

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for determination of need for  
Citrus County combined cycle power plant, by  
Duke Energy Florida, Inc.

DOCKET NO. 140110-EI

In re: Petition for determination of cost  
effective generation alternative to meet need  
prior to 2018, by Duke Energy Florida, Inc.

DOCKET NO. 140111-EI  
ORDER NO. PSC-14-0440-PHO-EI  
ISSUED: August 22, 2014

Pursuant to Notice and in accordance with Rule 28-106.209, Florida Administrative Code (F.A.C.), a Prehearing Conference was held on August 13, 2014, in Tallahassee, Florida, before Commissioner Ronald A. Brise, as Prehearing Officer.

APPEARANCES:

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On behalf of Duke Energy Florida (DEF).

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On behalf of Office of Public Counsel (OPC).

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On behalf of White Springs Agricultural Chemicals, Inc. d/b/a PCS Phosphate (PCS Phosphate).

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On behalf of NRG Florida, LP (NRG).

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On behalf of EFS Shady Hills LLC (Shady Hills).

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On behalf of the Southern Alliance for Clean Energy (SACE).

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On behalf of the Florida Public Service Commission (Staff).

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Advisor to the Florida Public Service Commission.

## **PREHEARING ORDER**

### **I. CASE BACKGROUND**

On May 27, 2014, Duke Energy Florida, Inc. (DEF or Company) filed a Petition and supporting testimony to determine the need for a Citrus County combined cycle power plant and another Petition for determination of cost effective generation alternatives to meet need prior to 2018, pursuant to Sections 366.04 and 403.519, Florida Statutes (F.S.), and Rules 25-22.080, 25-22.081, 25-22.082 and 28-106.201, Florida Administrative Code (F.A.C.). On May 29, 2014, the Commission issued a Notice of Commencement of Proceedings pursuant to Rule 25-22.080(3), F.A.C.

The Office of Public Counsel, the Florida Industrial Power Users Group, White Springs Agricultural Chemicals, Inc. d/b/a PCS Phosphate, Calpine Construction Finance Company, L.P., and NRG Florida, LP, have each been granted intervention in both dockets. EFS Shady Hills LLC., and SACE have been granted intervention in Docket No. 140110-EI.

Both matters are scheduled for a formal administrative hearing beginning on August 26, 2014. The hearings will be conducted simultaneously.

### **II. CONDUCT OF PROCEEDINGS**

Pursuant to Rule 28-106.211, F.A.C., this Prehearing Order is issued to prevent delay and to promote the just, speedy, and inexpensive determination of all aspects of this case.

### **III. JURISDICTION**

This Commission is vested with jurisdiction over the subject matter by the provisions of Chapters 366.04 and 403.519, F.S. This hearing will be governed by said Chapters and Chapters 25-6, 25-22, and 28-106, F.A.C., as well as any other applicable provisions of law.

### **IV. PROCEDURE FOR HANDLING CONFIDENTIAL INFORMATION**

Information for which proprietary confidential business information status is requested pursuant to Section 366.093, F.S., and Rule 25-22.006, F.A.C., shall be treated by the Commission as confidential. The information shall be exempt from Section 119.07(1), F.S., pending a formal ruling on such request by the Commission or pending return of the information to the person providing the information. If no determination of confidentiality has been made and the information has not been made a part of the evidentiary record in this proceeding, it shall be returned to the person providing the information. If a determination of confidentiality has been made and the information was not entered into the record of this proceeding, it shall be returned to the person providing the information within the time period set forth in Section

366.093, F.S. The Commission may determine that continued possession of the information is necessary for the Commission to conduct its business.

It is the policy of this Commission that all Commission hearings be open to the public at all times. The Commission also recognizes its obligation pursuant to Section 366.093, F.S., to protect proprietary confidential business information from disclosure outside the proceeding. Therefore, any party wishing to use at the hearing any proprietary confidential business information, as that term is defined in Section 366.093, F.S., shall adhere to the following:

- (1) When confidential exhibits are used in the hearing, parties must prepare twenty-five copies for the Commissioners, necessary staff, parties and the court reporter, in red envelopes clearly marked with the nature of the contents and with the confidential information highlighted. Any party wishing to examine the confidential material that is not subject to an order granting confidentiality shall be provided a copy in the same fashion as provided to the Commissioners, subject to execution of any appropriate protective agreement with the owner of the material.
- (2) The Commissioners and Commission staff will have confidential versions of the prefiled testimony and prefiled exhibits available for their use in the hearing room. The party intending to use the confidential prefiled testimony or prefiled exhibit shall prepare sufficient copies for use by the witness. All other parties are responsible for providing their own copy of the confidential prefiled testimony and prefiled exhibits.
- (3) Any party intending to use confidential prefiled testimony or exhibits shall coordinate with Commission staff prior to the commencement of the hearing to identify what confidential exhibits or portions of the confidential prefiled testimony shall be used at the hearing.
- (4) Counsel and witnesses are cautioned to avoid verbalizing confidential information in such a way that would compromise confidentiality. Therefore, confidential information should be presented by written exhibit when reasonably possible.

At the conclusion of that portion of the hearing that involves confidential information, all copies of confidential exhibits shall be returned to the proffering party. If a confidential exhibit has been admitted into evidence, the copy provided to the court reporter shall be retained in the Office of Commission Clerk's confidential files. If such material is admitted into the evidentiary record at hearing and is not otherwise subject to a request for confidential classification filed with the Commission, the source of the information must file a request for confidential classification of the information within 21 days of the conclusion of the hearing, as set forth in Rule 25-22.006(8)(b), F.A.C., if continued confidentiality of the information is to be maintained.

V. PREFILED TESTIMONY AND EXHIBITS; WITNESSES

Testimony of all witnesses to be sponsored by the parties (and Staff) has been prefiled and will be inserted into the record as though read after the witness has taken the stand and affirmed the correctness of the testimony and associated exhibits. All testimony remains subject to timely and appropriate objections. Upon insertion of a witness' testimony, exhibits appended thereto may be marked for identification. Each witness will have the opportunity to orally summarize his or her testimony at the time he or she takes the stand. Summaries of testimony shall be limited to five minutes.

Witnesses are reminded that, on cross-examination, responses to questions calling for a simple yes or no answer shall be so answered first, after which the witness may explain his or her answer. After all parties and Staff have had the opportunity to cross-examine the witness, the exhibits may be moved into the record. All other exhibits may be similarly identified and entered into the record at the appropriate time during the hearing.

The Commission frequently administers the testimonial oath to more than one witness at a time. Therefore, when a witness takes the stand to testify, the attorney calling the witness is directed to ask the witness to affirm whether he or she has been sworn.

The parties shall avoid duplicative or repetitious cross-examination. Further, friendly cross-examination will not be allowed. Cross-examination shall be limited to witnesses whose testimony is adverse to the party desiring to cross-examine. Any party conducting what appears to be a friendly cross-examination of a witness should be prepared to indicate why that witness's direct testimony is adverse to its interests.

Witnesses who appear in both dockets shall be called for a single appearance for direct and cross examination in both dockets. Rebuttal witnesses shall likewise make a single simultaneous appearance in both dockets. Witnesses shall, however, be subject to the normal rules for being recalled or released upon completion of their testimony.

VI. ORDER OF WITNESSES

<u>Witness</u>	<u>Proffered By</u>	<u>Issues #</u>	<u>Docket No.</u>
<u>Direct</u>			
Mark E. Landseidel	DEF	2, 5, 7, 10, 13, 14, 15	140110 & 140111
Amy Dierolf	DEF	2, 7	140110
Jeffrey Patton	DEF	2, 3, 7	140110

<u>Witness</u>	<u>Proffered By</u>	<u>Issues #</u>	<u>Docket No.</u>
Kevin Delehanty	DEF	1, 2, 3, 7, 10, 11, 15	140110 & 140111
Ed Scott	DEF	1, 2, 5, 6, 7, 9, 10, 13, 14, 15	140110 & 140111
Alan S. Taylor, Sedway Consulting, Inc.	DEF	5, 6, 7	140110
Julie Solomon, Navigant Consulting, Inc.	DEF	13, 14, 15	140111
Benjamin M.H. Borsch	DEF	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	140110 & 140111
Todd Thornton	Calpine	1, 2, 3, 5, 6, 7, 9, 10, 11, 13, 14, 15	140110 & 140111
Paul J. Hibbard	Calpine	2, 3, 5, 6, 7, 10, 11, 13, 14, 15	140110 & 140111
John L. Simpson, P.E.	Calpine	1, 2, 3, 5, 6, 7, 9, 10, 11, 13, 14, 15	140110 & 140111
David Hunger, Ph.D.	Calpine	10, 13, 14, 15	140111
Jeffrey Pollock	NRG	9, 10, 13, 14, 15	140110 & 140111
Jim Dauer	NRG	10, 11, 13, 14, 15	140110 & 140111
John F. Morris	NRG	13, 14	140110 & 140111
<u>Rebuttal</u>			
Jeffrey Patton	DEF	11, 13, 14, 15	140111
Ed Scott	DEF	9, 10, 13, 14, 15	140111
Julie Solomon Navigant Consulting, Inc.	DEF	13, 14, 15	140111
Benjamin M.H. Borsch	DEF	1, 2, 3, 4, 5, 6, 7, 8 9, 10, 11, 12, 13, 14, 15, 16	140110 & 140111

VII. BASIC POSITIONS

**DEF:**  
**(140110-EI)**

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") 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 demand-side 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 supply-side 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, cost-effective 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.

**DEF:**

**(140111-EI)** Pursuant to Rules 25-22.080 and 25-22.081, Florida Administrative Code ("F.A.C."), and in accordance with the 2013 Revised and Restated Stipulation and Settlement Agreement approved by the Commission on November 12, 2013 in Order No. PSC-13-0598-FOF-EI in Docket No. 130208-EI (the "2013 Settlement Agreement"), DEF petitioned the Florida Public Service Commission ("FPSC" or the "Commission") on May 27, 2014 for an affirmative determination that DEF has a need for additional generation capacity prior to 2018 and that DEF's Suwannee Simple Cycle and Hines Chillers Power Uprate Projects are the most cost effective generation alternatives to meet that need. In the 2013 Settlement Agreement, the Company agreed to evaluate the most cost effective alternative to satisfy its generation capacity needs prior to year end 2017 through its IRP methodology and to present this evaluation to the Commission.

DEF needs the Suwannee Simple Cycle Project and the Hines Chillers Power Uprate Project by the summer of 2016 and 2017, respectively, to meet its 20 percent Reserve Margin commitment and to serve its customers' future electrical power needs in a reliable and cost-effective manner. The Company plans its resource needs in its IRP process to optimize its supply-side options along with its demand-side options into a final, integrated optimal plan, designed to deliver reliable, cost-effective power to DEF's customers. DEF plans its resources in a manner consistent with utility industry planning practices to satisfy its minimum 20 percent Reserve Margin criterion established for investor-owned utilities in Florida in Order No. PSC-99-2507-S-EU.

The Company faced resource planning decisions leading up to and early in 2013 that affected the Company's near-term reliability need for generation capacity. As a result, during the Company's annual resource planning analysis, the Company identified substantial generation capacity needs in the near term, beginning in 2016. This analysis was first reflected in the Company's 2013 TYSP and the Company's generation capacity need beginning in the summer of 2016 was confirmed in its 2014 TYSP. The Company will experience load growth as the Florida economy recovers from the last recession. DEF expects both more customers and growth in energy demand in the near term, through 2017 and beyond. This growth, especially in summer peak demand on the Company's system, is one factor in the Company's need for additional generation.

Another driver in the Company's need for additional generation is the retirement of and reduction in generation capacity on DEF's system. In February 2013, the

Company decided to retire its Crystal River Unit 3 nuclear power plant (“CR3”). CR3 accounted for approximately 790 MW of summer generation capacity on DEF’s system. The Company’s plan for compliance with the EPA MATS at CR1 and CR2 will result in a reduction in the CR1 and CR2 plant capacity beginning in the spring of 2016. The Company also plans to retire some of its oldest combustion turbines in its fleet and its three 1950’s vintage, oil- and gas-fired steam generation plants at the Company’s Suwannee power plant site in 2016. The Company’s generation plant retirements are another primary reason for the Company’s generation capacity need in 2016 and 2017 to reliably serve its customers.

The Suwannee Simple Cycle and the Hines Chillers Power Uprate projects are the most cost effective options to fulfill DEF’s generation capacity needs prior to 2018. The Suwannee Simple Cycle project leverages use of existing land, gas, and transmission infrastructure at the Company’s existing Suwannee power plant site and will have low air emissions using proven combustion turbine technology. In addition, the F class combustion turbine technology that will be placed in commercial service with the Suwannee Simple Cycle project is well suited to the Company’s peaking capacity needs.

The Hines Chillers Power Uprate project meets the Company’s need for reliable capacity through an increase in the efficient power output of the existing natural-gas fired, combined cycle power plants located at the Hines Energy Complex (“HEC”). The Project provides customers the savings associated with achieving reliable summer peaking capacity at combined cycle generation efficiency without having to build additional peaking capacity at another site on DEF’s system.

Before selecting the Suwannee Simple Cycle and Hines Chillers Power Uprate Projects, DEF examined several alternative generation expansion plans to meet its near-term reliability need. The Company evaluated generation options to determine those options that were the most cost-effective, screening the options based on cost, fuel sources and availability, technological maturity, and overall resource feasibility within the Company’s system. Generation alternatives that passed this screen were included in the Company’s economic evaluation in the Strategist and Energy Portfolio Management (“EPM”) resource planning production cost computer model. The primary output of this modeling is a Cumulative Present Value Revenue Requirements (“CPVRR”) comparison of the generation resource options that satisfied DEF’s reliability requirements. The Suwannee Simple Cycle Project and the Hines Chillers Power Uprate Project had the lowest CPVRR and were chosen by the Company as its Base Generation Plan to meet the Company’s reliability needs in 2016 and 2017.

DEF evaluated several power purchase agreement (“PPA”) and acquisition of generation facility proposals to determine if they were more cost effective than

the Company's self-build new generation Suwannee Simple Cycle and Hines Chillers Power Uprate Projects to meet the Company's capacity needs commencing in 2016. DEF evaluated nine proposals for PPAs or generation facility acquisitions. DEF evaluated all of these proposals by systematically following a structured, orderly evaluation process that evaluated all proposals, including the Company's self-build generation projects, on price and non-price attributes. This detailed evaluation was performed in stages and included all costs, including transmission cost impacts, in the analysis. If a proposal was economic compared to the Company's self-build generation projects the Company would proceed to the next step in the analysis.

In CPVRR terms, in the initial detailed economic evaluation, the Company's Suwannee Simple Cycle and Hines Chillers Power Uprate projects were found to be more cost effective than all the PPA proposals and all but one of the potential generation facility acquisition proposals. The Company's Base Generation Plan was only marginally more expensive than the NRG plant acquisition proposal, but in CPVRR terms over the 30-year study period they were nearly equivalent on an economic basis to the Company. The Calpine plant acquisition proposal ranked third behind the Company's Base Generation Plan including its self-build projects.

The next step in the evaluation was to quantify a number of cost risks with the proposals evaluated in cost sensitivities. These sensitivities included construction cost risk for the self-build projects, and gas transportation contract risks, plant condition and maintenance risks, and transmission cost risks for the potential generation facility acquisitions. Additionally, there were also qualitative or non-price issues with the technical feasibility and viability of the proposed acquisitions such as the physical condition and maintenance of the plants, site environmental impacts and compliance, insurance, and indemnity obligations, among other qualitative factors, that had to be evaluated and mitigation plans developed for these qualitative risks, including the negotiation of terms and conditions to mitigate those risks.

The cost risk sensitivities placed the acquisition proposals in a range where they were possibly close to the cost effectiveness of the Company's self-build projects or substantially less cost effective than the self-build projects. Given this range of possible values, DEF continued its evaluation of the feasibility of the potential generation facility acquisitions by conducting a FERC Competitive Analysis Screen. This FERC market screen analysis is a required step in obtaining FERC approval under the Federal Power Act ("FPA") for any acquisition of a jurisdictional generation facility.

The Company retained Julie Solomon with Navigant Consulting, Inc. to perform the FERC Competitive Analysis Screen. Both the NRG and the Calpine generation facility acquisition proposals failed the FERC Competitive Analysis

Screen. Failure of the FERC Competitive Analysis Screen means that FERC likely will not approve the generation facility acquisition transaction without mitigation of the market screen failures. This meant that the Company would have to build additional transmission facilities to expand the transmission import capability to mitigate the screen failures at substantial cost to the Company and its customers.

No NRG or Calpine witness directly challenges the cost-effectiveness of the Hines Chillers Power Uprate Project as a generation capacity resource to meet DEF's reliability need in the summer of 2017. Their testimony challenges the Company's comparison of their respective generation capacity proposals to the Suwannee Simple Cycle Project.

NRG submitted a final and best offer to meet the Company's generation capacity need commencing in the summer of 2016 as an alternative to the Company's Suwannee Simple Cycle Project after DEF filed its Petition in this Docket. NRG witnesses abandon that NRG final and best offer in their recommendations. They instead challenge DEF's decision that the Suwannee Simple Cycle Project is the most cost effective alternative to meet DEF's need in the summer of 2016 based on NRG's least cost effective, initial plant acquisition proposal. DEF evaluated that initial NRG plant acquisition proposal and determined it was not more cost effective, on a quantitative and qualitative basis -- which NRG agrees is the correct evaluation methodology -- to the Suwannee Simple Cycle Project to meet DEF's need commencing in the summer of 2016. NRG witnesses continue to ignore DEF's need for firm natural gas transportation at all times for all the plant capacity for DEF to rely on the NRG plant as a firm resource to meet DEF's obligation to provide reliable electric service to its customers. Further, no NRG witness disputes the fact that the NRG initial plant acquisition that NRG continues to advance in its testimony failed the FERC market screen rendering FERC approval of this acquisition unlikely without substantial mitigation. For these reasons, the Suwannee Simple Cycle Project remains a superior generation capacity resource to the NRG plant acquisition to meet DEF's generation capacity need commencing in the summer of 2016.

Calpine submitted multiple final and best offers after DEF filed its Petition in this Docket. These proposals moved closer to the cost effectiveness of the Suwannee Simple Cycle Project, but they still were not more cost effective than that Project to meet DEF's need for generation capacity in the summer of 2016. Calpine's primary expert witness Mr. Hibbard disputes this determination, but he fails to include all the costs associated with Calpine's last final and best offer --- including costs either he or other Calpine witnesses admit exist such as additional transmission wheeling charges --- in his criticism of DEF's evaluation. He also ignores the qualitative risks associated with Calpine's last final and best offer that present additional cost risk to DEF. When all costs are included, and the qualitative cost risks accounted for in the evaluation, the Suwannee Simple Cycle

Project is still a superior generation capacity resource to the Calpine final and best offer to meet DEF's generation capacity need commencing in the summer of 2016.

Calpine's witness Mr. Hibbard also criticizes DEF's evaluation methodology. He deliberately ignores or does not understand DEF's evaluation models and tools, criticizes DEF for not employing production cost economic dispatch models that DEF in fact employed, and urges the Commission instead to use his results from a simplistic screening tool for "like type" resources to evaluate different types of resources without understanding the costs and benefits of the dispatch of the resources on DEF's system. This is not a detailed economic analysis of the proposals or a fair and accurate criticism of DEF's detailed economic analysis of the alternative generation resource options to meet its reliability need commencing in the summer of 2016. That detailed economic analysis -- which includes an analysis of the economic dispatch of the alternative resources on DEF's system using the very model Mr. Hibbard said DEF should use --- demonstrates that DEF has a need for peaking generation capacity in the summer of 2016 and that the Suwannee Simple Cycle Project is the most cost effective generation capacity resource to meet that need. Even the simplistic screening tool Mr. Hibbard used demonstrates that, if peaking generation capacity is needed which is the case in the summer of 2016, the Suwannee Simple Cycle Project is more cost-effective to meet that need than the Calpine plant.

The Company decided that, based on the FERC market screen results and the results of its own economic and qualitative analyses, the potential generation facility acquisitions under the Calpine and NRG initial or final and best offer proposals were not cost effective for the Company's customers. The Company determined that the Suwannee Simple Cycle Project and the Hines Chillers Power Uprate Project were more cost-effective, on a quantitative and qualitative basis, than any of the alternative supply-side generation proposals. DEF requests Commission approval of the Suwannee Simple Cycle Project and the Hines Chillers Power Uprate Project as the most cost effective generation capacity resources to meet DEF's need for generation capacity prior to 2018.

**OPC:**

The Commission has before it petitions in both Dockets 140110 and 140111 because Duke experienced failures in the preservation of existing and planned nuclear generation resources. As the signatory to a complex and comprehensive global settlement that delivered over \$2.3 billion in value to Duke customers, the OPC agreed to a process that gives Duke an opportunity to demonstrate to the Commission that it has both a need for generation resources and has identified the lowest cost, reliable generation resource solution to the dilemma that Duke's actions have created.

Paragraph 16 of the Revised and Restated Stipulation and Settlement Agreement (RRSSA) generally provides the basis for the proceeding, together with the Commission's Need Determination Rule (Rule 25-22.082(15), F.A.C., and provisions of Chapter 403, Fla. Stat). The OPC urges the Commission to be mindful of the circumstances that gave rise to the need that Duke presents. Even though the Commission is charged with not allowing costs in excess of those that are necessary for the provision of reliable electric service in every such Need Determination proceeding, we ask that the Commission hold Duke to its burden of proof in light of the fact that customers are paying (or will soon be paying) for the abandonment of three nuclear generation projects while also paying for the generation needed to replace the power that would have been the product of that abandoned generation.

At this time, Duke and certain intervenors have proposed competing solutions to the need that Duke asserts exists before 2018 and then after 2018. The OPC has evaluated the testimony that has been filed, but discovery has not yet been completed. The OPC will evaluate the testimony as a whole and any additional discovery that may be undertaken and endeavor to take a position based on what is filed.

As a basic proposition, the Public Counsel believes that the Commission should find that the lowest cost, prudent, reliable solution should be selected in the event that the Commission determines that Duke has met its burden to demonstrate that a need exists. However, at this time, based on the state of the record, the OPC cannot take a definitive position of the ultimate outcomes in these two dockets.

**FIPUG:** For FIPUG members, the costs of electrical service is a significant variable cost that impacts the business operations of its members. Thus, FIPUG advocates for and seeks reliable electricity and associated electrical services at the lowest possible cost for its members and similarly situated ratepayers. In these consolidated cases, to the extent the Commission determines that a need exists for additional generating capacity for Duke customers, FIPUG supports the selection of the most cost-effective resources available. Duke must meet its burden of proof in this regard, a position that FIPUG will take on many issues in these consolidated proceedings.

The need for Duke's proposed new Citrus County combined cycle plant (1640 MW) can be deferred for many reasons. Importantly, Duke is able to continue to operate its existing Crystal River units 1 & 2 (1434 MW) through 2020 and does not need to retire these units in 2018. Like a family that can put off buying a new car because it can get a few more years and miles from the family car that has been fully paid off, Duke can defer for at least two years, until 2020, the construction and operation of its proposed, brand new, Crystal River combined cycle power plant. The new Citrus County plant will cost ratepayers more than

\$1.5 billion dollars, and ratepayers will be better off if these additional costs to be imposed upon them can be delayed for a couple of years. Accordingly, the Commission should do one of the following:

- not grant Duke's need determination petition as filed, but defer the need determination decision and seek additional, more accurate load forecast information from Duke at a later point in time; or
- grant Duke's need determination as filed, but impose two conditions: 1) that the construction and operation of the plant be deferred from 2018 until 2020; and 2) that Duke subsequently provide the Commission with updated load forecast information that can be reviewed to better determine whether Duke's projected need remains.

Deferring the Citrus County need determination decision will benefit ratepayers and ensure that the Commission has better information about Duke's future needs for energy to serve its load.

**PCS**

**Phosphate:**

Duke Energy Florida, Inc. ("Duke") filed its petitions in Docket Nos. 140110 and 140111 ostensibly to replace lost generating capacity associated with the closure of the utility's ruined Crystal River 3 nuclear plant, to replace aging existing coal and peaking generation, and to meet summer peak demand needs, although its winter peak is higher and normally used for capacity planning purposes. The Revised and Restated Stipulation and Settlement Agreement (RRSSA) approved by the Commission last year permits Duke to request such determinations and attendant cost recovery in rates, but it does not appear at this juncture that either petition is in the public interest.

With respect to the application for a determination of need for the Citrus County, the burden of proving both the need for 1,640 MWs of combined cycle generation capacity (summer) by the end of December 2018 and the reasonableness of the proposed \$1.5 billion in capital costs lies with Duke. The record to this point does not demonstrate that need at this time. In fact, it appears that the project should be deferred by at least three years. Also, considering the on-going rate impacts to Duke's customers imposed by the utility's three failed nuclear ventures at Crystal River and Levy County, Duke should pursue all available options for meeting its capacity needs while minimizing customer impacts.

With respect to the Hines chiller and combustion turbine investments proposed in Docket No. 140111, intervenors have proposed competing solutions which they claim are more cost-effective in meeting the need that Duke asserts exists both before and after 2018. Based on the testimony filed to date, it does not appear that Duke has met its burden of establishing the reasonableness of the estimated costs of its proposed self-build options.

**Calpine:**

**(140110-EI)** The Osprey Energy Center (the “Osprey Facility”) is a proven, efficient combined cycle power plant in Auburndale, Florida, that has operated reliably for more than ten years, providing cost-effective wholesale power to Seminole Electric Cooperative, Tampa Electric Company, Progress Energy Florida (now Duke Energy Florida, Inc., hereinafter “Duke”) and other utilities for resale to their customers. Calpine has offered to make the capacity and energy output of the Osprey Facility available to Duke through various combinations of power purchase agreements (“PPAs”) and asset sale structures, at prices that are extremely favorable to Duke’s customers. The Osprey Facility represents a very competitive, low-risk, highly efficient and environmentally advantageous resource with full dispatch flexibility to meet Duke’s needs for supply-side resources.

The Osprey Facility is a better option than Duke’s self-build options that are the subject of Docket No. 140111-EI, the Suwannee Peakers and the Hines Chillers. The Osprey Facility is approximately 30 percent more efficient than the Suwannee Project. In addition, the Osprey Facility is capable of providing at least 515 MW of capacity both in the summer and in the winter, whereas the Hines Chillers, due to the technology, are unlikely to contribute any of that project’s proposed 220 MW of added capacity to serve customers during winter peaking conditions. This is important to maintaining Duke’s system reliability, because Duke’s winter peaks are greater than its summer peaks.

Relative to the proposed Citrus County Project proposed by Duke in this docket, the Osprey Facility offers an efficient, proven resource with zero construction risk and zero permitting risk, and Osprey in combination with Duke’s proposed Hines Chillers may support delaying the Citrus County Project, thus enabling Duke to cost-effectively meet its near term needs while reducing customer risks relative to Duke’s actual load growth.

Calpine’s most recent offer would save Duke and Duke’s ratepayers approximately \$133 million in Cumulative Present Value Revenue Requirements, even including the costs of a direct transmission connection of Osprey to Duke’s system, and that direct transmission connection would provide extra benefits and value to Duke’s customers by providing an additional connection between Duke’s two major load centers.

Duke's purported reason for rejecting the Osprey Facility – that the acquisition would not be approved by the FERC without costly mitigation efforts – was and is misplaced. Established FERC precedent recognizes that the acquisition of a power plant, where that power plant has been under the control of the acquiring utility pursuant to a PPA, does not adversely affect competition and no mitigation would be required under the PPA-and-acquisition proposal that Calpine offered to Duke.

In the best interests of its customers, Duke should acquire the Osprey Energy Center pursuant to Calpine's PPA-acquisition proposal. Osprey is an operating, efficient, low-risk resource that can timely and reliably meet part of the need to be served by Duke's three self-build projects, including the option value of Osprey in preserving Duke's need to move forward with its Citrus County Project in the event that Duke's load growth is not as great as Duke currently projects.

**Calpine:**

**(140111-EI)** The Osprey Energy Center (the "Osprey Facility") is a proven, efficient combined cycle power plant in Auburndale, Florida, that has operated reliably for more than ten years, providing cost-effective wholesale power to Seminole Electric Cooperative, Tampa Electric Company, Progress Energy Florida (now Duke Energy Florida, Inc., hereinafter "Duke") and other utilities for resale to their customers.

Calpine has offered to make the capacity and energy output of the Osprey Facility available to Duke through various combinations of power purchase agreements ("PPAs") and asset sale structures, at prices that are extremely favorable to Duke's customers as compared to the Suwannee Peaker Project and the Hines Chillers Project for which Duke seeks the Commission's approval in this docket.

As compared to Duke's self-build option, the Suwannee Peakers, the Osprey Facility is approximately 30 percent more efficient than the Suwannee Project. In addition, the Osprey Facility is capable of providing at least 515 MW of capacity both in the summer and in the winter; whereas the Hines Chillers, due to the technology, are unlikely to contribute any capacity to serve customers during winter peaking conditions. This is important to maintaining Duke's system reliability, because Duke's winter peaks are greater than its summer peaks.

Calpine's most recent offer would save Duke and Duke's ratepayers approximately \$133 million in Cumulative Present Value Revenue Requirements, even including the costs of a direct transmission connection of Osprey to Duke's system, and that direct transmission connection would provide extra benefits and value to Duke's customers by providing an additional connection between Duke's two major load centers.

Duke's purported reason for rejecting the Osprey Facility – that the acquisition would not be approved by the FERC without costly mitigation efforts – was and is misplaced. Established FERC precedent recognizes that the acquisition of a power plant, where that power plant has been under the control of the acquiring utility pursuant to a PPA, does not adversely affect competition and no mitigation would be required under the PPA-and-acquisition proposal that Calpine offered to Duke. The Osprey Facility, available to Duke pursuant to Calpine's offer, is significantly more efficient than Duke's proposed Suwannee Peak and is the most cost-effective option available to Duke for meeting its need for additional generating capacity in the 2016 time frame. Moreover, Duke's proposed self-build projects carry additional construction and permitting risks, whereas Osprey has no such risks. Accordingly, Duke should have accepted Calpine's offer, and the Commission should deny Duke's petition because Duke's self-build options are not the most cost-effective alternative available to meet the needs of Duke's customers.

**NRG:**

**(140110-EI)** Duke's proposed plans for its generation fleet as described in this Docket, as well as in parallel Docket No. 140111, represent an "extreme makeover" of its generation portfolio. Duke appears intent on building its rate-base and substantially increasing its retail rates. In addition to recovering the \$2.1 billion cost of retiring existing facilities, Duke seeks to recover another \$1.9 billion of capital to – in the end – supply less than 200 MW of additional generation capacity.

Duke's load forecast may indicate a need for additional capacity, but given the uncertainties associated with electric use and load forecasts, Duke's plan exposes itself and its customers to unnecessary risks by committing large amounts of capital over a long period of time. Duke's forecast is largely driven by a projection that wholesale and peak loads will increase by more than 1000 MW in 2014-2015. Because this is far more peak load growth than Duke has experienced in any two consecutive years since 2005, there is significant risk that load growth could be less than Duke projects. If the projected load growth fails to materialize, Duke's already high retail rates could rise even further because the costs of Duke's extreme makeover would be spread over a lower kWh sales base, thus creating the potential for further constrained load growth, and increasing the probability that rates could spiral even higher.

For these reasons and others, the Commission should carefully evaluate the significant risks associated with Duke's proposed plans in determining whether Duke's request for a determination of need in this Docket, as well as Duke's request for a determination of cost-effectiveness in parallel Docket No. 140111-EI, are in the best interests of Duke and its customers. If the Commission determines that Duke does in fact need additional generation capacity beginning in the 2018 timeframe, it should direct Duke to give further consideration to

significantly reducing the cost of the needed capacity. Keeping capital investment costs down, and using capital toward projects that mitigate construction and load forecast risk is the single best way to ameliorate the risk to ratepayers and the Commission should think carefully about whether to authorize commitment of the enormous, long-term, capital expenditures required for the proposed Citrus County combined cycle plant.

**NRG:**

**(140111-EI)** The NRG Osceola facility, identified in Duke filings as “Acquisition 1”, meets Duke’s capacity needs prior to 2018 at far less than the capital cost of Duke’s proposed Suwannee Simple Cycle and Hines Chiller Uprate projects. However, Duke refused to seriously consider Acquisition 1, citing questionable market power concerns, as discussed below. The facts are clear:

- NRG Osceola’s 465 MW would provide more incremental capacity at a far lower cost than Duke’s proposed self-build projects.
- Osceola would provide sufficient capacity to meet Duke’s forecasted capacity needs prior to 2018.
- As an existing generating facility, NRG Osceola reduces the risk to ratepayers by eliminating construction and performance risk and better managing potential risk from load forecast error.
- The substantially lower acquisition price will restrain the steadily increasing upward pressure on Duke’s already high electricity rates that would be further exacerbated by the proposed self-build projects.
- Duke’s own analysis shows that the 30-year cumulative net present value revenue requirement (NPVRR) of acquiring NRG Osceola is \$49 million less than Duke’s self-build projects.
- In fact, the Osceola acquisition would be even more cost-effective if Duke had included incremental natural gas delivery or service costs in its analysis of its own self-build projects.

After determining that NRG Osceola was the least-cost alternative, Duke unreasonably rejected NRG’s superior project based on inflated FERC market-power concerns. As explained by Dr. John Morris, Duke incorrectly applied FERC’s Competitive Analysis (market power) Screen to NRG Osceola, and – although NRG continued to offer alternatives through June, 2014 – refused to consider other potential means of mitigating any market power concerns.

Moreover, Duke’s cost-effectiveness analysis is further flawed because it attributed unjustified equity costs to alternative purchased power agreement by

imputing additional debt to the projected cost of a power purchase agreement with NRG, and unreasonably attributed firm gas transportation costs to the Osceola facility, when it would be far more economically efficient to serve the facility using secondary firm natural gas transportation from Duke's existing portfolio of firm transportation on the Florida Gas Transportation ("FGT") pipeline, capacity released on the system, or other spot purchases of gas. Collectively, these analytical flaws and errors skew the economics toward the Duke's self-build projects, resulting in a substantial and unjustifiable bias in the evaluation process that highly favors the self-build projects and, in turn, Duke's attempt to build its rate base.

The NRG Osceola acquisition is less risky than Duke's self-build projects for at least two reasons. First, NRG Osceola is an existing, operational facility of similar technology and fuel supply that has the capacity to satisfy Duke's energy needs, and that can be acquired for a known price. By contrast, Duke will seek recovery of the entire cost of constructing the Suwannee and Hines projects, whatever that may end up being. Even though Duke is now estimating a total construction cost of \$197 million for the Suwannee CTs and \$160 million for the Hines Chiller Uprate, the potential for cost overruns remain.

Second, Duke's load forecast error is a risk that must be managed to avoid harm to Duke's customers. Duke's need for capacity prior to 2018 is largely driven by a more than 1,000 MW increase in both wholesale and peak demand in 2014-2015. The Osceola acquisition provides a better method of managing load forecast error because it provides more capacity at a lower cost than the Suwannee/Hines projects. If the load growth materializes above Duke's projections, Duke can defer retirement of the existing Suwannee units. If the projected load growth fails to materialize, Duke's customers would not be saddled with paying the estimated \$357 million of additional capital costs over the remaining lives of the self-build facilities.

Because the proposed self-build projects (including Citrus County) will exacerbate the significant upward pressure on Duke's already high electricity rates, they should be evaluated in broad terms - not just in terms of the impact on rates associated with the self-build projects. The Commission also must consider the broader rate impacts and potential consequences of exacerbating what are already among the highest electric rates in Florida and the Southeast. The extreme nature of Duke's proposed generation fleet makeover will require retail electric rates to support more than \$4 billion of capital to supply less than 200 MW of additional generation capacity. Duke's strategy should be rejected.

For these reasons and others the Commission should reject Duke's determination of Cost Effective Generation Alternative in this Docket, and should direct Duke to resume negotiations with NRG Florida LP for the acquisition of the Osceola

facility or for a combination of the purchase of capacity and energy from the facility under a long-term toll and subsequent acquisition.

**Shady Hills:** The Florida PSC should not grant Duke Energy Florida's ("DEF's") request for a determination of need for the proposed 1,640 MW Citrus County combined cycle plant ("Citrus CC") because DEF has not adequately demonstrated through its Request for Proposal ("RFP") process that, in a fair comparison, the DEF's Citrus CC offers the most cost-effective solution to meeting its need for electric system reliability and integrity. Furthermore, considering the uncertainties in future energy usage and needs, especially in light of additional conservation, energy efficiency and demand side management options which could be implemented, DEF has not adequately demonstrated that the selection of the Citrus CC as the preferred option was the most prudent course in lieu of selection of a smaller, state-of-the-art combined-cycle unit that would provide more flexibility for meeting its future needs and provides the risk allocation benefits of a power purchase agreement.

**STAFF:** Staff's positions are preliminary and based on materials filed by the parties and on discovery. The preliminary positions are offered to assist the parties in preparing for the hearing. Staff's final positions will be based upon all the evidence in the record and may differ from the preliminary positions.

## VIII. ISSUES AND POSITIONS

### ISSUES FOR DOCKET NO. 140110

**ISSUE 1:** Is the proposed Citrus County combined cycle plant needed, taking into account the need for electric system reliability and integrity?

### POSITIONS

**DEF:** 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).

**OPC:** Given the methodology underlying the demand forecast that Duke has produced in Dockets 140110 & 140111 and absent sufficient time or evidence in the shortened need proceeding schedule to develop a competing forecast, the OPC has not filed testimony challenging Duke's forecast. Duke nevertheless has the burden of demonstrating the reasonableness of its forecast and the Commission should consider testimony offered by other witnesses as well as evidence adduced at the hearing in making a determination whether the Duke forecast meets its burden to demonstrate the need for the Citrus County combined cycle plant.

At this time, the issue of electric system reliability and integrity in the context of competing resource options proposed by other intervenors in this docket is still under evaluation by the OPC given that discovery has not been concluded in this docket. At this time the OPC does not yet have a complete basis to determine whether Duke has met its burden of proof on this issue. The Public Counsel believes that the Commission should find that the lowest cost, prudent, reliable solution should be selected in the event that the Commission determines that Duke has met its burden to demonstrate that a need exists.

**FIPUG:** The in-service date of the plant may be deferred based on the evidence presented.

**PCS Phosphate:** No. Duke carries the burden of demonstrating the reasonableness of its forecasts, and the utility has not demonstrated that capacity additions of the size proposed in the Citrus County project are needed by 2018. Considering the abbreviated schedule associated with this need proceeding and the fact that Duke has not filed its rebuttal testimony as of this date, there are substantial questions that must be resolved concerning the demand forecasts that Duke relies upon and the suitability of the proposed projects.

**Calpine:** No. Although Duke will likely need additional generating resources within the next ten years, it is not clear that Duke will need to add all of the planned capacity for the Citrus County Project as early as 2018.

**NRG:** No. Duke's load forecast may indicate need, but given the uncertainties associated with electric use and load forecasts, Duke's plan exposes itself and its customers

to unnecessary risks by committing large amounts of capital over a long period of time.

**Shady Hills:** No. DEF has not demonstrated that the proposed Citrus CC is needed for electric system reliability and integrity in 2018 since DEF did not evaluate alternatives that would defer the need for the Citrus CC by continued operation of other viable generating units, e.g., Crystal River Units 1 and 2, which are contemplated to be available to operate until October 2018 in case of delays of the in-service date for the Citrus CC.

**STAFF:** No position.

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

**POSITIONS**

**DEF:** 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).

**OPC:** Given the methodology underlying the demand forecast that Duke has produced in Dockets 140110 & 140111 and absent sufficient time or evidence in the shortened need proceeding schedule to develop a competing forecast, the OPC has not filed testimony challenging Duke's forecast. Duke nevertheless has the burden of demonstrating the reasonableness of its forecast and the Commission should consider testimony offered by other witnesses as well as evidence adduced at the hearing in making a determination whether the Duke forecast meets its burden to demonstrate the need for the Citrus County combined cycle plant.

At this time, the issue of adequate electricity as a reasonable cost in the context of competing resource options proposed by other intervenors in this docket is still under evaluation by the OPC. given that discovery has not been concluded in this docket. At this time the OPC does not yet have a complete basis to determine whether Duke has met its burden of proof on this issue. The Public Counsel believes that the Commission should find that the lowest cost, prudent, reliable solution should be selected in the event that the Commission determines that Duke has met its burden to demonstrate that a need exists

**FIPUG:** The in-service date of the plant may be deferred based on the evidence presented.

**PCS  
Phosphate:** No. Duke carries the burden of demonstrating the reasonableness of its forecasts, and the utility has not demonstrated that capacity additions of the size proposed in the Citrus County project are needed by 2018. Considering the abbreviated schedule associated with this need proceeding and the fact that Duke has not filed its rebuttal testimony as of this date, there are substantial questions that must be resolved concerning the demand forecasts and the suitability of the proposed projects.

**Calpine:** No. Although Duke will likely need additional generating resources within the next ten years, it is not clear that adding all of the capacity proposed for the Citrus County Project in 2018 is the most cost-effective alternative for meeting its customers' needs, particularly given that highly efficient, cost-effective alternatives with lower cost risks, such as the Osprey Facility, are available.

**NRG:** No. Duke's need for capacity is primarily driven by a more than 1,000 MW forecasted increase in both wholesale and peak demand in 2014-2015. Because this is more load growth than Duke has experienced in any two consecutive years since 2005, it introduces a significant element of forecast risk. There is evidence in this docket that there may be viable alternatives to Duke that would provide less risky and less costly means of supplying generation.

**Shady Hills:** No. DEF's evaluation did not adequately represent the cost of the bidder alternatives to the Citrus CC based on a flawed evaluation process, resulting in premature selection of the Citrus CC and conclusion of the RFP.

**STAFF:** No position.

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

**POSITIONS**

**DEF:** 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 Power Plant to its system. (Borsch, Patton, Delehanty).

**OPC:** Given the methodology underlying the demand forecast that Duke has produced in Dockets 140110 & 140111 and absent sufficient time or evidence in the shortened need proceeding schedule to develop a competing forecast, the OPC has not filed testimony challenging Duke’s forecast. Duke nevertheless has the burden of demonstrating the reasonableness of its forecast and the Commission should consider testimony offered by other witnesses as well as evidence adduced at the hearing in making a determination whether the Duke forecast meets its burden to demonstrate the need for the Citrus County combined cycle plant.

At this time, the issue of adequate electricity as a reasonable cost in the context of competing resource options proposed by other intervenors in this docket is still under evaluation by the OPC given that discovery has not been concluded in this docket.. At this time the OPC does not yet have a complete basis to determine whether Duke has met its burden of proof on this issue. The Public Counsel believes that the Commission should find that the lowest cost, prudent, reliable solution should be selected in the event that the Commission determines that Duke has met its burden to demonstrate that a need exists.

**FIPUG:** The in-service date of the plant may be deferred based on the evidence presented.

**PCS  
Phosphate:** No. Duke carries the burden of demonstrating the reasonableness of its forecasts, and the utility has not demonstrated that capacity additions of the size proposed in the Citrus County project are needed by 2018. Duke’s proposal to construct additional natural gas-fired generation is creating a more gas-reliant system rather than expanding fuel diversity. Considering the abbreviated schedule associated with this need proceeding and the fact that Duke has not filed its rebuttal testimony as of this date, there are substantial questions that must be resolved concerning the demand forecasts and the suitability of the proposed projects.

**Calpine:** No. Calpine does not dispute the importance of fuel diversity and supply reliability to Duke and Florida. The Osprey Facility, just like all of Duke's supply-side options, is fueled by natural gas and the fuel plan for the Osprey Facility would meet Duke's need for fuel diversity and supply reliability.

**NRG:** No, Duke has not met its burden of proving that the Citrus County plant is needed to increase fuel diversity and supply reliability.

**Shady Hills:** No. DEF's proposed Citrus CC increases reliance on, and further commits its retail ratepayers to, natural gas as a component of its long-term fuel supply, which is contrary to its objective of fuel diversity. An RFP choice of a smaller unit would allow reliability needs to be met while providing additional opportunities to procure non-natural gas resources, such as solar renewables.

**STAFF:** No position.

**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?**

#### **POSITIONS**

**DEF:** 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).

**OPC:** At this time, the OPC has no basis to dispute that Duke has appropriately incorporated into its analysis all renewable energy sources and technologies or conservation measures taken by or reasonably available to the company as required by the Commission in its needs analysis in Dockets 140110 & 140111. Nevertheless, Duke has the burden to demonstrate that it has properly considered renewables and conservation in its analysis.

**FIPUG:** The in-service date of the plant may be deferred based on the evidence presented.

**PCS**

**Phosphate:** At this time, it appears that Duke has appropriately incorporated into its analysis all renewable energy sources and technologies reasonably available to the company, but Duke's forecasted growth in peak demand while usage per customer generally flattens or declines suggests that Duke's efforts to manage peak load growth are insufficient.

**Calpine:** No.

**NRG:** The Commission should defer a finding on this issue until it reaches a decision on Duke's conservation goals in Docket No. 130200-EI, Commission review of numeric conservation goals (Duke Energy Florida, Inc.).

**Shady Hills:** Unknown. Shady Hills would note that the load forecast developed by DEF to support the need for the Citrus CC assumes a reduction in conservation measures and therefore increases projected supply requirements.

**STAFF:** No position.

**ISSUE 5:** **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?**

**POSITIONS**

**DEF:** 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).

**OPC:** At this time, the issue of whether the proposed Citrus County combined cycle plant is the most cost-effective alternative available to meet the needs of Duke Energy Florida and its customers is still under evaluation by the OPC given that discovery has not been concluded in this docket. At this time the OPC does not yet have a complete basis to determine whether Duke has met its burden of proof on this issue. The Public Counsel believes that the Commission should find that the lowest cost, prudent, reliable solution should be selected in the event that the Commission determines that Duke has met its burden to demonstrate that a need exists.

**FIPUG:** The in-service date of the plant may be deferred based on the evidence presented.

**PCS  
Phosphate:** At this time, Duke has not met its burden of proving that constructing the proposed Citrus County combined cycle plant for an in-service date of December 2018 is the most cost-effective alternative available to meet the needs of Duke Energy Florida and its customers.

**Calpine:** No. Although Duke will likely need additional generating resources within the next ten years, it is not clear that adding all of the capacity proposed for the Citrus County Project in 2018 is the most cost-effective alternative for meeting its

customers' needs, particularly given that highly efficient, cost-effective alternatives with lower cost risks, such as the Osprey Facility, are available.

**NRG:** No, Duke has not met its burden of proving that the proposed Citrus County combined cycle plant is the most cost-effective alternative available to meet the asserted need.

**Shady Hills:** No. DEF only calculated cost-effectiveness based on a single measure – Cumulative Present Value Revenue Requirements over 35 years – and has therefore concluded prematurely that the Citrus CC is the most cost-effective solution based on imprudent evaluation methodology and assumptions.

**STAFF:** No position.

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

### **POSITIONS**

**DEF:** 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 County 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).

**OPC:** At this time, the issue of whether Duke Energy Florida reasonably evaluated all alternative scenarios for cost effectively meeting the needs of its customers over

the relevant planning horizon is still under evaluation by the OPC given that discovery has not been concluded in this docket.. At this time the OPC does not yet have a complete basis to determine whether Duke has met its burden of proof on this issue. The Public Counsel believes that the Commission should find that the lowest cost, prudent, reliable solution should be selected in the event that the Commission determines that Duke has met its burden to demonstrate that a need exists.

**FIPUG:** The in-service date of the plant may be deferred based on the evidence presented.

**PCS**  
**Phosphate:** No position at this time.

**Calpine:** No. Duke did not reasonably evaluate all available scenarios for acquiring needed capacity and energy. Specifically, Duke did not reasonably evaluate the scenario of acquiring the Osprey Facility through a combination of a 5-year PPA and purchase of the Osprey Facility during, or at the end of, the PPA term. This scenario would not cause the problem of possible FERC disapproval of the acquisition, which Duke asserted was the basis for ruling out the Osprey Facility earlier in its evaluations. When the PPA/acquisition scenario is properly evaluated, Duke's acquisition of the Osprey Facility pursuant to Calpine's offer is a low-risk, high-value option for Duke and its customers, and Duke's acquisition of the Osprey Facility may cost-effectively defer, in part, Duke's need for additional combined cycle capacity beyond 2018.

**NRG:** DEF must meet its burden of proof on this issue.

**Shady Hills:** No. DEF did not evaluate scenarios that considered continued operation of Crystal River Units 1 and 2 through 2020. DEF also modeled an unreasonable "overbuild" of bidder alternative supply plans, and did not evaluate deferral of part or all of the Citrus CC.

**STAFF:** No position.

**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?**

## **POSITIONS**

**DEF:** 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).

**OPC:** At this time the OPC does not yet have a complete basis to determine whether Duke has met its burden of proof on this issue. The Public Counsel believes that the Commission should find that the lowest cost, prudent, reliable solution should be selected in the event that the Commission determines that Duke has met its burden to demonstrate that a need exists.

**FIPUG:** The determination of need should not be granted as requested as the in service date of the plant may be deferred based on the evidence presented.

**PCS  
Phosphate:** No. Duke has not met its burden of proving that constructing the proposed Citrus County combined cycle plant for an in-service date of December 2018 is the most cost-effective alternative available to meet the needs of Duke Energy Florida and its customers.

**Calpine:** No. The Commission should deny Duke's petition in this docket and direct Duke to pursue the most cost-effective and lowest-risk alternative available to meet its customers' needs, which is the Osprey Facility, to be acquired by Duke pursuant to the PPA/acquisition proposal offered by Calpine.

**NRG:** No. Duke failed to meet its burden of proving its asserted need, or that its proposed Citrus County combined cycle plant is the most cost-effective alternative to meet that need.

**Shady Hills:** No. DEF has not reasonably demonstrated either its need for the Citrus CC, nor its cost-effectiveness, and prematurely terminated the RFP process.

**STAFF:** No position.

**ISSUE 8:** **Should Docket No. 140110-EI be closed?**

**POSITIONS**

**DEF:** 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).

**OPC:** No position.

**FIPUG:** Yes.

**PCS**

**Phosphate:** No position.

**Calpine:** No. The Commission should consider keeping this docket open for further proceedings to address Duke's need for generating capacity in the 2018-2020 time frame.

**NRG:** Yes.

**Shady Hills:** No. The Commission should deny any relief to DEF because it has not demonstrated its Citrus CC is the most cost-effective alternative to meeting its need for electric system reliability and integrity at a reasonable cost. DEF should be directed to resume the RFP process and reevaluate bidder proposals based on the comments above, and procurement outcomes from DEF's separate pre-2018 need determination process, which could influence remaining need and available resources options.

**STAFF:** No position.

**ISSUES FOR DOCKET NO. 140111**

**ISSUE A:** **Does the Commission have jurisdiction in this docket to grant Duke's request for a determination that the proposed Suwannee Simple Cycle Project and Hines Chillers Power Uprate Project are the most cost-effective generation alternatives to meet Duke's needs prior to 2018?**

## **POSITIONS**

**DEF:** Yes. The Commission can determine its jurisdiction at any time and the Commission has the jurisdiction to grant DEF's Petition.

The Commission determined that it had jurisdiction to grant DEF's Petition in the Revised and Restated Stipulation and Settlement Agreement ("2013 Settlement Agreement"), pursuant to Chapter 366, including among others, Sections 366.04 and 366.05, Florida Statutes, in Commission Order No. PSC-13-0598-FOF-EI approving the 2013 Settlement Agreement. The 2013 Settlement Agreement provides for a potential Generation Base Rate Adjustment ("GBRA") for DEF generation resources prior to 2018 based on the Commission's determination of the need for and cost effectiveness of the generation resources.

The Florida Legislature granted the Commission broad jurisdiction over the development by public utilities like DEF of new generation resources. Under Section 366.04(1) the Commission has the "jurisdiction to regulate and supervise each public utility with respect to rates and service." Under Section 366.04(2) the Commission in "the exercise of its jurisdiction" has the "power over electric utilities" to "require electric power ... reliability within a coordinated grid for operational as well as emergency purposes." Under Section 366.04(5) the Commission "shall further have jurisdiction over the planning, development, and maintenance of a coordinated electric power grid throughout Florida to assure an adequate and reliable source of energy for operational and emergency purposes in Florida and the avoidance of further uneconomic duplication of generation, transmission, and distribution facilities." The Commission clearly has jurisdiction under Chapter 366 to determine the need for and cost effectiveness of the proposed Suwannee Simple Cycle Project and Hines Chillers Power Uprate Project to meet DEF's need for additional generation prior to 2018.

This jurisdiction is consistent with and not in conflict with the Commission's jurisdiction under the Florida Electric Power Plant Siting Act ("PPSA"). The Florida Legislature carved out certain types and sizes of generation resources for advance need determination proceedings pursuant to the PPSA. This "carve out" did not otherwise diminish or restrict the Commission's existing jurisdiction over DEF's Petition. Nowhere in the PPSA does the Florida Legislature express the intent to restrict or limit the Commission's existing jurisdiction over the need for and cost effectiveness of any generation resource not covered by the PPSA.

Indeed, under Section 366.05(8), the Florida Legislature expressly stated that the Commission's jurisdiction under that provision to require the installation or repair of necessary facilities, including generating plants, under certain conditions did not supersede or control the PPSA provisions.

The Florida Legislature recognized here that the Commission had jurisdiction over determinations of need for and cost effectiveness of utility generation resources not covered by the PPSA.

The Commission, therefore, has the jurisdiction to determine that any plant DEF builds is needed and cost effective. If it qualifies for the PPSA that determination must be made up front; if the plant does not qualify for the PPSA that determination is usually made after the fact in a rate case, but it does not have to be made after the fact, instead, the Commission has the broad jurisdiction to make that determination at any time. The Commission has jurisdiction under Chapter 366 to decide DEF's Petition.

**OPC:** The OPC stands by the 2013 Revised and Restated Stipulation and Settlement Agreement (RRSSA) to which it is a signatory. The provisions of the RRSSA were entered into in good faith and are lawful and are the product of a global settlement including give and take by all parties, especially as it concerns the availability of, and manner of, base rate relief. The Commission has broad authority to accept and implement settlements that it finds to be in the public interest. The provisions providing for the hearings being conducted in Dockets 140111 and 140110 emanate from the RRSSA which the Commission expressly found to be in the public interest in its entirety. For this reason, the OPC is unaware of any reason why the Commission lacks jurisdiction to entertain and consider the petitions filed by Duke in these dockets. The OPC reserves the right to modify this position and to brief the issue after the conclusion of the hearing.

**FIPUG:** No Position

**PCS**  
**Phosphate:** No Position

**Calpine:** Yes. The Commission has the authority and jurisdiction to approve retail rates for Duke Energy Florida based on reasonable and prudent costs. The 2013 Revised and Restated Stipulation and Settlement Agreement (RRSSA) allows Duke to petition the Commission for a base rate adjustment associated with adding generating capacity, subject to the limitations stated in the RRSSA. The Commission has jurisdiction to consider and act on Duke's petition in this case pursuant to its general jurisdiction over retail rates and also pursuant to its order approving the RRSSA. The Commission also has jurisdiction and authority to determine that the proposed Suwannee Simple Cycle Project and Hines Chillers Power Uprate Project are not the most cost-effective alternative for meeting its needs prior to 2018. Further, by the same analysis, the Commission has the jurisdiction and authority to determine that the acquisition of the Osprey Energy Center from Calpine, pursuant to Calpine's offer to DEF, is the most cost-effective alternative for meeting the needs of DEF's customers prior to 2018 and

to approve a base rate adjustment to reflect the purchase of the Osprey Energy Center at the time that the proposed sale and purchase become final.

**NRG:** No. The Legislature granted authority for the Commission to pre-determine whether a need exists for a proposed power plant and pre-approve a proposed plant as the most cost-effective alternative to meet that need in Section 403.519, Florida Statutes, which applies only to power plants subject to the Florida Electrical Power Plant Siting Act, Sections 403.501 – 403.518, Florida Statutes. Neither the Suwannee Simple Cycle Project nor the Hines Chillers Power Uprate Project is subject or eligible for review under the Florida Electrical Power Plant Siting Act.

**Shady Hills:** No position

**STAFF:** No position

**ISSUE 9:** **Are the proposed Suwannee Simple Cycle Project and Hines Chillers Power Uprate Project needed, taking into account the need for electric system reliability and integrity?**

**POSITIONS**

**DEF:** Yes, the proposed Suwannee Simple Cycle Project and Hines Chillers Power Uprate Project are needed for electric system reliability and integrity. The Company's plan includes the Suwannee Simple Cycle Project in the summer of 2016 and the Hines Chillers Power Uprate Project by the summer of 2017. Both Company projects are necessary to meet the Company's summer Reserve Margin requirement in 2016 and 2017 to deliver reliable electric service to the Company's customers. DEF projects growth in firm summer peak demand in the summers of 2016 and in 2017. DEF's existing and planned generation capacity retirements and reductions also contribute to the Company's need for generation capacity commencing in the summer of 2016. Without the installation of the Suwannee Simple Cycle Project in the summer of 2016, and the Hines Chillers Power Uprate Project in the summer of 2017, DEF's Reserve Margin will decrease to 16.9 percent in the summer of 2016 and 14.9 percent by the summer of 2017. The addition of the Suwannee Simple Cycle Project will increase DEF's summer peak Reserve Margin to 20.4 percent in the summer of 2016. The addition of the Hines Chillers Power Uprate Project by the following summer will increase DEF's 2017 summer peak Reserve Margin to 20.7 percent. The Suwannee Simple Cycle and Hines Chillers Power Uprate Projects allow DEF to satisfy its commitment to maintain a minimum 20 percent Reserve Margin and are needed for the Company is maintain electric system reliability and integrity. (Borsch, Scott).

**OPC:** Given the methodology underlying the demand forecast that Duke has produced in Dockets 140110 & 140111 and absent sufficient time or evidence in the shortened need proceeding schedule to develop a competing forecast, the OPC has not filed testimony challenging Duke's forecast. Duke nevertheless has the burden of demonstrating the reasonableness of its forecast and the Commission should consider testimony offered by other witnesses as well as evidence adduced at the hearing in making a determination whether the Duke forecast meets its burden to demonstrate the need for the Citrus County combined cycle plant.

At this time, the issue of electric system reliability and integrity in the context of competing resource options proposed by other intervenors in this docket is still under evaluation by the OPC given that discovery has not been concluded in this docket. At this time the OPC does not yet have a complete basis to determine whether Duke has met its burden of proof on this issue. The Public Counsel believes that the Commission should find that the lowest cost, prudent, reliable solution should be selected in the event that the Commission determines that Duke has met its burden to demonstrate that a need exists.

**FIPUG:** Duke must meet its burden of proof on this point.

**PCS**

**Phosphate:** PCS agrees with the Office of Public Counsel that there are material issues of fact that need to be resolved and that Duke bears the burden of demonstrating the reasonableness of its forecast and the reasonableness of its self-build proposals compared to other viable alternatives that intervenors have put forth.

**Calpine:** No. Although Calpine does not dispute that Duke needs additional generating capacity in the 2016 time frame, Calpine believes that Duke does not need either the Suwannee Project or the Hines Chillers Project because the Osprey Facility would better meet Duke's needs for system reliability and integrity.

**NRG:** No. Duke's load forecast may indicate need prior to 2018, but given the uncertainties associated with electric use and load forecasts, Duke's plan exposes itself and its customers to unnecessary risks by committing large amounts of capital over the near term. Duke's need for capacity prior to 2018 is largely driven by a more than 1,000 MW forecasted increase in both wholesale and peak demand in 2014-2015. Because this is more load growth than Duke has experienced in any two consecutive years since 2005 it introduces a significant element of forecast risk. NRG's Osceola facility is an existing, operational facility of similar technology and fuel supply that provides for needed electric system reliability and integrity while managing load forecast error. It provides more capacity at a lower cost than the Suwannee/Hines projects, with increased flexibility resulting from its three generating units, and without the uneconomic duplication of generating facilities that would result from Duke's self-build projects. By contrast, the Suwannee/Hines self-build projects would commit

ratepayers to paying an estimated \$357 million of additional capital costs over the estimated 35 and 29-year lives, respectively, of these facilities. (Pollock)

**STAFF:** No position.

**ISSUE 10:** **Are the proposed Suwannee Simple Cycle Project and Hines Chillers Power Uprate Project needed, taking into account the need for adequate electricity at a reasonable cost?**

**POSITIONS**

**DEF:** Yes, the proposed Suwannee Simple Cycle Project and Hines Chillers Power Uprate Project are needed and will provide adequate electricity at a reasonable cost.

The Suwannee Simple Cycle Project is a new, fuel-efficient, F class combustion turbine (“CT”) project that will be installed at the Company’s existing Suwannee power plant site in Suwannee County, Florida. The Suwannee power plant site existing infrastructure will support the Suwannee Simple Cycle Project. The Suwannee plant site has existing gas pipeline access and an existing transmission switchyard. The Suwannee Simple Cycle Project will be connected via a gas lateral to the Florida Gas Transmission gas pipeline and the existing site metering and regulating station. The CT’s will be connected to the existing 115 kv and 230 kv transmission switchyard. This existing infrastructure at the Suwannee site reduces the cost of the Suwannee Simple Cycle project.

DEF estimates that it will cost approximately \$197 million, including the Allowance for Funds Used During Construction (“AFUDC”), to build the Suwannee Simple Cycle Project. The estimated incremental annual fixed operation and maintenance (“O&M”) cost is \$1.4 million and the estimated variable O&M costs is approximately \$700,000 for the Suwannee Simple Cycle Project. The Suwannee Simple Cycle Project will provide fuel-cost efficient, reliable peaking capacity to DEF and its customers. The Suwannee Simple Cycle Project will provide DEF’s customers needed electricity at a reasonable cost.

The Hines Chillers Power Uprate Project meets the Company’s need for reliable capacity by the summer of 2017 through an increase in the summer capacity of the existing natural-gas fired, combined cycle power plants located at the HEC. The estimated Project cost is \$160 million. Existing generation, site infrastructure, and transmission infrastructure will support this power uprate project. There are no additional transmission costs associated with the Hines Chillers Uprate Project. DEF will achieve an increase of approximately 220MW in its HEC summer capacity by utilizing an existing site and power block, saving customers the increased costs and time of building new generation at another

existing site or a Greenfield site to achieve the same reliable summer capacity. The Hines Chillers Power Uprate Project achieves this increase in the Company's HEC summer capacity with a minimal increase in the fixed and variable O&M costs at HEC and a much lower fixed and variable O&M cost for the same amount of capacity for a new power plant at an existing or Greenfield site. The Project will provide additional combined-cycle summer capacity and resulting fuel efficiency savings to customers. The Hines Chiller Uprate Power Project also will provide DEF's customers needed electricity at a reasonable cost. (Borsch, Landseidel, Delehanty, Scott).

**OPC:** Given the methodology underlying the demand forecast that Duke has produced in Dockets 140110 & 140111 and absent sufficient time or evidence in the shortened need proceeding schedule to develop a competing forecast, the OPC has not filed testimony challenging Duke's forecast. Duke nevertheless has the burden of demonstrating the reasonableness of its forecast and the Commission should consider testimony offered by other witnesses as well as evidence adduced at the hearing in making a determination whether the Duke forecast meets its burden to demonstrate the need for the Citrus County combined cycle plant.

At this time, the issue of adequate electricity as a reasonable cost in the context of competing resource options proposed by other intervenors in this docket is still under evaluation by the OPC given that Duke discovery has not been concluded in this docket. At this time the OPC does not yet have a complete basis to determine whether Duke has met its burden of proof on this issue. The Public Counsel believes that the Commission should find that the lowest cost, prudent, reliable solution should be selected in the event that the Commission determines that Duke has met its burden to demonstrate that a need exists.

**FIPUG:** Duke must meet its burden of proof on this point.

**PCS**  
**Phosphate:** PCS agrees with the Office of Public Counsel that there are material issues of fact that need to be resolved and that Duke bears the burden of demonstrating the reasonableness of its forecast and the reasonableness of its self-build proposals compared to other viable alternatives that intervenors have put forth.

**Calpine:** No. Although Calpine does not dispute that Duke needs additional generating capacity in the 2016 time frame, Calpine believes that Duke does not need either the Suwannee Project or the Hines Chillers Project because the existing Osprey Facility would better meet Duke's needs for adequate electricity at a reasonable cost.

**NRG:** No. Duke's need for capacity prior to 2018 is largely driven by a more than 1,000 MW forecasted increase in both wholesale and peak demand in 2014-2015. Because this is more load growth than Duke has experienced in any two

consecutive years since 2005, it introduces a significant element of forecast risk. NRG's Osceola facility is an existing, operational facility of similar technology and fuel supply that provides for adequate electricity at a cost that – by Duke's own acknowledgement – is the most cost-effective alternative to the Suwannee and Hines projects. Moreover, its three generating units offer increased operating and planning flexibility, without the uneconomic duplication of generating facilities that would result from Duke's self-build projects. (Pollock, Dauer)

**STAFF:** No position.

**ISSUE 11:** **Are the proposed Suwannee Simple Cycle Project and Hines Chillers Power Uprate Project needed, taking into account the need for fuel diversity and supply reliability?**

**POSITIONS**

**DEF:** Yes, the proposed Suwannee Simple Cycle Project and Hines Chillers Power Uprate Project are needed taking into account the need for fuel diversity and supply reliability. The Suwannee Simple Cycle Project and the Hines Chillers Power Uprate Project are natural gas-fired generation projects. Natural-gas fired generation is the most economic and qualitatively attractive generation technology for DEF and the State of Florida at this time and for the foreseeable future. In fact, the NRG and Calpine third-party proposals to meet DEF's need prior to 2018 were natural-gas fired generation capacity. There are abundant conventional and unconventional natural gas resources available in the United States and North America. These natural gas resources ensure a long term natural gas supply at economically beneficial prices for electric power generation at the Suwannee Simple Cycle Project and the Hines Chillers Power Uprate Project.

Both projects are also located at existing brown field, power plant sites. The Suwannee Simple Cycle Project new F class combustion turbine generators will be connected via a gas lateral to the Florida Gas Transmission gas pipeline and to the existing site metering and regulating station. The Hines Chillers Power Uprate Project will use the existing fuel pipeline infrastructure and firm gas transportation and supply arrangements for the HEC. Both Projects, then, benefit from existing fuel transportation infrastructure and firm gas transportation and supply to provide fuel supply reliability to the DEF system.

Accordingly, for these reasons, these Projects are needed taking into account fuel diversity and supply reliability. (Borsch, Delehanty, Patton, Landseidel).

**OPC:** Given the methodology underlying the demand forecast that Duke has produced in Dockets 140110 & 140111 and absent sufficient time or evidence in the shortened need proceeding schedule to develop a competing forecast, the OPC has

not filed testimony challenging Duke's forecast. Duke nevertheless has the burden of demonstrating the reasonableness of its forecast and the Commission should consider testimony offered by other witnesses as well as evidence adduced at the hearing in making a determination whether the Duke forecast meets its burden to demonstrate the need for the Citrus County combined cycle plant.

At this time, the issue of adequate electricity as a reasonable cost in the context of competing resource options proposed by other intervenors in this docket is still under evaluation by the OPC given that discovery has not been concluded in this docket. At this time the OPC does not yet have a complete basis to determine whether Duke has met its burden of proof on this issue. The Public Counsel believes that the Commission should find that the lowest cost, prudent, reliable solution should be selected in the event that the Commission determines that Duke has met its burden to demonstrate that a need exists.

**FIPUG:** Duke must meet its burden of proof on this point.

**PCS  
Phosphate:** PCS agrees with the Office of Public Counsel that there are material issues of fact that need to be resolved and that Duke bears the burden of demonstrating the reasonableness of its forecast and the reasonableness of its self-build proposals compared to other viable alternatives that intervenors have put forth.

**Calpine:** No. Calpine does not dispute that Duke needs additional generating capacity in the 2016 time frame, and further, Calpine does not dispute the importance of fuel diversity and supply reliability to Duke and Florida. However, Calpine believes the fuel plan for the Osprey Facility, would meet Duke's needs for fuel diversity and supply reliability.

**NRG:** No. Other alternatives, including NRG Osceola - which is an existing, operational facility of similar technology and fuel supply - can provide the same attributes in a less risky and cost effective manner, without the construction risk and unnecessary duplication of generating facilities that would result from the Duke self-build projects. Osceola's dual-fuel capability allows it to operate on both natural gas and oil, enhancing fuel diversity over a natural-gas only alternative. (Dauer)

**STAFF:** No position.

**ISSUE 12:** **Are there any renewable energy sources and technologies or conservation measures taken by or reasonably available to Duke Energy Florida, Inc. that might mitigate the need for the proposed Suwannee Simple Cycle Project and Hines Chillers Power Uprate Project?**

**POSITIONS**

**DEF:** No there are not. DEF analyzed viable non-generating, demand-side alternatives before determining that the Suwannee Simple Cycle and Hines Chillers Power Uprate Projects were the most cost effective resource option to meet DEF's needs. Energy conservation and direct load control programs are always a part of the Company's IRP process and the Company's current DSM programs were considered in connection with the Company's near term generation capacity need commencing in 2016. The Company's DSM programs, however, cannot replace or defer the Company's need for additional generation on its system to meet the Company's capacity needs commencing in 2016.

No commercially available, economically feasible renewable generation resource currently exists to displace or defer DEF's generation capacity needs commencing in the summer of 2016. No proposals for renewable energy projects have been received in response to the Company's Request For Renewables ("RFR") that will displace or defer the Company's generation capacity needs in 2016 and 2017. Accordingly, there are no renewable energy sources and technologies or conservation measures taken by or reasonably available to DEF to mitigate the Company's need for the Suwannee Simple Cycle and Hines Chillers Power Uprate Projects. (Borsch).

**OPC:** At this time, the OPC has no basis to dispute that Duke has appropriately incorporated into its analysis all renewable energy sources and technologies or conservation measures taken by or reasonably available to the company as required by the Commission in its needs analysis in Dockets 140110 & 140111. Nevertheless, Duke has the burden to demonstrate that it has properly considered renewables and conservation in its analysis.

**FIPUG:** Duke must meet its burden of proof on this point.

**PCS**

**Phosphate:** At this time, it appears that Duke has appropriately incorporated into its analysis all renewable energy sources and technologies reasonably available to the company, but Duke's forecasted growth in peak demand while usage per customer generally flattens or declines suggests that Duke's efforts to manage peak load growth are insufficient.

**Calpine:** No.

**NRG:** The Commission should defer a finding on this issue until it reaches a decision on Duke's conservation goals in Docket No. 130200-EI, Commission review of numeric conservation goals (Duke Energy Florida, Inc.)

**STAFF:** No position.

**ISSUE 13:** Are the proposed Suwannee Simple Cycle Project in 2016 and Hines Chillers Power Uprate Project in 2017 the most cost-effective alternatives available to meet the needs of Duke Energy Florida, Inc. and its customers?

**POSITIONS**

**DEF:** Yes, the proposed Suwannee Simple Cycle Project and Hines Chillers Power Uprate Project are the most cost-effective alternative available to meet the needs of DEF and its customers prior to 2018.

The Company conducted a careful screening of various other supply side alternatives as part of its IRP process. The Company evaluated new generation, existing plant uprate projects, and existing generation life extension projects to meet this need. This evaluation included the fixed project capital costs, fixed and variable O&M costs, fuel and consumable costs, transmission costs, and the technical feasibility of these generation options. Based on this evaluation, the Company identified the Suwannee Simple Cycle and Hines Chillers Power Uprate Projects as its base generation plan to meet its reliability needs by the summers of 2016 and 2017.

The Company evaluated market proposals for alternative generation, including the NRG and Calpine initial and final and best offer proposals, and the Company determined that the Suwannee Simple Cycle and Hines Chillers Power Uprate projects were more cost-effective, on a quantitative and qualitative basis, than any of alternative supply-side generation proposal on the market.

The Suwannee Simple Cycle Project is a new, state-of-the-art combustion turbine plant with higher fuel efficiency than existing combustion turbine PPAs or the acquisition of existing combustion generation facilities. There are also economic benefits associated with its location at an existing Company power plant site. Further, there are no FERC market screen issues with new generation in the market. FERC is concerned with removing generation or the ability to remove generation from the market. For all these reasons, the Suwannee Simple Cycle Project proved to be a cost-effective part of the Company's base generation plan to meet its reliability needs in 2016.

The Hines Chillers Power Uprate Project is the most cost-effective generation option in every generation alternative scenario. This project adds summer generation capacity with additional combined cycle power generation. As a result, the Company obtains additional summer peaking generation at combined cycle generation efficiency and cost. The fuel efficiency and relatively low cost of the Hines Chillers Power Uprate project make it a highly cost-effective generation option to meet DEF's customer reliability needs. No NRG or Calpine

witness contests the cost-effectiveness of the Hines Chillers Power Uprate Project to meet the Company's generation capacity need commencing in the summer of 2017.

DEF evaluated nine proposals for PPAs or generation facility acquisitions. DEF evaluated all of these proposals by systematically following a structured, orderly evaluation process that evaluated all proposals, including the Company's self-build generation projects, on price and non-price attributes. This detailed economic evaluation was performed in stages and included all costs, including transmission cost impacts, in the analysis.

In CPVRR terms, the Suwannee Simple Cycle and Hines Chillers Power Uprate Projects were found to be more cost effective than all the PPA proposals and all but one of the potential generation facility acquisition proposals. The Company's Projects was only marginally more expensive than the NRG acquisition proposal, but in CPVRR terms over the 30-year study period they were nearly equivalent on an economic basis to the Company. The Company next quantified a number of cost risks with the proposals evaluated in cost sensitivities and considered the qualitative risks that presented additional cost risk to the Company. These sensitivities included construction cost risk for the self-build projects, and gas transportation contract risks, plant condition and maintenance risks, and transmission cost risks for the potential NRG and Calpine generation facility acquisition proposals. The qualitative or non-price issues with the technical feasibility and viability of these proposals included the physical condition and maintenance of the plants, site environmental impacts and compliance, insurance, and indemnity obligations, among other qualitative factors, that had to be evaluated and mitigation plans developed for these qualitative risks, including the negotiation of terms and conditions to mitigate those risks.

The cost risk sensitivities placed the acquisition proposals in a range where they were possibly close to the cost effectiveness of the self-build projects or substantially less cost effective than the self-build projects. Given this range of possible values, DEF continued its evaluation of the feasibility of the potential generation facility acquisitions by conducting a FERC Competitive Analysis Screen. This FERC market screen analysis is a required step in obtaining FERC approval under the FPA for any acquisition of a jurisdictional generation facility. The Company retained Julie Solomon with Navigant Consulting, Inc. to perform the FERC Competitive Analysis Screen. Both potential generation facility acquisitions failed the FERC Competitive Analysis Screen. This meant that the Company would have to build additional transmission facilities to expand the transmission import capability to mitigate the screen failures at substantial cost to the Company and its customers. The most cost effective generation option to meet customer reliability needs prior to 2018 based on the quantitative analysis and the FERC market screen analysis is the Company's self-build generation plan.

NRG submitted a final and best offer to meet the Company's generation capacity need commencing in the summer of 2016 as an alternative to the Company's Suwannee Simple Cycle Project after DEF filed its Petition in this Docket. NRG witnesses abandon that NRG final and best offer in their recommendations and challenge DEF's decision that the Suwannee Simple Cycle Project is the most cost effective alternative to meet its need in the summer of 2016 based on NRG's least cost effective, initial plant acquisition proposal. DEF had already evaluated NRG's initial plant acquisition proposal and determined it was not more cost effective, on a quantitative and qualitative basis -- which NRG agrees is the correct evaluation methodology -- to the Suwannee Simple Cycle Project to meet DEF's need commencing in the summer of 2016. NRG witnesses continue to ignore DEF's need for firm natural gas transportation at all times for all the plant capacity for DEF to rely on the NRG plant as a firm resource to meet DEF's obligation to provide reliable electric service to its customers. Additionally, no NRG witness disputes the fact that the NRG initial plant acquisition that NRG continues to advance in its testimony failed the FERC market screen rendering FERC approval of this acquisition unlikely without substantial mitigation. For these reasons, the Suwannee Simple Cycle Project remains a superior generation capacity resource to the NRG plant acquisition to meet DEF's generation capacity need commencing in the summer of 2016.

Calpine submitted multiple final and best offers after DEF filed its Petition in this Docket. These proposals moved closer to the cost effectiveness of the Suwannee Simple Cycle Project, but they still were not more cost effective than that Project to meet DEF's need for generation capacity in the summer of 2016. Calpine's primary expert witness Mr. Hibbard disputes this determination, but he fails to include all the costs associated with Calpine's last final and best offer --- including costs either he or other Calpine witnesses admit exist such as additional transmission wheeling charges --- in his criticism of DEF's evaluation. He also ignores the qualitative risks associated with Calpine's last final and best offer that present additional cost risk to DEF. When all costs are included, and the qualitative cost risks accounted for in the evaluation, the Suwannee Simple Cycle Project is still a superior generation capacity resource to the Calpine final and best offer to meet DEF's generation capacity need commencing in the summer of 2016.

Based on this evaluation, the Suwannee Simple Cycle and Hines Chillers Power Uprate Projects are the most cost-effective generation options, based on price and non-price attributes, to meet the Company's reliability needs in the summers of 2016 and 2017. (Borsch, Scott, Solomon, Patton).

**OPC:** At this time, the issue of whether the proposed Suwannee Simple Cycle Project in 2016 and Hines Chillers Power Uprate Project in 2017 are the most cost-effective alternative(s) available to meet the needs of Duke Energy Florida and its customers is still under evaluation by the OPC given that discovery has not been

concluded in this docket. At this time the OPC does not yet have a complete basis to determine whether Duke has met its burden of proof on this issue. The Public Counsel believes that the Commission should find that the lowest cost, prudent, reliable solution should be selected in the event that the Commission determines that Duke has met its burden to demonstrate that a need exists.

**FIPUG:** Duke must meet its burden of proof on this point.

**PCS**

**Phosphate:** There are material issues of fact that need to be resolved and Duke has not met its burden of demonstrating the reasonableness of its forecast and the reasonableness of its self-build proposals compared to other viable alternatives that intervenors have put forth.

**Calpine:** No. The Osprey Facility, which is available to Duke pursuant to a PPA and asset sale, is the most cost-effective alternative available to meet Duke's needs for capacity and energy in the 2016 time frame. Properly evaluated, Duke's acquisition of Osprey's capacity and energy pursuant to the PPA-acquisition proposal offered by Calpine will save Duke's customers approximately \$133 million in Cumulative Present Value Revenue Requirements.

**NRG:** No. The NRG Osceola facility, identified in Duke filings as "Acquisition 1", is the better and more cost-effective choice for meeting Duke's capacity needs prior to 2018 when fairly and non-discriminatorily evaluated against Duke's proposed Suwannee Simple Cycle and Hines Chiller Uprate self-build projects. Osceola is far more cost-effective than Duke's proposed self-build projects; its 465 MW generating capacity can meet Duke's projected capacity needs prior to 2018; it is much less risky for Duke's customers; and, it will restrain the steadily increasing upward pressure on Duke's already high electricity rates as compared to the proposed self-build projects. (Pollock, Dauer, Morris)

**STAFF:** No position.

**ISSUE 14:** **Did Duke Energy Florida, Inc. reasonably evaluate all alternative scenarios for cost effectively meeting the needs of its customers over the relevant planning horizon?**

**POSITIONS**

**DEF:** Yes it did. Before selecting the Suwannee Simple Cycle and Hines Chillers Power Uprate Projects, DEF examined several alternative generation expansion plans to meet its near-term reliability need. The Company evaluated generation options to determine those options that were the most cost-effective, screening the options based on cost, fuel sources and availability, technological maturity, and overall

resource feasibility within the Company's system. The Suwannee Simple Cycle Project and the Hines Chillers Power Uprate Project had the lowest CPVRR and were chosen by the Company as its base generation plan to meet the Company's reliability needs in 2016 and 2017.

DEF evaluated nine proposals for PPAs or generation facility acquisitions. DEF evaluated all of these proposals by systematically following a structured, orderly evaluation process that evaluated all proposals, including the Company's self-build generation projects, on price and non-price attributes. The detailed economic evaluation was performed in stages and included all costs, including transmission cost impacts, in the analysis. If a proposal was economic compared to the Company's self-build generation projects the Company would proceed to the next step in the analysis.

In CPVRR terms, the Suwannee Simple Cycle and Hines Chillers Power Uprate projects were found to be more cost effective than all the PPA proposals and all but one of the potential generation facility acquisition proposals. The Company's Projects were only marginally more expensive than the NRG plant acquisition proposal, but in CPVRR terms over the 30-year study period they were nearly equivalent on an economic basis to the Company. The Company next quantified a number of cost risks with the proposals evaluated in cost sensitivities and identified qualitative factors that presented additional cost risks. These sensitivities included construction cost risk for the self-build projects, and gas transportation contract risks, plant condition and maintenance risks, and transmission cost risks for the potential NRG and Calpine generation facility acquisitions. The qualitative or non-price issues with the technical feasibility and viability of these acquisition proposals included the physical condition and maintenance of the plants, site environmental impacts and compliance, insurance, and indemnity obligations, among other qualitative factors, that had to be evaluated and mitigation plans developed for these qualitative risks, including the negotiation of terms and conditions to mitigate those risks.

The cost risk sensitivities placed the NRG and Calpine acquisition proposals in a range where they were possibly close to the cost effectiveness of the self-build projects or substantially less cost effective than the self-build projects. Given this range of possible values, DEF continued its evaluation of the feasibility of the potential generation facility acquisitions by conducting a FERC Competitive Analysis Screen. The FERC market screen analysis is a required step in obtaining FERC approval under the FPA for any acquisition of a jurisdictional generation facility. The Company retained Julie Solomon with Navigant Consulting, Inc. to perform the FERC Competitive Analysis Screen. Both potential generation facility acquisitions failed the FERC Competitive Analysis Screen. This meant that the Company would have to build additional transmission facilities to expand the transmission import capability to mitigate the screen failures at substantial cost to the Company and its customers. The most cost effective generation option

to meet customer reliability needs prior to 2018 based on the quantitative analysis and the FERC market screen analysis is the Company's self-build generation plan.

NRG submitted a final and best offer to meet the Company's generation capacity need commencing in the summer of 2016 as an alternative to the Company's Suwannee Simple Cycle Project after DEF filed its Petition in this Docket. NRG witnesses abandon that NRG final and best offer in their recommendations. They instead challenge DEF's decision that the Suwannee Simple Cycle project is the most cost effective alternative to meet DEF's need in the summer of 2016 based on NRG's least cost effective, initial plant acquisition proposal. DEF had already evaluated NRG's initial plant acquisition proposal and determined it was not more cost effective, on a quantitative and qualitative basis -- which NRG agrees is the correct evaluation methodology -- to the Suwannee Simple Cycle Project to meet DEF's need commencing in the summer of 2016. NRG witnesses continue to ignore DEF's need for firm natural gas transportation at all times for all the plant's capacity for DEF to rely on the NRG plant as a firm resource to meet DEF's obligation to provide reliable electric service to its customers. Further, no NRG witness disputes the fact that the NRG initial plant acquisition that NRG continues to advance in its testimony failed the FERC market screen rendering FERC approval of this acquisition unlikely without substantial mitigation. For these reasons, the Suwannee Simple Cycle Project remains a superior generation capacity resource to the NRG plant acquisition to meet DEF's generation capacity need commencing in the summer of 2016.

Calpine submitted multiple final and best offers after DEF filed its Petition in this Docket. These proposals moved closer to the cost effectiveness of the Suwannee Simple Cycle Project, but they still were not more cost effective than that Project to meet DEF's need for generation capacity in the summer of 2016. Calpine's primary expert witness Mr. Hibbard disputes this determination, but he fails to include all the costs associated with Calpine's last final and best offer --- including costs either he or other Calpine witnesses admit exist such as additional transmission wheeling charges --- in his criticism of DEF's evaluation. He also ignores the qualitative risks associated with Calpine's last final and best offer that present additional cost risk to DEF. When all costs are included, and the qualitative cost risks accounted for in the evaluation, the Suwannee Simple Cycle Project is still a superior generation capacity resource to the Calpine final and best offer to meet DEF's generation capacity need commencing in the summer of 2016.

Calpine's witness Mr. Hibbard also criticizes DEF's evaluation methodology. He deliberately ignores or does not understand DEF's evaluation models and tools, criticizes DEF for not employing production cost economic dispatch models that DEF in fact employed, and urges the Commission instead to use his results from a simplistic screening tool for "like type" resources to evaluate different types of resources without understanding the costs and benefits of the dispatch of the

resources on DEF's system. This is not a detailed economic analysis of the proposals or a fair and accurate criticism of DEF's detailed economic analysis of the alternative generation resource options to meet its reliability need commencing in the summer of 2016. That detailed economic analysis -- which includes an analysis of the economic dispatch of the alternative resources on DEF's system using the very model Mr. Hibbard said DEF should use --- demonstrates that DEF has a need for peaking generation capacity in the summer of 2016 and that the Suwannee Simple Cycle Project is the most cost effective generation capacity resource to meet that need. Even the simplistic screening tool Mr. Hibbard used demonstrates that, if peaking generation capacity is needed which is the case in the summer of 2016, the Suwannee Simple Cycle Project is more cost-effective to meet that need than the Calpine plant.

Based on this evaluation, the Company reasonably evaluated all alternative scenarios for cost effectively meeting the needs of its customers and determined that the Suwannee Simple Cycle and Hines Chillers Power Uprate Projects were the most cost-effective generation options, based on price and non-price attributes, to meet the Company's reliability needs prior to 2018. (Borsch, Scott, Solomon, Patton).

**OPC:** At this time, the issue of whether Duke Energy Florida reasonably evaluated all alternative scenarios for cost effectively meeting the needs of its customers over the relevant planning horizon is still under evaluation by the OPC given that discovery has not been concluded in this docket. At this time the OPC does not yet have a complete basis to determine whether Duke has met its burden of proof on this issue. The Public Counsel believes that the Commission should find that the lowest cost, prudent, reliable solution should be selected in the event that the Commission determines that Duke has met its burden to demonstrate that a need exists.

**FIPUG:** Duke must meet its burden of proof on this point.

**PCS**  
**Phosphate:** There are material issues of fact that need to be resolved and Duke has not met its burden of demonstrating the reasonableness of its forecast and the reasonableness of its self-build proposals compared to other viable alternatives that intervenors have put forth.

**Calpine:** No. Duke did not reasonably evaluate all available scenarios for acquiring needed capacity and energy. Specifically, Duke did not reasonably evaluate the scenario of acquiring the Osprey Facility through a combination of a 5-year PPA and purchase of Osprey during, or at the end of, the PPA term. This scenario would not cause the problem of possible FERC disapproval of the acquisition, which Duke asserted was the basis for ruling out the Osprey Facility earlier in its evaluations. When the PPA/acquisition scenario is properly evaluated, Duke's

acquisition of the Osprey Facility pursuant to Calpine's offer is the best option for Duke and its customers.

**NRG:** No. According to Duke's own analysis, the 30-year cumulative net present value revenue requirement (NPVRR) of acquiring NRG Osceola is \$49 million less than Duke's self-build projects. In fact, the Osceola acquisition would be even more cost-effective if Duke had included incremental natural gas delivery or service costs in its analysis of its own self-build projects. Duke's analysis also erred in eliminating NRG Osceola as a viable alternative to its self-build projects by incorrectly applying FERC's Competitive Analysis (market power) Screen to NRG Osceola. Moreover, Duke's cost-effectiveness analysis is further flawed because it attributed unjustified equity costs to alternative purchased power agreement by imputing additional debt to the projected cost of a power purchase agreement with NRG, thereby favorably skewing economics toward the Duke self-build projects. Collectively, these analytical flaws and errors result in a substantial and unjustifiable bias in the evaluation process that highly favors the self-build projects and, in turn, Duke's attempt to build its rate base. (Pollock, Dauer, Morris)

**STAFF:** No position.

**ISSUE 15:** **Based on the resolution of the foregoing issues, should the Commission grant the requested determination that the proposed Suwannee Simple Cycle Project and Hines Chillers Power Uprate Project are the most cost-effective generation alternatives to meet Duke's needs prior to 2018?**

**POSITIONS**

**DEF:** Yes, the Commission should grant the requested determination that the proposed Suwannee Simple Cycle Project and Hines Chillers Power Uprate Project are the most cost-effective generation alternative to meet DEF's needs prior to 2018. DEF needs the Suwannee Simple Cycle Project and the Hines Chillers Power Uprate Project by the summer of 2016 and 2017, respectively, to meet its 20 percent Reserve Margin commitment and to serve its customers' future electrical power needs in a reliable and cost-effective manner.

The Company evaluated these Projects against PPA and generation facility acquisition proposals from third-party generators, and none of these proposals compared more favorably, on a quantitative and qualitative basis, to the Company's Suwannee Simple Cycle Project and the Hines Chillers Power Uprate Project. Moreover, the Company has continually interacted with NRG and Calpine and has evaluated their final and best proposals. The Company still determined that the Suwannee Simple Cycle Project and the Hines Chillers Power Uprate Project were more cost-effective, on a quantitative and qualitative basis,

than any of the alternative supply-side generation proposals. The NRG and Calpine witness testimony in this Docket does not change this determination. DEF has demonstrated that the Suwannee Simple Cycle Project and the Hines Chillers Power Uprate Project are the most cost effective alternatives for maintaining DEF's electric system reliability and integrity, and providing its customers with adequate electricity at a reasonable cost, by the summer of 2016 and 2017, respectively. DEF, accordingly, requests that the Commission approve the Suwannee Simple Cycle Project and the Hines Chillers Power Uprate Project as the most cost-effective alternatives to meet the Company's need in 2016 and 2017. (Borsch, Scott, Delehanty, Landseidel, Solomon, Patton).

**OPC:** At this time the OPC does not yet have a complete basis to determine whether Duke has met its burden of proof on this issue. The Public Counsel believes that the Commission should find that the lowest cost, prudent, reliable solution should be selected in the event that the Commission determines that Duke has met its burden to demonstrate that a need exists.

**FIPUG:** Duke must meet its burden of proof on this point.

**PCS  
Phosphate:** No position at this time.

**Calpine:** No. The Commission should deny Duke's petition in this docket and direct Duke to pursue the most cost-effective and lowest-risk alternative available to meet its customers' needs, which is the Osprey Facility, to be acquired by Duke pursuant to the PPA/acquisition proposal offered by Calpine.

**NRG:** No. The Commission should find that the proposed Suwannee Simple Cycle Project and Hines Chillers Power Uprate self-build projects are not the most cost-effective; and should further determine that acquisition of NRG Florida LP's Osceola plant is the most cost-effective generation alternative to meet the need asserted by Duke in Docket 140111-EI. (Pollock, Dauer)

**STAFF:** No position.

**ISSUE 16:** **Should Docket No. 140111-EI be closed?**

**POSITIONS**

**DEF:** Following a final order by the Commission granting the requested determination that the proposed Suwannee Simple Cycle Project and Hines Chillers Power Uprate Project are the most cost effective generation alternative to meet DEF's need prior to 2018, and pending the filing of reconsideration or for appellate review, if any, yes, this docket should be closed. (Borsch).

**OPC:** No position.

**FIPUG:** Yes.

**PCS**

**Phosphate:** No position at this time.

**Calpine:** No. The Commission should deny Duke's petition because the acquisition of the Osprey Facility through the PPA-acquisition proposals offered to Duke by Calpine is a more cost-effective and lower-risk alternative. The Commission should consider keeping this docket open for further proceedings to address Duke's need for generating capacity in the 2016 time frame.

**NRG:** No. The Commission should require Duke to engage in further negotiations with NRG and to report the results to the Commission within 90 days.

**STAFF:** No Position.

IX. EXHIBIT LIST

<u>Witness</u>	<u>Proffered By</u>		<u>Description</u>
Mark E. Landseidel	DEF	MEL-1	A preliminary aerial site plan of the Citrus County Combined Cycle Power Plant site.
Mark E. Landseidel	DEF	MEL -2	The preliminary general arrangement of the Citrus County Combined Cycle Power Plant at the Citrus County site.
Mark E. Landseidel	DEF	MEL -3	A copy of the Sargent & Lundy Consulting LLC Citrus County Combined Cycle Station Risk Analysis for Single Fuel Operation.
Mark E. Landseidel	DEF	MEL -4	A table of the major cost items for the Citrus County Combined Cycle Power Plant project.
Mark E. Landseidel	DEF	MEL -5	The projected schedule and key milestones for completion of the Citrus County Combined Cycle Power Plant project.
Mark E. Landseidel	DEF	MEL-1	A map showing the location of the Suwannee power plant site in Suwannee County, Florida.

<u>Witness</u>	<u>Proffered By</u>		<u>Description</u>
Mark E. Landseidel	DEF	MEL-2	The preliminary layout of the Suwannee Simple Cycle project at the Suwannee power plant site.
Mark E. Landseidel	DEF	MEL-3	An itemization of the major cost items for the Suwannee Simple Cycle project.
Mark E. Landseidel	DEF	MEL-4	The projected schedule for completion of the Suwannee Simple Cycle project.
Mark E. Landseidel	DEF	MEL-5	A map showing the location of the Hines Chillers Power Uprate project in Polk County, Florida.
Mark E. Landseidel	DEF	MEL-6	The preliminary layout of the Hines Chillers Power Uprate project equipment and facilities located at the Hines Energy Complex in Polk County, Florida.
Mark E. Landseidel	DEF	MEL-7	An itemization of the major cost items for the Hines Chillers Power Uprate project.
Mark E. Landseidel	DEF	MEL-8	The projected schedule for completion of the Hines Chillers Power Uprate project.
Amy Dierolf	DEF	AD-1	A list of the permits or licenses DEF will obtain for the Citrus County Combined Cycle power plant.
Amy Dierolf	DEF	AD-2	A copy of the estimated schedule for submittal and approval of the SCA for the Citrus County Combined Cycle Power Plant.
Jeffrey Patton	DEF	JP-1	A map of the natural gas supply pipelines serving the State of Florida including the Sabal Trail Transmission LLC (“Sabal Trail”) pipeline project.
Jeffrey Patton	DEF	JP-2	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.

<u>Witness</u>	<u>Proffered By</u>		<u>Description</u>
Jeffrey Patton	DEF	JP-3	A map of the gas supply access at Transco Station 85 provided by Sabal Trail.
Jeffrey Patton	DEF	JP-4	A chart illustrating a forecast of United States dry natural gas production from the 2014 Annual Energy Outlook published by the Energy Information Administration.
Kevin Delehanty	DEF	KD-1	<b>CONFIDENTIAL</b> - A chart of the Company's base, high, and low natural gas price forecast.
Kevin Delehanty	DEF	KD-2	<b>CONFIDENTIAL</b> - A chart of the Company's base natural gas price forecast and other industry natural gas price forecasts.
Kevin Delehanty	DEF	KD-3	United States Energy Information Administration Map of major North American shale basins.
Kevin Delehanty	DEF	KD-4	United States Potential Gas Committee chart of Total Potential Resources.
Kevin Delehanty	DEF	KD-1	<b>CONFIDENTIAL</b> - A chart of the Company's base, high, and low natural gas price forecast.
Kevin Delehanty	DEF	KD-2	<b>CONFIDENTIAL</b> - A chart of the Company's base natural gas price forecast and other industry natural gas price forecasts.
Kevin Delehanty	DEF	KD-3	United States Energy Information Administration Map of major North American shale basins.
Kevin Delehanty	DEF	KD-4	United States Potential Gas Committee chart of Total Potential Resources.

<u>Witness</u>	<u>Proffered By</u>		<u>Description</u>
Ed Scott	DEF	ES-1	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.
Ed Scott	DEF	ES-2	<b>CONFIDENTIAL-</b> transmission groups evaluated in the Company’s transmission screening studies of the 2018 RFP proposals.
Ed Scott	DEF	ES-3	<b>CONFIDENTIAL-</b> 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.
Ed Scott	DEF	ES-1	A map and graphic illustration of the transmission interconnections for the Suwannee Simple Cycle Project at the Suwannee power plant site.
Ed Scott	DEF	ES-2	A depiction of the existing Hines Energy Complex combined cycle power plant blocks and the existing transmission interconnections.
Ed Scott	DEF	ES-3	<b>CONFIDENTIAL-</b> A description of the potential generation facility acquisitions evaluated for transmission cost impacts to the DEF transmission system, including the physical location of the facilities and a description of the necessary transmission network upgrades to reliably integrate the facilities onto the electric grid that result from the DEF transmission analyses.

<u>Witness</u>	<u>Proffered By</u>		<u>Description</u>
Alan S. Taylor	DEF	AST-1	Document No. 1, Resume of Alan S. Taylor  <b>CONFIDENTIAL-</b> Document No. 2, Sedway Consulting's Independent Evaluation Report.
Julie Solomon	DEF	JS-1	A copy of Julie Solomon's curriculum vitae.
Julie Solomon	DEF	JS-2	A schematic showing DEF's Balancing Authority Area ("BAA") and other BAAs in the Florida Reliability Coordinating Council.
Julie Solomon	DEF	JS-3	Sample Herfindahl-Hirschman Index ("HHI") calculations of market concentration.
Julie Solomon	DEF	JS-4	A table depicting the metrics FERC uses to define market concentration and acceptable levels of HHI changes under the Competitive Analysis Screen.
Julie Solomon	DEF	JS-5	A table of the ten periods that are evaluated in the Competitive Analysis Screen.
Julie Solomon	DEF	JS-6	A table of the "Available Economic Capacity ("AEC") calculations derived for DEF in the Competitive Analysis Screen evaluation.
Julie Solomon	DEF	JS-7	A table of the AEC calculations derived for DEF with a ten percent increase in the market price.
Julie Solomon	DEF	JS-8	A table summarizing the differences between the AEC for DEF from Exhibit No. ___ (JS-6) and Exhibit No. ___ (JS-7).
Julie Solomon	DEF	JS-9	Results of the Competitive Analysis Screen for potential Acquisition 1.
Julie Solomon	DEF	JS-10	Results of the Competitive Analysis Screen for potential Acquisition 2.

<u>Witness</u>	<u>Proffered By</u>		<u>Description</u>
Julie Solomon	DEF	JS-11	Results of the Competitive Analysis Screen price increase and decrease sensitivity analyses for potential Acquisition 1.
Julie Solomon	DEF	JS-12	Results of the Competitive Analysis Screen price increase and decrease sensitivity analyses for potential Acquisition 2.
Benjamin M.H. Borsch	DEF	BMHB-1	<b>CONFIDENTIAL-</b> the Company's Need Study for the Citrus County Combined Cycle Power Plant.
Benjamin M.H. Borsch	DEF	BMHB-2	The Company's April 2014 Ten Year Site Plan ("TYSP").
Benjamin M.H. Borsch	DEF	BMHB-3	DEF's projected summer peak load growth and Reserve Margins with and without additional generation resources through 2018.
Benjamin M.H. Borsch	DEF	BMHB-4	DEF's projected net energy for load growth on DEF's system.
Benjamin M.H. Borsch	DEF	BMHB-5	A comparison of the cost efficiency of commercially available generation technologies including combined cycle generation technology.
Benjamin M.H. Borsch	DEF	BMHB-6	A map of the location of unconventional shale gas developments and major gas pipelines in the Southeast United States.
Benjamin M.H. Borsch	DEF	BMHB-7	A chart of the recent, current, and future production from both conventional and unconventional North American gas supply resources.
Benjamin M.H. Borsch	DEF	BMHB-8	A map showing the location of the Sabal Trail natural gas pipeline and the other natural gas pipelines into the State of Florida.
Benjamin M.H. Borsch	DEF	BMHB-9	A flow chart of the 2018 RFP evaluation process.

<u>Witness</u>	<u>Proffered By</u>		<u>Description</u>
Benjamin M.H. Borsch	DEF	BMHB-10	A table of the 2018 RFP Threshold Requirements.
Benjamin M.H. Borsch	DEF	BMHB-11	A table of the 2018 Minimum Technical Requirements.
Benjamin M.H. Borsch	DEF	BMHB-12	A table of the 2018 RFP bidder proposal resource scenarios evaluated in the Company's 2018 RFP evaluation process.
Benjamin M.H. Borsch	DEF	BMHB-13	A table of the results of the Company's Initial Detailed Evaluation of the 2018 RFP bidder proposal resource scenarios.
Benjamin M.H. Borsch	DEF	BMHB-14	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.
Benjamin M.H. Borsch	DEF	BMHB-1	A copy of the Florida Reliability Coordinating Council ("FRCC") Evaluation of Transmission Impact of the United States Environmental Protection Agency ("EPA") Mercury and Air Toxics Standard ("MATS") --- Transmission Impact Study for Shutdown of Crystal River Unit 1 ("CR1") and Crystal River Unit 2 ("CR2") with retirement of Crystal River Unit 3 ("MATS Study").
Benjamin M.H. Borsch	DEF	BMHB-2	The Company's current, April 2014 Ten Year Site Plan ("TYSP").
Benjamin M.H. Borsch	DEF	BMHB-3	The Company's near-term summer and winter load forecast.
Benjamin M.H. Borsch	DEF	BMHB-4	The Company's forecast of summer peak demands and reserves with and without additional generation capacity in the summers of 2016 and 2017.
Benjamin M.H. Borsch	DEF	BMHB-5	The Company's forecast of physical and dispatchable demand-side resource reserves through the summers of 2016 and 2017.

<u>Witness</u>	<u>Proffered By</u>		<u>Description</u>
Benjamin M.H. Borsch	DEF	BMHB-6	The generation options evaluated to contribute to the Company's capacity needs in the summers of 2016 and 2017.
Benjamin M.H. Borsch	DEF	BMHB-7	<b>CONFIDENTIAL</b> - A chart of the supply-side generation proposals evaluated by the Company to meet its capacity needs in the summers of 2016 and 2017.
Benjamin M.H. Borsch	DEF	BMHB-8	The Company's initial detailed economic analysis results for the most cost-effective generation option to meet the Company's capacity needs in the summers of 2016 and 2017.
Benjamin M.H. Borsch	DEF	BMHB-9	The Company's cost sensitivity analysis results based on the initial detailed economic analysis.
Benjamin M.H. Borsch	DEF	BMHB-10	The Company's final detailed economic analysis results for the most cost-effective generation option to meet the Company's capacity needs in the summer of 2016 and 2017.
Benjamin M.H. Borsch	DEF	BMHB-11	The Company's analysis of natural gas price and carbon cost ("CO2") sensitivities to the final detailed economic analyses.
Paul J. Hibbard	Calpine	PJH-1	Curriculum vitae of Paul J. Hibbard
Paul J. Hibbard	Calpine	PJH-2	<b>CONFIDENTIAL</b> - Calpine LCOE Model Sources and Assumptions
Paul J. Hibbard	Calpine	PJH-3	<b>CONFIDENTIAL</b> - Levelized Cost of Electricity (\$2014/MWh)
Paul J. Hibbard	Calpine	PJH-4	<b>CONFIDENTIAL</b> - Levelized Cost (\$2014/MWh) by Capacity Factor 2015-2043
Paul J. Hibbard	Calpine	PJH-5	Growth in Total Energy Demand and Potential Energy Generation from Generic Combined Cycle Units

<u>Witness</u>	<u>Proffered By</u>		<u>Description</u>
Paul J. Hibbard	Calpine	PJH-6	<b>CONFIDENTIAL-</b> Comparison of Osprey Capacity Factor and Starts, by Year, DEF Production Simulation Results, Scenario 5 Acquisition
Paul J. Hibbard	Calpine	PJH-7a&7b	<b>CONFIDENTIAL-</b> Adjustments to Cumulative Present Value Revenue Requirements
Paul J. Hibbard	Calpine	PJH-8	<b>CONFIDENTIAL-</b> Emission Rates by Technology, Carbon Dioxide (CO2) and Nitrogen Oxides (NOx)
John L. Simpson, P.E.	Calpine	JS-1	Resume' of John L. Simpson, P.E.
John L. Simpson, P.E.	Calpine	JS-2	Excerpts from FPL Ten Year Site Plan - Turkey Point Synchronous Condenser Operation
David Hunger, Ph.D.	Calpine	DH-1	Qualifications and Experience of David Hunger, Ph.D.
Jeffry Pollock	NRG	JP-1	Appearance List
Jeffry Pollock	NRG	JP-2	Load Growth Sensitivity
Jeffry Pollock	NRG	JP-3	Capacity Requirement Sensitivity
Jeffry Pollock	NRG	JP-4	2013 Settlement
Jeffry Pollock	NRG	JP-5	Bill Comparison – Winter 2014
Jeffry Pollock	NRG	JP-6	Bill Comparison – Summer 2013
John F. Morris	NRG	JRM-1	Resume – Dr. John R. Morris
John F. Morris	NRG	JRM-2	Revised DPT Results – Long-Term Contract With Osceola

<u>Witness</u>	<u>Proffered By</u>		<u>Description</u>
John F. Morris	NRG	JRM-3	Revised DPT Results – Other Comparable Capacity
<u>Rebuttal</u>			
Ed Scott	DEF	ES-4	The estimated cost for firm Point to Point (PTP”) transmission reservation service with Tampa Electric Company (“TEC”) to deliver the entire Calpine Osprey plant capacity and energy to the interface between the TEC and DEF system.
Ed Scott	DEF	ES-5	The estimated cost to wheel the 249MW of firm partial pass PTP transmission service that Calpine currently has with TEC to deliver 249 MW of firm capacity and energy from the Calpine Osprey plant to the interface between the TEC and DEF system.
Benjamin M.H. Borsch	DEF	BMHB-15	DEF’s load forecasts.
Benjamin M.H. Borsch	DEF	BMHB-16	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.
Benjamin M.H. Borsch	DEF	BMHB-12	CONFIDENTIAL - A composite exhibit of the written communications between DEF and NRG between late May 2014 and early July 2014.
Benjamin M.H. Borsch	DEF	BMHB-13	CONFIDENTIAL - A composite exhibit of the written communications between DEF and Calpine between late May 2014 and early July 2014.
Benjamin M.H. Borsch	DEF	BMHB-14	CONFIDENTIAL - NRG’s final and best offer to sell its plant to DEF.
Benjamin M.H. Borsch	DEF	BMHB-15	CONFIDENTIAL - DEF’s evaluation of NRG’s final and best offer to sell its plant to DEF.

<u>Witness</u>	<u>Proffered By</u>		<u>Description</u>
Benjamin M.H. Borsch	DEF	BMHB-16	CONFIDENTIAL - Calpine's June 16, 2014 final and best offer to sell its plant to DEF.
Benjamin M.H. Borsch	DEF	BMHB-17	CONFIDENTIAL - Calpine's July 3, 2014 final and best offer to sell its plant to DEF.
Benjamin M.H. Borsch	DEF	BMHB-18	CONFIDENTIAL - DEF's evaluation of Calpine's July 3, 2014 final and best offer to sell its plant to DEF.
Benjamin M.H. Borsch	DEF	BMHB-19	DEF's summary of similar capital projects to the Suwannee Simple Cycle Project.
Benjamin M.H. Borsch	DEF	BMHB-20	DEF's load forecasts.

Parties and Staff reserve the right to identify additional exhibits for the purpose of cross-examination.

X. PROPOSED STIPULATIONS

DEF and FIPUG have stipulated between themselves that 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.

XI. PENDING MOTIONS AND PROCEDURAL MATTERS

None at this time.

XII. PENDING CONFIDENTIALITY MATTERS

None at this time.

XIII. POST-HEARING PROCEDURES

If no bench decision is made, each party shall file a post-hearing statement of issues and positions for each docket. A summary of each position of no more than 120 words, set off with asterisks, shall be included in that statement. If a party's position has not changed since the issuance of this Prehearing Order, the post-hearing statement may simply restate the prehearing position; however, if the prehearing position is longer than 120 words, it must be reduced to no more than 120 words. If a party fails to file a post-hearing statement, that party shall have waived all issues and may be dismissed from the proceeding.

Pursuant to Rule 28-106.215, F.A.C., a party's proposed findings of fact and conclusions of law, if any, statement of issues and positions, and brief, shall together total no more than 80 pages combined for both dockets. Parties may allocate those 80 pages between the two dockets as they deem appropriate.

XIV. RULINGS

Opening statements for both dockets shall be combined. Opening statements for DEF shall not exceed 10 minutes. Opening statements for all other parties shall not exceed 5 minutes each.

Based on the agreement of all parties there shall be a consolidated record incorporating both dockets. Any testimony or exhibits admitted into one docket shall be deemed admitted in the other docket.

NRG Florida LP's Clarification of Testimony Filings and Motion to Accept Testimony of NRG Witness Jim Dauer is hereby granted.

The motion of Calpine Construction Finance Company, L.P. to Accept Testimony Filed Shortly After Close of Business on Filing Date is hereby granted.

The motion of Calpine Construction Finance Company, L.P. to Accept as Timely the Testimony of Witness Todd Thornton is hereby granted.

It is, therefore,

ORDERED by Commissioner Ronald A. Brisé, as Prehearing Officer, that this Prehearing Order shall govern the conduct of these proceedings as set forth above unless modified by the Commission. It is further

ORDERED that NRG Florida LP's Clarification of Testimony Filings and Motion to Accept Testimony of NRG Witness Jim Dauer is hereby granted. It is further

ORDERED that the motion of Calpine Construction Finance Company, L.P. to Accept Testimony Filed Shortly After Close of Business on Filing Date is hereby granted. It is further

ORDERED that the motion of Calpine Construction Finance Company, L.P. to Accept as Timely the Testimony of Witness Todd Thornton is hereby granted.

By ORDER of Commissioner Ronald A. Brisé, as Prehearing Officer, this 22nd day of  
August, 2014.



RONALD A. BRISE  
Commissioner and Prehearing Officer  
Florida Public Service Commission  
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Tallahassee, Florida 32399  
(850) 413-6770  
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Copies furnished: A copy of this document is provided to the parties of record at the time of issuance and, if applicable, interested persons.

MTL

NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Mediation may be available on a case-by-case basis. If mediation is conducted, it does not affect a substantially interested person's right to a hearing.

Any party adversely affected by this order, which is preliminary, procedural or intermediate in nature, may request: (1) reconsideration within 10 days pursuant to Rule 25-22.0376, Florida Administrative Code; or (2) judicial review by the Florida Supreme Court, in the case of an electric, gas or telephone utility, or the First District Court of Appeal, in the case of a water or wastewater utility. A motion for reconsideration shall be filed with the Office of Commission Clerk, in the form prescribed by Rule 25-22.0376, Florida Administrative Code. Judicial review of a preliminary, procedural or intermediate ruling or order is available if review of the final action will not provide an adequate remedy. Such review may be requested from the appropriate court, as described above, pursuant to Rule 9.100, Florida Rules of Appellate Procedure.