DOCKET NO. 150043-EI

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Determination that the Osprey Plant Acquisition and, alternatively, the Suwannee Simple Cycle Project is the most Cost Effective Generation Alternative to Meet the Remaining Need Prior to 2018 for Duke Energy Florida, Inc.

DOCKET NO. _____ Submitted for filing: January 30, 2015

DUKE ENERGY FLORIDA'S PETITION FOR DETERMINATION THAT THE OSPREY PLANT ACQUISITION OR, ALTERNATIVELY, THE SUWANNEE SIMPLE CYCLE PROJECT IS THE MOST COST EFFECTIVE GENERATION ALTERNATIVE TO MEET DUKE ENERGY FLORIDA'S REMAINING NEED PRIOR TO 2018

Pursuant to the provisions of Chapter 366, Florida Statutes, and Rules 25-22.080 and 28-106.301, Florida Administrative Code ("F.A.C."), and in accordance with the 2013 Revised and Restated Stipulation and Settlement Agreement ("2013 Settlement Agreement"), approved by the Florida Public Service Commission ("PSC" or the "Commission"), on November 12, 2013 in Order No. PSC-13-0598-FOF-EI in Docket No. 130208-EI, Duke Energy Florida, Inc. ("DEF" or the "Company") respectfully petitions the Commission for a determination that the Calpine Construction Finance Company, L.P. ("Calpine") Osprey Plant acquisition and, alternatively, if DEF cannot purchase the Osprey Plant, the construction of the Suwannee Simple Cycle Project is the most cost effective generation to meet DEF's remaining need for additional generation capacity prior to 2018.

DEF determined that it had a need for additional generation capacity prior to 2018 and initially petitioned the Commission on May 27, 2014 in Docket No. 140111-EI to determine that the Suwannee Simple Cycle Project and the Hines Chillers Power Uprate Project were the most cost effective generation alternatives to meet that need. Based on a term sheet for DEF's purchase of the Osprey Plant that Calpine provided DEF the first day of the hearing in Docket

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¹ DEF executed an Asset Purchase and Sale Agreement with Osprey Energy Center, LLC as the assignee of Calpine Construction Finance Company, L.P. for the Osprey Plant (Osprey Energy Center).

No. 140111-EI, DEF moved to withdraw its request with respect to the Suwannee Simple Cycle Project. Pending the potential cost-effective acquisition of the Osprey Plant, DEF explained it would renew its request for additional generation capacity to meet DEF's remaining need prior to 2018. The Commission granted DEF's motion and, following the evidentiary hearing, the Commission granted DEF's petition for determination of need for the Hines Chillers Power Uprate Project to meet part of DEF's need prior to 2018 in Order No. PSC-14-0590-FOF-EI.

DEF needs either the Osprey Plant or, if DEF cannot purchase the Osprey Plant, the Suwannee Simple Cycle Project to meet its remaining need for additional generation prior to 2018. DEF signed an Asset Purchase and Sale Agreement ("APA") with Calpine in December 2014 to acquire the Osprey Plant. That acquisition, however, is contingent on various required regulatory approvals, including approval by the Federal Energy Regulatory Commission ("FERC"), this Commission, and the Department of Justice ("DOJ"). DEF mitigated this regulatory risk in the APA by preserving for DEF's customers the benefits of the Suwannee Simple Cycle Project. If the requisite regulatory approvals are not timely obtained, DEF cannot purchase the Osprey Plant and DEF will complete the Suwannee Simple Cycle Project to meet DEF's remaining generation need prior to 2018. DEF must commence work on that Project in time to complete the Project to meet DEF's need for additional generation capacity in the summer of 2017.

DEF will build the Suwannee Simple Cycle Project only if DEF cannot purchase the Osprey Plant. DEF must, however, petition this Commission at this time for approval of DEF's acquisition of the Osprey Plant or, alternatively, if DEF cannot buy the Osprey Plant, of DEF's construction of the Suwannee Simple Cycle Project. DEF cannot separately present these projects to the Commission for consideration of the most cost effective alternative to meet DEF's

remaining need for additional generation prior to 2018 because they are inextricably intertwined. Central to the parties' deal in the APA is the preservation for customers of the benefits of the most cost-effective generation project regardless of the outcome of regulatory approvals beyond their control. DEF preserves for customers the benefits of the cost-effective Osprey Plant acquisition, if all regulatory approvals are obtained; and DEF preserves the benefits of the costeffective Suwannee Simple Cycle Project, if an adverse regulatory outcome were to render the Osprey Plant acquisition unattainable. For this reason, DEF cannot present, and the Commission cannot consider, one project without the other in determining the most cost-effective generation alternative to meet DEF's remaining need prior to 2018. DEF further cannot delay this Petition because DEF does not have enough time to obtain Commission approval for the Suwannee Simple Cycle Project in the event DEF cannot purchase the Osprey Plant before DEF must recommence the Suwannee Simple Cycle Project to meet its need for additional generation in the summer of 2017. For these reasons, as more fully explained below and in DEF's direct testimony and exhibits, DEF petitions the Commission for a determination that the Osprey Plant acquisition is the most cost effective generation alternative to meet DEF's need for additional generation capacity prior to 2018. Alternatively, if DEF cannot purchase the Osprey Plant, DEF respectfully asks the Commission to determine that the Suwannee Simple Cycle Project is the most cost effective generation alternative to meet DEF's need for additional generation capacity prior to 2018.

In support of this Petition DEF is submitting the direct testimony and exhibits of DEF witnesses Benjamin Borsch, Kevin Delehanty, Kris Edmondson, Mark Landseidel, Matthew Palasek, and Ed Scott.

I. PRELIMINARY INFORMATION.

1. The Petitioner's name and address are:

Duke Energy Florida, Inc. 299 1st Avenue North St. Petersburg, Florida 33701

2. Any pleading, motion, notice, order, or other document required to be served upon DEF or filed by any party to this proceeding should be served upon the following individuals:

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II. PRIMARILY AFFECTED UTILITY.

- 3. DEF is the utility primarily affected by the Calpine Osprey Plant acquisition and, alternatively, the proposed Suwannee Simple Cycle Project. DEF is an investor-owned electric utility, regulated by the Commission, and is a wholly owned subsidiary of Duke Energy Corporation. The Company's principal place of business is located at 299 1st Ave. N., St. Petersburg, Florida 33701.
- 4. 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 supplies electricity at retail to approximately 350 communities and at wholesale to Florida municipalities, utilities, and power agencies in the State of Florida.
- 5. DEF still has a need for additional generation capacity prior to 2018 consistent with what DEF demonstrated in Docket No. 140111-EI. As DEF explained there, DEF serves an area that is recovering from the Great Recession. Economic conditions support customer and energy demand growth and that is what DEF is experiencing in its service area. As a result, DEF expects higher population and economic growth over the next ten years. DEF projects annual customer growth, increased summer firm demand, and an increase in net energy for load ("NEL") prior to 2018 and within the projected ten-year period. More detail on the Company's demand and energy forecast, and the methodology used to develop them, is included in Chapter 2 of the Company's 2014 Ten Year Site Plan ("TYSP") submitted in evidence in Docket No. 140111-EI and in support of this Petition as an exhibit to the direct testimony of Benjamin Borsch.

- 6. The Company currently has a total summer net generation capacity resource of 11,024 MegaWatts ("MW"). This generation capacity resource includes utility purchased power, non-utility purchased power, combustion turbine, fossil steam, and combined cycle plants. A more detailed description of DEF's generation resources is set forth in Schedule 1 and Table 3.1 in the Company's 2014 TYSP included as an exhibit in evidence in Docket No. 140111-EI and to the direct testimony of Benjamin Borsch in this proceeding.
- 7. The Company's total Demand-Side Management ("DSM") resources are shown in Schedules 3.1, 3.2, and 3.3 in the Company's 2014 TYSP. These resources include non-dispatchable DSM, interruptible load, and dispatchable load control resources. The Company's DSM programs and measures are described in more detail in Chapter 2 in the Company's 2014 TYSP.
- 8. The Company is part of a nationwide interconnected power network that enables interconnected utilities to exchange power. DEF's transmission system includes approximately 5,000 circuit miles of transmission lines. The Company's distribution system includes approximately 18,000 circuit miles of overhead distribution conductors and approximately 13,000 circuit miles of underground distribution cable.

III. PROPOSED ALTERNATIVE GENERATION PROJECTS.

A. <u>Calpine Osprey Plant Acquisition.</u>

9. The Calpine Osprey Plant (the Osprey Energy Center) is a natural gas-fired, combined cycle generation facility located at an existing power plant site with existing land, gas, and transmission infrastructure at the site in Auburndale, Polk County, Florida. The Osprey Plant began commercial operation in 2004. The Plant produces approximately 534 MW on a base load basis and up to 599 MW (nominal) with additional peaking capacity. The Osprey Plant

is fully dispatchable and it is expected to have high availability on DEF's system and a capacity factor consistent with other, similar vintage DEF combined-cycle power plants. The Plant is fueled by natural gas as the single fuel source for the Plant and the natural gas is supplied by the Gulf Stream Natural Gas System, L.L.C. ("Gulfstream") pipeline through a gas lateral to the Plant.

- 10. The Osprey Plant is an advanced class gas turbine, 2 by 1 combined-cycle configuration, which includes two combustion turbines, two heat recovery steam generators, one steam turbine, and generator step up transformers. The Osprey Plant generates electricity in two stages, first by firing the combustion turbines, and second by using the hot gas from the combustion turbines to produce steam through the heat recovery steam generators, which is fed in to the steam generator to generate additional electricity. The combined cycle plant configuration makes the most of the input fuel, by burning it and using the waste heat from that process to generate electricity and, therefore, is a very efficient plant design to produce electrical energy. In addition, the Osprey Plant has duct firing capability, which provides additional cost effective peaking capacity and energy. The Osprey Plant is expected to be an efficient, flexible, cost-effective resource when operated in DEF's system.
- 11. The Osprey Plant is located in the Tampa Electric Company ("TEC") Balancing Area Authority ("BAA"). Currently there is partial path firm point-to-point transmission service for 249 MW from the Osprey Plant across TEC's BAA to the DEF system. To obtain the full output of the Osprey Plant, DEF currently plans to build transmission network upgrades to directly connect the Osprey Plant to DEF's system. These transmission network upgrades were identified using industry-standard transmission screening studies consistent with North American Electric Reliability Corporation ("NERC") and Florida Reliability Coordinating

Council ("FRCC") reliability standards. The estimated cost of these transmission network upgrades is \$150 million. The transmission network upgrade cost estimates are based on industry-standard transmission facility estimation standards consistent with DEF's experience with such transmission network upgrades.

- DEF agreed to request all requisite regulatory approvals for its purchase of the Osprey Plant pursuant to the terms of the APA. DEF and Calpine also agreed to a power purchase agreement ("PPA") for the purchase of firm capacity and energy that the Osprey Plant can provide DEF pending receipt of the regulatory approvals for the Osprey Plant acquisition. Calpine further agreed in the APA to continue to prudently operate and maintain the Plant during the PPA period.
- 13. Prior to executing the APA for the Osprey Plant, DEF conducted a detailed due diligence evaluation of the Plant acquisition as described in the direct testimony of Mr. Edmondson. DEF concluded that the current condition and operating performance of the Osprey Plant was reasonable and that there were no fatal flaws to DEF's acquisition of the Plant. DEF's due diligence review did reveal maintenance requirements for the equipment at the Osprey Plant. DEF prepared cost estimates for the Plant maintenance needs based on DEF's extensive experience and expertise with the maintenance requirements and costs for similar equipment. These maintenance costs were taken into account in the Company's evaluation of the cost effectiveness of acquiring the Plant.
- 14. The cost to acquire the Calpine Osprey Plant is included in the APA that is attached as a confidential exhibit to Mr. Palasek's direct testimony. The Plant maintenance requirements and costs if DEF acquires the Plant are described in the direct testimony of Mr. Edmondson. The closing for the Osprey Plant acquisition is January 3, 2017, if the requisite

regulatory approvals for the acquisition are timely obtained and other conditions precedent to the closing in the APA are satisfied. These terms and conditions are more fully described in Mr. Palasek's direct testimony and in the APA attached as a confidential exhibit to his testimony.

B. <u>Suwannee Simple Cycle Combustion Turbine Project.</u>

- 15. If DEF cannot purchase the Osprey Plant, DEF will build the Suwannee Simple Cycle Project because it is the next most cost effective alternative to meet DEF's need prior to 2018. The Suwannee Simple Cycle Project is a state-of-the-art, combustion turbine generation project. Two dual fuel F class combustion turbine generators will be purchased and installed together with two generator step-up transformers to generate an estimated 320 MW for DEF's customers. The Project will also include fuel oil and demineralized water storage tanks, and related balance of plant facilities, and it will be located at DEF's existing Suwannee power plant site in Suwannee County, Florida. The Suwannee site has existing combustion turbines fired by gas and oil and existing steam units with supporting pipeline and transmission infrastructure.
- 16. The Suwannee Simple Cycle Project will leverage use of existing land, gas, and transmission infrastructure at the site, minimizing the need to purchase or build this infrastructure for the Project. For example, the Project will use existing transmission infrastructure at the site. One of the F class combustion turbines will be connected to the existing 115kV transmission switchyard and the other F class combustion turbine will be connected to the existing 230kV transmission switchyard. Limited transmission network upgrades estimated at approximately \$10 million are needed to reliably integrate the additional generation to the electric grid. Natural gas will be supplied to the two F class combustion turbines by the Florida Gas Transmission ("FGT") pipeline and a local gas lateral to the existing metering and regulating station on site.

- 17. The Suwannee Simple Cycle Project is expected to have high reliability and operate at a capacity factor range consistent with its peaking generation capacity role on DEF's system. The Project will have low air emissions using proven dry, low NOx combustors with water injection when operating on fuel oil. The F class combustion turbine technology is well suited to DEF's peaking capacity needs.
- 18. DEF estimates that it will cost approximately \$195.1 million, including the Allowance for Funds Used During Construction ("AFUDC"), to build the Suwannee Simple Cycle Project. The estimated incremental annual fixed O&M cost is \$1.4 million and the estimated variable O&M costs are approximately \$700,000 for the Project. The Project is scheduled for commercial operation in June 2017.

C. Alternative Generation Options to Meet 2017 Need.

- 19. DEF needs either the Osprey Plant or the Suwannee Simple Cycle Project to meet its remaining need for additional generation capacity in 2017. The Osprey Plant is the more cost effective of the two generation alternatives options, if DEF can timely obtain the requisite regulatory approvals and purchase the Plant; if not, the Suwannee Simple Cycle Project is the most cost effective generation alternative to meet DEF's remaining need prior to 2018.
- 20. Before DEF can purchase the Osprey Plant DEF must timely obtain the requisite regulatory approvals for the Plant acquisition. The requisite regulatory approvals are set forth in the APA attached as an exhibit to Mr. Palasek's direct testimony and they include this Commission's approval of this Petition, FERC approval that the Osprey Plant jurisdictional generation facility acquisition is fair and consistent with the competitive requirements under section 203 of the Federal Power Act ("FPA"), and DOJ approval of the acquisition. Pursuant to the terms of the APA, DEF will petition FERC for approval of DEF's acquisition of the Osprey

Plant, file this Petition with the Commission, and request DOJ approval of the Osprey Plant acquisition. These regulatory approvals are conditions precedent to DEF's purchase of the Osprey Plant in the APA. If the requisite regulatory approvals are not timely obtained, there will be no closing, and DEF will not purchase the Plant. In that event, DEF will re-start the Suwannee Simple Cycle Project and build that Project to meet its remaining need for generation in 2017.

- IV. DEF'S ENERGY AND CAPACITY NEED FOR THE CALPINE OSPREY PLANT ACQUISITION OR, ALTERNATIVELY, THE SUWANNEE SIMPLE CYCLE PROJECT.
- 21. DEF still has a need for near term additional generation capacity consistent with what DEF demonstrated in Docket No. 140111-EI as explained in DEF's direct testimony and exhibits in support of this Petition. The term sheet for DEF's acquisition of the Plant was executed the first day of the hearing in Docket No. 140111-EI based on the same evidence supporting the need for additional generation capacity in that Docket. Between the date of that term sheet in late August and the execution of the APA DEF conducted due diligence evaluations and analyses of the Osprey Plant to ensure that the Osprey Plant acquisition was feasible and practicable. Further, as DEF conducted its due diligence reviews and negotiated the APA with Calpine, DEF continued to evaluate the cost effectiveness of the Osprey Plant acquisition based on meeting the remaining need for additional generation capacity prior to 2018 that DEF demonstrated in Docket No. 140111-EI above the need filled by the Hines Chillers Power Uprate Project approved in that Docket. That need remained through DEF's decision to sign the APA and purchase the Osprey Plant to meet that need.
- 22. As DEF demonstrated in Docket No. 140111-EI and as included in the filing in support of this Petition, DEF identified additional generation capacity needs prior to 2018 during

the Company's integrated resource planning ("IRP") process. In its IRP process DEF evaluated the relationship of demand and supply against the Company's reliability criteria and included cost-effective DSM programs before DEF determined additional generation capacity was needed prior to 2018. This analysis was first reflected in the Company's 2013 TYSP and confirmed in its 2014 TYSP. DEF needs additional generation capacity resources on its system prior to 2018 to meet its 20 percent Reserve Margin commitment and to serve DEF's future electrical power needs in a reliable and cost-effective manner for its customers.

- assumptions, including forecasts of customer growth, energy consumption, and peak demand, in order to assess DEF'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 and independent industry sources. These forecasts drew 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. These models and methodologies are well-accepted and widely used in the electric utility industry. The specific methodologies and forecasts are discussed in more detail in Chapter 2 of the 2014 TYSP included as an exhibit to Mr. Borsch's testimony.
- 24. The Company is experiencing 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. The Company's summer firm demand is expected to grow to 9,307 MW by the summer of 2017 and NEL is projected to grow to 41,375 GWh in 2017. The demand and energy

forecasts are discussed in more detail in Chapter 2 of the Company's 2014 TYSP. This growth is one factor in the Company's need for additional generation.

- 25. Another driver in DEF's need for additional generation is the retirement of or 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 United States Environmental Protection Agency ("EPA") Mercury and Air Toxics Standards Rule ("MATS") at Crystal River Unit 1 ("CR1") and Crystal River Unit 2 ("CR2") will result in a reduction in their capacity of approximately 130 MW beginning in the spring of 2016. The Company also plans to retire some of its oldest and least efficient plants. The Company's generation plant retirements and generation plant capacity reductions are significant drivers of the Company's generation capacity need prior to 2018.
- 26. Together, the Company's current and projected customer and peak demand growth, and its existing and planned plant retirements and generation plant capacity reductions, demonstrate a need for additional generation capacity in the summer of 2017. As DEF explained in Docket No. 140111-EI, the Company evaluated several alternative generation options to meet this need including (i) construction of new generation; (ii) purchases from or acquisitions of existing generation plants owned by other companies; and (iii) power uprate projects at existing generation plants on the Company's system. The Company established a process for Commission review of its evaluation of this need in the Company's 2013 Settlement Agreement. In the 2013 Settlement Agreement, the Company agreed to evaluate and compare 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.

- 27. The Company initially petitioned the Commission in Docket No. 140111-EI to approve the need for the Suwannee Simple Cycle Project and the Hines Chillers Power Uprate Project to meet its need for additional generation capacity prior to 2018. DEF moved to withdraw the Suwannee Simple Cycle Project from this petition the first day of the evidentiary hearing in Docket No. 140111-EI when DEF and Calpine agreed to the term sheet for DEF to purchase the Osprey Plant to meet part of this need subject to DEF's due diligence reviews of the Plant and an agreement to an asset purchase agreement for the Plant acquisition. The Commission granted DEF's motion and approved, based on the evidence in Docket No. 140111-EI, DEF's remaining petition for the Hines Chillers Power Uprate Project to meet part of its generation need prior to 2018 in Order No. PSC-14-0590-FOF-EI. The Company's remaining need for additional generation capacity is now approximately 180 MW in the summer of 2017, growing to over 300 MW in the summer of 2018.
- DEF still needs the Osprey Plant or, alternatively, if DEF cannot purchase the Osprey Plant, the Suwannee Simple Cycle Project by the summer of 2017 to meet its 20 percent Reserve Margin Commitment. With the Osprey Plant acquisition the Company's Reserve Margin will be 20.6 percent in the summer of 2017. Alternatively, if DEF builds the Suwannee Simple Cycle Project, the Company's Reserve Margin will be 20.7 percent in the summer of 2017. Without one of these generation capacity additions, DEF's Reserve Margin will decrease to 18 percent in the summer of 2017. DEF maintains its Reserve Margin commitment to ensure reliable electric service to its customers. DEF needs this additional generation capacity, whether it is the Osprey Plant or the Suwannee Simple Cycle Project, in the summer of 2017 to meet its obligation to provide reliable electric service to its customers.

V. MAJOR GENERATING ALTERNATIVES EXAMINED AND EVALUATED.

- 29. DEF evaluated several generation options to meet its near-term reliability need prior to 2018. Generation alternatives that passed DEF's cost-effectiveness screen based on cost, fuel sources and availability, technological maturity, and resource feasibility were included in DEF's economic evaluation in the Strategist and Energy Portfolio Management ("EPM") resource planning production cost computer models. 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 most cost-effective supply-side resources were evaluated and ranked by system revenue requirements. Based on the CPVRR analysis, the Company initially chose the Suwannee Simple Cycle Project and the Hines Chillers Power Uprate Project as its base generation plan to meet the Company's reliability needs prior to 2018.
- 30. DEF next evaluated the potential future supply of firm capacity from purchased power contracts and potential generation facility acquisitions to determine if they were more cost effective than the Company's Suwannee Simple Cycle Project and Hines Chillers Power Uprate Project to meet its reliability need prior to 2018. DEF screened the proposal's fixed and variable payments or costs and performed economic optimization screening analyses in a staged, detailed economic evaluation. DEF used the Strategist and EPM production cost optimization models. Inputs to the models included the load and energy forecast and the costs and characteristics (such as heat rates, outage rates, and maintenance requirements) of the Company's existing generating units and purchase power agreements. Costs and operating characteristics of potential future supply-side resources, which could be generating units or purchases, are also included in the models. The Strategist resource plan optimization and fixed costs results were integrated with

the detailed production costs from the EPM model to calculate a resulting CPVRR for each proposal for comparison with each alternative proposal and the base generation plan. The economic evaluation included a quantification of cost and other qualitative risks with the proposals that were evaluated in cost sensitivity analyses, including gas transportation, transmission, and FERC approval of the acquisitions. These sensitivity analyses provided DEF with a cost effectiveness range for all proposals. As a result of these quantitative and qualitative analyses, DEF initially selected the Suwannee Simple Cycle Project and the Hines Chillers Power Uprate Project as the most cost effective generation resource options to meet DEF's customer reliability needs prior to 2018.

- Plant to meet DEF's need for DEF's evaluation after DEF filed its Petition in Docket No.

 140111-EI. These proposals, and DEF's evaluation of them, continued to the start of the evidentiary hearing in Docket No. 140111-EI when Calpine gave DEF a term sheet that "closed the gap" between the cost effectiveness of the Osprey Plant acquisition and the Suwannee Simple Cycle Project. At that point, DEF and Calpine reached an agreement in principle for DEF to acquire the Calpine Osprey Plant subject to DEF's due diligence reviews of the Plant and the agreement of the parties to an asset purchase agreement for DEF to purchase the Plant. DEF moved the Commission to withdraw the Suwannee Simple Cycle Project and the Commission granted that motion and proceeded to determine, based on the evidence in Docket No. 140111-EI, that the Hines Chillers Power Uprate Project was cost effective to meet part of DEF's need for additional generation capacity prior to 2018.
- 32. DEF evaluated the technical feasibility and viability of the Osprey Plant acquisition through due diligence reviews involving the quantitative and qualitative analysis of

factors such as the physical condition and maintenance of the Plant, Plant operating permits, capital and O&M requirements to incorporate the Plant into the DEF system, site environmental impacts and environmental permit compliance, permitted water supplies, insurance, indemnity obligations, and guarantees. Based on the results of DEF's due diligence reviews, DEF determined that there were no material impediments to DEF's purchase of the Osprey Plant as a long-term generation resource on DEF's system. DEF did determine that there will be maintenance requirements and associated costs to acquire the Plant and incorporate it into DEF's system under DEF's standard maintenance practices and procedures. These maintenance requirements and costs were included in DEF's evaluation of the cost effectiveness of acquiring the Osprey Plant rather than building the Suwannee Simple Cycle Project. The Osprey Plant due diligence reviews and results, and the maintenance requirements and costs, are described in the direct testimony and exhibits of Mr. Edmondson in this proceeding.

33. DEF has determined, based upon the terms and conditions of the APA, that the Osprey Plant acquisition is the most cost effective generation alternative to meet DEF's need for additional generation prior to 2018, if the Osprey Plant acquisition is approved by the requisite regulatory authorities in accordance with the APA. The Osprey Plant will provide DEF's customers with beneficial combined-cycle generation fuel efficiency and emissions costs at a favorable acquisition price even with the necessary capital maintenance, O&M, and transmission interconnection investment in the Plant to incorporate it into DEF's system. On a CPVRR basis, the Osprey Plant acquisition is approximately \$61 million more cost effective for DEF's customers than the Suwannee Simple Cycle Project as described in the testimony and exhibits of Mr. Borsch.

34. The Company continually evaluates the timelines for new technologies, including renewable energy sources and technologies, as part of its IRP process. The Company has a Request for Renewables ("RFR") that continuously solicits proposals for renewable energy projects. No commercially available, economically feasible renewable generation resource or project proposal currently exists to displace or defer DEF's remaining generation capacity needs in the summer of 2017. DEF needs the Osprey Plant, or alternatively if DEF cannot purchase the Osprey Plant, the Suwannee Simple Cycle Project by the summer of 2017 to reliably serve DEF's customers.

VI. VIABLE NON-GENERATING ALTERNATIVES.

- 35. DEF also analyzed viable non-generating, demand-side alternatives before determining that the Osprey Plant or, alternatively, the Suwannee Simple Cycle Project was the most cost effective DEF generation resource option to meet DEF's remaining reliability needs prior to 2018. 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 the evaluation of the Company's near term generation capacity need. The Company's DSM programs, however, cannot replace or defer the Company's remaining need for additional generation on its system to meet customer reliability needs in the summer of 2017. A detailed description of the Company's DSM programs is contained in the Company's 2014 TYSP attached to Mr. Borsch's direct testimony.
- 36. DEF considered the Commission's decision in Docket No. 130200-EI, the DSM Goals Docket for DEF, in its evaluation of the most cost effective resource to meet its remaining reliability need prior to 2018. In the Company's DSM Goals Docket, the Commission voted to approve DEF's future DSM goals. Over the next ten years DEF's DSM goals are generally

lower than the existing DSM goals. All other things being equal, then, the Company's near-term DSM goals will cause an increase in DEF's firm summer peak demand prior to 2018. Based on the Commission's approval of these DSM goals, there are no additional cost effective DSM measures or programs that can replace or defer the Company's remaining need for additional generation capacity prior to 2018 to reliably serve DEF's customers.

VII. ADVERSE CONSEQUENCES OF DELAY.

37. DEF committed in the APA to purchase the Osprey Plant to meet its remaining generation capacity need prior to 2018 if the terms and conditions of the APA, including the requisite regulatory approvals, are performed. If these terms and conditions are not performed and DEF cannot purchase the Osprey Plant, DEF still needs additional generation capacity by the summer of 2017 to reliably serve customers. In that event, DEF must re-commence the Suwannee Simple Cycle Project to serve its customers in the next most reliable and costeffective manner. Any delay in either project, if that project is the one on track under the APA, exposes DEF's customers to a risk of interruption of service in the event of unanticipated forced outages or other contingencies for which DEF maintains reserves. In this way, DEF ensured that the APA preserves the benefits of the most cost-effective generation alternative for DEF's customers to meet DEF's remaining need prior to 2018, regardless of the outcome of the requisite regulatory approvals for the Osprey Plant acquisition. The deal is structured for the projects to alternatively meet DEF's remaining need for generation capacity, with the parties proceeding to close on the Osprey Plant acquisition in the event of timely regulatory approval, and with DEF proceeding with the Suwannee Simple Cycle Project in the event regulatory approval for the acquisition is not timely obtained, in order for DEF to mitigate the regulatory risk to customers. As such, DEF must present the Osprey Plant acquisition and the Suwannee

Simple Cycle Project to the Commission together because they are inextricably intertwined in the APA to preserve for customers the benefits of the most cost-effective generation alternative in all circumstances, and they cannot, as a result, logically or practicably be evaluated separately. Further, to ensure that either the Osprey Plant or the Suwannee Simple Cycle Project is in place to meet customer system generation needs by the summer of 2017, DEF must petition the Commission now for a determination that the Osprey Plant acquisition and, alternatively, the Suwannee Simple Cycle Project, is the most cost effective generation alternative to meet that need. DEF cannot delay its Petition because there is insufficient time before DEF must recommence the Suwannee Simple Cycle Project to preserve the benefits of that cost effective Project for customers if DEF does not timely obtain the regulatory approvals for the Osprey Plant acquisition and cannot purchase the Plant. For these reasons, DEF petitions the Commission for a determination that the Osprey Plant acquisition is the most cost effective generation alternative to meet DEF's need for additional generation capacity prior to 2018. Alternatively, if DEF cannot purchase the Osprey Plant, DEF respectfully asks the Commission for an order determining that the Suwannee Simple Cycle Project is the most cost effective generation alternative to meet DEF's need for additional generation capacity prior to 2018.

VIII. PROPOSED ISSUES FOR COMMISSION CONSIDERATION.

- 38. DEF proposes that the issues that must be resolved in this proceeding are as follows:
- a) Whether the Osprey Plant acquisition and, alternatively, if DEF cannot purchase the Osprey Plant in accordance with the APA, the Suwannee Simple Cycle Project is needed by DEF to meet its needs for electric system reliability and integrity;

- b) Whether the Osprey Plant acquisition and, alternatively, if DEF cannot purchase the Osprey Plant in accordance with the APA, the Suwannee Simple Cycle Project is needed by DEF to continue to provide adequate electricity to its customers at a reasonable cost;
- c) Whether the Osprey Plant acquisition and, alternatively, if DEF cannot purchase the Osprey Plant in accordance with the APA, the Suwannee Simple Cycle Project is needed by DEF for fuel diversity and supply reliability;
- d) Whether the Osprey Plant acquisition and, alternatively, if DEF cannot purchase the Osprey Plant in accordance with the APA, the Suwannee Simple Cycle Project is the most cost-effective alternative available to meet DEF's reliability needs;
- e) Whether renewable energy sources and technologies, as well as conservation measures, are utilized to the extent reasonably available;
- f) Whether DEF has adequately considered the conservation measures taken by the Company or reasonably available to it which might have mitigated the need for the Osprey Plant acquisition and, alternatively, if DEF cannot purchase the Osprey Plant in accordance with the APA, the Suwannee Simple Cycle Project; and
- g) Given the resolution of the foregoing issues, whether the Osprey Plant acquisition and, alternatively, if DEF cannot purchase the Osprey Plant in accordance with the APA, the Suwannee Simple Cycle Project, is the most cost effective generation alternative to meet DEF's remaining need prior to 2018.
- 39. For sake of clarity, at this time DEF is not requesting that the Commission make a determination as to the prudence of or the final amount of the costs for the Osprey Plant

acquisition or the Suwannee Simple Cycle Project. Under the 2013 Settlement Agreement, those costs will be considered at a later time when either the Osprey Plant or the Suwannee Simple Cycle Project is placed in-service. Accordingly, DEF will be requesting prudence determinations on the actual costs in future proceedings.

IX. DISPUTED ISSUES OF MATERIAL FACT.

- 40. DEF is not aware at this time that there will be any disputed issues of material fact in this proceeding. Through its testimony and exhibits, incorporated herein by reference, DEF has demonstrated its generation capacity reliability need for the Osprey Plant acquisition and, alternatively, the Suwannee Simple Cycle Project, and DEF has also demonstrated that the Osprey Plant acquisition is the most cost effective alternative to meet DEF's needs prior to 2018, or alternatively, if DEF cannot purchase the Osprey Plant, that the Suwannee Simply Cycle Project is the most cost effective alternative for meeting that need.
- 41. DEF's Petition is consistent with the provisions of the 2013 Settlement
 Agreement approved by the Commission in Order No. PSC-13-0598-FOF-EI. No party to the
 2013 Settlement Agreement has expressed to DEF that DEF has not complied with the 2013
 Settlement Agreement.

X. CONCLUSION.

42. DEF seeks an affirmative determination that the Osprey Plant acquisition and, alternatively, if DEF cannot purchase the Osprey Plant in accordance with the APA, the Suwannee Simple Cycle Project is the most cost effective generation alternative to meet the Company's need for electric system reliability and integrity and to enable the Company to continue to provide adequate electricity to its customers at a reasonable cost. DEF determined to seek this approval only after conducting a rigorous internal review of supply-side and demand-

side options, and after soliciting and evaluating competing proposals submitted by interested

third-party suppliers. The Company has attempted to avoid or defer supply-side resources by

considering and pursuing demand-side options and renewable energy sources and technologies

reasonably available to it, but the Company has nonetheless concluded that it cannot avoid or

defer its need for the Osprey Plant acquisition and, alternatively, the Suwannee Simple Cycle

Project.

43. The Osprey Plant acquisition and, alternatively, the Suwannee Simple Cycle

Project is the most cost effective alternative for maintaining DEF's electric system reliability and

integrity, and providing its customers with adequate electricity at a reasonable cost, by the

summer of 2017.

WHEREFORE, for all of the reasons provided in this Petition, as developed more fully in

DEF's pre-filed testimony and exhibits, DEF respectfully requests that the Commission grant a

favorable determination that the Company needs additional generation capacity in the summer of

2017 to reliably serve its customers, and that the Osprey Plant acquisition and, alternatively, if

DEF cannot purchase the Osprey Plant in accordance with the APA, the Suwannee Simple Cycle

Project is the most cost effective generation alternative to meet the Company's reliability need.

Respectfully submitted this 30th day of January, 2015.

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