed Citrus County combined cycle plant?

DEF Position:

Yes. DEF needs the Citrus County Combined Cycle Power Plant to maintain its electric system reliability and integrity and to provide its customers with adequate electricity at a reasonable cost. By building the Citrus County Combined Cycle Power Plant, the Company will be able to meet its commitment to maintain a 20 percent Reserve Margin, and it will do so by improving not just the quantity, but also preserving the quality, of its total reserves, maintaining an appropriate portion of physical generating assets in the Company's overall resource mix. The Plant also adds diversity to DEF's fleet of generating assets, in terms of natural gas fuel supply diversity, technology, age, and functionality of the Plant. Having exhausted cost effective conservation measures reasonably available to the Company in the timeframe of the need, DEF selected the Citrus County Combined Cycle Power Plant as its most cost-effective alternative for meeting its reliability needs. The Plant will be a state-of-the-art, fuel efficient, environmentally preferable installation that will be located on a site that takes advantage of existing transmission infrastructure and other infrastructure resources at the CREC adjacent to the Plant site. The Company believes it will successfully obtain all necessary permits to build and operate the Citrus County Combined Cycle Power Plant through the SCA approval process. DEF therefore urges the Commission to approve DEF's plan to build the Citrus County Combined Cycle Power Plant. (Borsch, Landseidel, Dierolf, Patton, Delehanty, Scott, Taylor).

Issue 8: Should this docket be closed?

DEF Position:

Following a final order by the Commission granting the requested determination of need for the proposed Citrus County Combined Cycle Power Plant and pending the filing of reconsideration or for appellate review, if any, yes this docket should be closed. (Borsch).

E. STIPULATED ISSUES:

DEF and FIPUG have stipulated as follows:

Duke Energy Florida, Inc. provides electrical service to FIPUG members; this proceeding affects the substantial interests of FIPUG members who receive electrical service from Duke Energy Florida, Inc.; FIPUG has standing in this matter for trial and appellate purposes.

F. PENDING MOTIONS OR OTHER MATTERS:

None at this time.

Document No.	Request	Date Filed
03047-14	First Request for Confidential Classification regarding Testimony Exhibits of B. Borsch, E. Scott, A. Taylor and K. Delehanty	6/17/14
03580-14	Second Request for Confidential Classification regarding portions of responses to Calpine Construction Finance Company, L.P.'s First Interrogatories and First Request for Production	7/9/14
03726-14	Third Request for Confidential Classification regarding responses to Calpine Second Interrogatories No. 10a	7/15/14
03891-14	Fourth Request for Confidential Classification regarding portions of responses to Citizens' Interrogatory Nos. 5, 6, 11 and 12 and documents responsive to Citizens' First Request for Production of Documents Nos. 4a, 4c, 5, 6, and 10	7/22/14

G. DEF'S REQUESTS FOR CONFIDENTIAL CLASSIFICATION:

H. REQUIREMENTS OF PREHEARING ORDER THAT CANNOT BE MET:

There are no requirements of the prehearing order that cannot be met at this time.

I. OBJECTIONS TO WITNESSES' QUALIFICATIONS:

None.

Respectfully submitted on the 1st day of August, 2014,

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY a true and correct copy of the foregoing has been furnished to counsel and parties of record as indicated below via electronic mail this 1st day of August, 2014.

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