BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for determination of need for Okeechobee Clean Energy Center Unit 1, by Florida Power & Light Company.	Docket No. 150196-EI Dated: December 9, 2015

POST-HEARING BRIEF OF FLORIDA POWER & LIGHT COMPANY

Florida Power & Light Company ("FPL" or the "Company") hereby files with the Florida Public Service Commission (the "FPSC" or "Commission") its Post-Hearing Brief in the above-referenced docket, pursuant to Order No. PSC-15-0547-PHO-EI.

I. INTRODUCTION AND OVERVIEW

On September 3, 2015, FPL petitioned the Commission for an affirmative determination of need for the construction of a combined cycle generating unit at a greenfield site in Okeechobee County, together with the associated facilities, including transmission line and substation facilities, needed to integrate, interconnect, and transmit energy from this site to FPL's transmission network for delivery to customers. The unit and associated facilities are collectively referred to as the Okeechobee Clean Energy Center Unit 1 ("Okeechobee Unit").

Construction of the Okeechobee Unit is needed to maintain system reliability and integrity for FPL's customers. Beginning in 2019, FPL's existing supply resources will not meet two of its three reliability criteria that determine its system reliability. Tr. 54, 58, 123 (Sim). To meet all of its reliability criteria in 2019, FPL needs 904 MW of additional generation resources, and that need grows in each year thereafter. *See* Ex. 59 (Bates Stamp Nos. 00053-00054); Ex. 3; Ex. 59 (Bates Stamp No. 00024, Update to Ex. SRS-2). To meet its reliability need, FPL proposes to build the Okeechobee Unit, a highly fuel-efficient, state-of-the-art combined cycle ("CC") natural gas unit, with approximately 1,633 MW (summer) of generation for commercial

operation beginning in June 2019. *See* Ex. 59 (Bates Stamp Nos. 00138-00141, Att. 2 (Corrected)); Ex. 63 (Bates Stamp No. 00128, Att. 1). Under FPL's most recent load forecast and reliability assessment, the Okeechobee Unit will meet FPL's resource needs through 2023. *See* Ex. 59 (Bates No. 00024, Att. 1). FPL's projected need for generation in 2019 and beyond fully accounts for all reasonably achievable, cost-effective conservation measures and renewable energy on FPL's system. Tr. 54 (Sim).

The Okeechobee Unit will provide adequate electricity at a reasonable cost for FPL's customers. The projected cost of the Okeechobee Unit is $1,231,700,000. *See* Ex. 63 (Bates Stamp No. 00128, Att. 1, Tr. 335 (Kingston)). For a 1,633 MW unit, that results in an installed cost of approximately $754/kW, a cost much lower than recently approved CC units in Florida. *See Id.* The Okeechobee Unit is projected to have outstanding operational parameters: an Equivalent Availability Factor ("EAF") of 95.5%, a Planned Outage Factor ("POF") of 3.5%, and a Forced Outage Factor ("FOF") of 1.0%. *See Id.*; Tr. 288, 301 (Kingston); Ex. 22. In addition, it is projected to have an exceptionally low heat rate of 6,249 British Thermal Units per kilowatt-hour ("Btu/kWh") at 75°F. *See* Ex. 63 (Bates Stamp No. 00128, Att. 1). This low projected heat rate will make the Okeechobee Unit the most fuel-efficient CC unit on FPL's already highly efficient system, the most efficient CC unit in Florida, and perhaps one of the most efficient CC units in the world. Tr. 301 (Kingston). Having this highly efficient generating unit available to serve customers over 95% of the time will generate significant fuel savings for FPL's customers. *See Id.*

Once FPL finished its self-build option analyses, it solicited competitive bids through a Request for Proposals ("RFP") under the Commission's Bid Rule (Rule 25-22.082, F.A.C). Tr. 68-72 (Sim). Following issuance of the RFP, the Commission found that FPL's RFP was

consistent with the Commission's Bid Rule. *See Id.*; DeSoto County Generating Company, LLC's objections to Florida Power & Light Company's 2015 request for proposals, Docket No. 150100-EI, Order No. PSC-15-0171-PCO-EI (issued May 5, 2015). No market alternatives were offered that complied with the minimum requirements of the RFP. Tr. 68-72 (Sim).

FPL's updated analyses based upon its most recent load and fuel base case forecasts project that the Okeechobee Unit will save FPL's customers at least $72 million cumulative present value revenue requirements ("CPVRR") (net present value) compared to the next lowest cost option against which it was analyzed (and $72 million to $522 million CPVRR against all other gas-fired options that were analyzed). Ex. 59 (Bates Stamp Nos. 00033-00035, Att. 2). FPL's analyses also showed that the Okeechobee Unit was more cost-effective than solar photovoltaic ("PV") alternatives, including both a total solar PV option and a hybrid solar PV/ smaller CC or combustion turbine ("CT") option. Tr. 63-65, 97-98, 161-162, 197-198, 526-527 (Sim).

The record clearly and unequivocally shows the Okeechobee Unit is the best and most cost-effective option to meet FPL's resource need in 2019, 2020, and beyond; it is expected to save FPL's customers tens of millions of dollars CPVRR in electricity costs and result in the lowest electric rates for FPL's customers over the next best alternative. *See* Ex. 59 (Bates Stamp Nos. 00138-00141, Att. 2 (Corrected)). Beyond the projected system net savings, while maintaining/improving system reliability, the Okeechobee Unit is estimated to generate significant economic benefits, including hundreds of millions of dollars in tax revenues for local governments and school districts and 650 temporary and 30 permanent jobs. Tr. 292, 307 (Kingston).

For these reasons, and as the record in this proceeding demonstrates, FPL satisfies the statutory elements for granting an affirmative determination of need for the Okeechobee Unit pursuant to Section 403.519, Florida Statutes.

II. SUMMARY OF ARGUMENT

The record shows that FPL's petition and testimony satisfy the criteria for an affirmative determination of need for the Okeechobee Unit under Section 403.519, Florida Statutes. The limited arguments presented by the intervenors in opposition to the Okeechobee Unit are thoroughly rebutted by FPL, are inconsistent with established law, or are completely unsupported by the record. Accordingly, FPL's need determination request should be granted.

Consistent with the Commission's directive in FPL's most recent determination of need case for the modernization of the Port Everglades power plant, FPL has provided updated economic analyses after the filing of its need determination request establishing that the Okeechobee Unit remains the most cost-effective alternative to meet its need. *See* Ex. 59 (Bates Nos. 00138-00141, Att. 2 (Corrected)); Ex. 63 (Bates No. 00128, Att. 1). FPL is also seeking the right to make an informational filing for any cost-effective improvement to the Power Train components of the Okeechobee Unit and will provide an annual report to the Commission on construction costs of the unit, and the corresponding increase in CPVRR net savings, as it has done with other generation projects. Tr. 76-77 (Sim); Tr. 301-302, 307 (Kingston). In the *FPL Port Everglades Need Determination* proceeding, FPL's most recent determination of need proceeding, the Commission noted:

> It is prudent for a utility to continue to evaluate whether it is in the best interests of its ratepayers for a utility to participate in a proposed power plant before, during, and after construction of a generating unit. If conditions change from those presented at the need determination proceeding, then a prudent utility would be expected to respond appropriately.

See In re: Petition to determine need for modernization of Port Everglades Plant, by Florida Power & Light Company, Docket No. 110309-EI, Order No. PSC-12-0187-FOF-EI at 17 (issued April 9, 2012) ("*FPL Port Everglades Need Determination*"). FPL's efforts to provide updated cost-effectiveness analyses, to request the right to make an informational filing, and to file annually updated construction cost information are designed to comply with this Commission directive. FPL will only make a unit design change and an associated informational filing if the design change results in CPVRR savings to customers relative to the design of the unit presented in this need determination proceeding. Tr. 76-77 (Sim); Tr. 301-302, 307 (Kingston).

III. ISSUES AND POSITIONS

ISSUE 1: **Is there a need for the proposed Okeechobee Clean Energy Center Unit 1, taking into account the need for electric system reliability and integrity, as the criterion is used in Section 403.519(3), Florida Statutes?**

FPL: *****Yes. There is a need for the Okeechobee Unit, taking into account the need for electric system reliability and integrity. FPL employs three reliability criteria to maintain its system reliability and integrity: a 0.1 Loss of Load Probability ("LOLP"), a 20% Reserve Margin ("RM"), and a 10% Generation Only Reserve Margin ("GRM"). After accounting for all reasonably achievable, cost-effective conservation and renewable resources available, FPL has a need for generation capacity beginning in 2019 under two of its three reliability criteria (RM and GRM). The Okeechobee Unit is the most cost-effective option available to meet all of FPL's reliability criteria.*

FPL's Uses Three Reliability Criteria to Determine Need

FPL employs three reliability criteria to ensure and maintain system reliability and integrity: (1) 0.1 day per year maximum loss of load probability ("LOLP"); (2) 20% minimum total reserve margin ("RM"); and (3) 10% minimum generation only reserve margin ("GRM"). Tr. 53-54 (Sim). LOLP has been used by FPL and accepted by the Commission for use by FPL and all Florida electric utilities for decades. Tr. 122-123 (Sim). A RM criterion is a generally accepted reliability criterion in the industry (Tr. 122-123 (Sim)), and the 20% minimum total RM

criterion, approved by the Commission in 1999, has been employed by FPL, the other Peninsular Florida Investor Owned Utilities ("IOUs"), and by the Commission, in numerous proceedings since initial adoption. *See In re: Generic investigation into the aggregate electric utility reserve margins planned for Peninsular Florida*, Docket No. 981890-EU, Order No. PSC-99-2507-S-EU (issued December 22, 1999); Tr. 585 (Sim); *See also, e.g., In re: Petition for determination of need for Hines Unit 2 Power Plant by Florida Power Corporation*, Docket No. 001064-EI, Order No. PSC-01-0029-FOF-EI at 5-7 (issued January 5, 2001); *In re: Petition to determine need for an electric power plant in Martin County by Florida Power & Light Company*, Docket No. 020262-EI, *In re: Petition to determine need for an electrical power plant in Manatee County by Florida Power & Light Company*, Docket No. 020263-EI, Order No. PSC-02-1743-FOF-EI at 4-6 (issued December 10, 2002); *In re: Petition to determine need for Hines Unit 3 in Polk County by Florida Power Corporation*, Docket No. 020953-EI, Order No. PSC-03-0175-FOF-EI at 4-5 (issued February 4, 2003) *("FPC Hines 3 Need Determination")*; *In re: Petition to determine need for Turkey Point Nuclear Units 6 and 7 electrical power plant, by Florida Power & Light Company*, Docket No. 070650-EI, Order No. PSC-08-0237-FOF-EI at 4-7 (issued April 11, 2008); *In re: Petition for modification to determination of need for expansion of an existing renewable energy electrical power plant in Palm Beach County by Solid Waste Authority of Palm Beach County and Florida Power & Light Company, and for approval of associated regulatory accounting and purchased power agreement cost recovery*, Docket No. 110018-EI, Order No. PSC-11-0293-FOF-EU at 6-7 (issued July 6, 2011); *FPL Port Everglades Need Determination*, Order No. PSC-12-0187-FOF-EI at 3-6; *In re: Petition to determine need for Polk 2-5 combined cycle conversion, by Tampa Electric Company*, Docket No. 120234-EI, Order No. PSC-13-0014-FOF-EI at 2 (issued January 8, 2013) ("*Tampa Electric Company Polk*

2-5 Need Determination"); *In re: Petition for determination of need for Citrus County Combined Cycle Power Plant by Duke Energy Florida, Inc.*, Docket No. 140110-EI, Order No PSC-14-0557-FOF-EI at 4-11 (issued October 10, 2014) ("*DEF Citrus County Need Determination*"). In 2011, FPL began considering and reporting to the Commission in its Ten-Year Site Plan ("TYSP") a GRM metric, and in its 2014 and 2015 TYSPs, FPL employed the GRM as a third reliability criterion. *See* Ex. 2; Exs. 46-51; Tr. 503 (Sim).

Each of these criteria addresses different aspects of system reliability, and collectively, they serve to ensure the reliability of FPL's system. Tr. 215-216 (Sim). Further, despite unfounded arguments from the intervenors to the contrary, use of the LOLP criterion by itself, or any one of the three criteria by itself, would not guarantee reliable service for FPL's customers. For example, in response to a Commission Staff data request in FPL's 2009 TYSP, FPL provided LOLP projection information for 2010 for FPL's system, indicating an LOLP projection that carried out to six decimal points – what at that time appeared to be a statistical impossibility (*i.e.*, a projected LOLP of 0.000000 for January 2010) that FPL could be unable to serve firm load and suffer a power outage in that month. Yet the reality was that a significant weather event occurred on January 11, 2010, and FPL came extremely close to a power blackout for its customers. If FPL had been planning to a 15% RM, rather than its approved 20% RM, FPL would have been 68 MW short of meeting firm load while still providing assistance to another utility, which would have resulted in a power outage for approximately 40,000 FPL customers or alternatively a denial of assistance to the other utility and a significant power outage for that utility and its customers. Tr. 215-216, 537-538, 583-584 (Sim). This occurred <u>despite</u> the "statistical impossibility" that the LOLP criterion projected. So, while each reliability criterion serves an important role in ensuring reliable service for FPL's customers, it

would not be prudent resource planning to rely simply on any single criterion, in this case, the LOLP criterion, to maintain system reliability. *Id.*

FPL'S 2019 Need Is Based on FPL's 20% RM and 10% GRM Reliability Criteria

In 2013, FPL's reliability analyses began showing that it had a reliability need under two of its reliability criteria in 2019, the 20% RM and the then contemplated 10% GRM. Tr. 54, 58, 123 (Sim). More recent reliability analyses continued to project that these two reliability criteria would be violated and that FPL's projected LOLP for 2019 was approaching but not yet violating the 0.1 threshold at a level of 0.055. Tr. 87-88, 124, 164 (Sim). As a result, FPL began analyzing the resources it might employ to meet that need. Once the Commission adopted FPL's demand side management ("DSM") goals in December 2014, and FPL had decided to move forward with 223 MW of utility scale solar PV in 2016, FPL reassessed its 2019 resource need. Accounting for all cost-effective and reasonably achievable DSM and renewable energy resources, FPL's 2019 resource need was 1,052 MW under its 10% GRM criterion and 988 MW under its 20% RM criterion. That need grows to 1,409 MW and 1,320 MW respectively in 2020 and continues to grow in subsequent years. Tr. 54 (Sim).

An update of those reliability assessments using FPL's most recently adopted load forecast continues to show that FPL has a significant resource need on its system beginning in 2019 of 904 MW under its 10% GRM criterion and 826 MW under its 20% RM criterion, which continues to grow in future years. *See* Ex. 59 (Bates Stamp No. 00024, Update to Ex. SRS-2). The Commission should have confidence in this load forecast; FPL's load forecast variance over the past three years has been -0.1%. Tr. 280-282 (Feldman).

FPL's Use of its Reliability Criteria is Reasonable and Appropriate to Determine its Resource Need in 2019 and Beyond

No intervenor in this proceeding contests FPL's calculation of its resource needs based upon its three reliability criteria, 0.1 day per year LOLP, 20% RM, and 10% GRM. Instead, the intervenors attempt to challenge FPL's use of the two reliability criteria that support FPL's 2019 resource need, the 20% RM and the 10% GRM, through a variety of legal and evidentiary arguments.

The Commission has already rejected the intervenors' legal arguments regarding the use of a total RM value other than 20%, *i.e.*, 15%, but in an abundance of caution, FPL will address the opposition to the Commission's approved 20% RM in this brief. Further, Dr. Sim persuasively rebutted the arguments of Southern Alliance for Clean Energy ("SACE") witness John Wilson and Environmental Confederation of Southwest Florida ("ECOSWF") witness Karl Rábago and demonstrated why FPL's 20% RM and 10% GRM are both appropriate resource planning criteria.

To begin with, there is a wide disparity between the experience and credibility of FPL's witness on these issues compared to the intervenors' witnesses. FPL's support for the resource planning criteria it utilized rests, in large part, on the analyses and opinions presented by a distinguished and experienced resource planner, Dr. Sim. He has been a resource planner since 1991. He has performed countless reliability assessments for FPL and has analyzed or helped analyze numerous cost-effectiveness analyses designed to establish whether a specific option is the most cost-effective option for FPL's customers. In his extensive career as a resource planner, he has served as the chair of the Southeastern Electric Exchange Integrated Resource Planning Task Force and is currently the chair of the Florida Reliability Coordinating Council ("FRCC")

Resource Working Group, which is responsible for performing reliability analyses for Peninsular Florida. Tr. 44-45, 505 (Sim).

The Commission has regularly reviewed and relied upon Dr. Sim and his analyses in a variety of dockets. He has appeared in numerous need determination proceedings, as well as Nuclear Cost Recovery and DSM goals proceedings. Tr. 44-45 (Sim). The Commission has repeatedly and consistently relied upon Dr. Sim's analyses in those proceedings.

In contrast, SACE and ECOSWF have offered the opinions, not analyses, of two witnesses, neither of whom is a resource planner. SACE witness John Wilson is a self-acknowledged regulatory advocate. Ex. 28. His primary responsibility is to direct technical and regulatory advocacy for SACE. Tr. 402 (Wilson). Mr. Wilson has never served as a resource planner or a system operator. Tr. 430-435 (Wilson); Ex. 28. He has never been employed by an entity responsible for maintaining or overseeing grid reliability – such as an electric utility, the FPSC, the FRCC, any other regional reliability agency, the North American Electric Reliability Corporation ("NERC"), or the Federal Energy Regulatory Commission ("FERC"). *Id*.

The bulk of Mr. Wilson's testimony and exhibits was a study he neither performed nor helped draft and which was supplanted by another study he failed to acknowledge. *See* Ex. 29; Tr. 430-431 (Wilson); Tr. 509-510 (Sim); Ex. 67. Armed with a glaring lack of resource planning experience, Mr. Wilson took aim at analyses performed by the Commission Staff as "outdated" and opined with no reasonable supporting basis that FPL's reliance on the Commission-approved 20% RM was not a "good utility practice." Tr. 406 (Wilson). Neither contention should carry any weight in this proceeding.

The deficiencies in the testimony of ECOSWF witness Karl Rábago are most clearly illustrated by the absurdity of the arguments he presented. Despite being an attorney and

employed by a law school, he shows a marked lack of understanding of the Florida need determination statute, Section 403.519, Fla. Stat., and the Florida Power Plant Siting Act (ss. 403.501-.518, Fla. Stat.). He offered the totally unsupported and false suggestion that FPL had a "campaign" to build power plants that was "out of control." Tr. 450-451, 453 (Rábago). Remarkably, he failed to acknowledge that each of the power plants that FPL has built in the last decade has received not only a determination of need from this Commission under Section 403.519, but also certification from the Siting Board under the Florida Power Plant Siting Act. He blithely contrasted FPL's growth in power plants with FPL's growth in load since 2000, while totally ignoring FPL's significant number of power plant retirements and purchased power agreement ("PPA") terminations that also help drive the need for new resources, nor did he acknowledge FPL's ongoing efforts with cost-effective DSM to avoid the construction of new power plants during that same time period, something no responsible resource planner would do. Tr. 450-451 (Rábago); Tr. 489-492 (Sim).

The intervenors' witnesses and testimony simply do not warrant serious consideration.

FPL's Use of the 20% RM Criterion to Determine a Reliability Need is Reasonable and Consistent with Commission Direction

In this need determination proceeding and in its resource planning over the past fifteen years, FPL, like other Peninsular Florida investor owned electric utilities, has relied on Commission practice and precedent approving, applying, and implementing the 20% RM criteria to maintain system reliability. In several prior determination of need proceedings, the Commission has explicitly held it will not revisit its approved 20% RM criterion in a determination of need proceeding. It will only consider an alternative reserve margin criterion, such as a 15% RM, in a generic proceeding because such a consideration would affect all of Florida's IOUs. *See FPC Hines 3 Need Determination*, Order No. PSC-03-0175-FOF-EI at 4-5

("The proper forum to address what minimum reserves are necessary should be in a generic docket, as was previously done, and not in a particular utility's power plant need determination docket."); *FPL Port Everglades Need Determination*, Order No. PSC-12-0187-FOF-EI at 3-5. So the Commission has made it clear that the approved 1999 stipulation for the 20% RM should be applied in an individual utility's need determination, while at the same time it does not negate the utility's burden to satisfy the need determination criteria under Section 403.519, Fla. Stat. The Commission has maintained this position in this proceeding through the Prehearing Officer's rulings on additional issues proposed by SACE and ECOSWF regarding changing FPL's 20% RM, again stating that a revisiting of and/or change to the applicability of the 20% RM as a criterion is not proper for a specific utility's need determination proceeding where no other affected IOU is a party to the proceeding. *See* Order No. PSC-15-0540-PCO-EI at 2-4 (issued November 20, 2015); and Order No. PSC-15-0547-PHO-EI at 22-23 (issued November 24, 2015). In addition, as documented by Dr. Sim's Exhibit SRS-7 in his amended rebuttal testimony, the Commission has repeatedly relied upon the 20% RM criterion in a wide variety of decisions over the last fifteen years. Ex. 66.

Moreover, FPL has reviewed its use of the 20% reserve margin and continues to believe it should be applied in its reliability analyses to ensure system reliability and "keep the lights on" for its customers and those of other Peninsular Florida IOUs. Tr. 513-514, 528, 582-584 (Sim). As the Commission has recognized consistently since its 1999 approval of the 20% RM for Peninsular Florida utilities, utilities like FPL must maintain adequate generation reserves to provide for unavailable capacity, such as due to forced outages, periodic maintenance, and refueling of nuclear plants, as well as for higher than projected peak demand due to forecast variances and unpredicted significant weather events. *See, e.g., FPC Hines 3 Need*

Determination, Order No.PSC-03-0175-FOF-EI at 4. Further, the FRCC applies a 15% RM to Florida electric utilities recognizing and assuming for reliability planning purposes that the Peninsular Florida IOUs will maintain a 20% RM and that the FRCC overall RM will meaningfully drop if FPL and those IOUs lowered their RM level to a 15% RM. Tr. 504-507 (Sim).

FPL's own internal studies and operating and planning experience clearly warrant that FPL continue to use the 20% RM criteria. Tr. 129, 140-141,513-514, 528, 541, 549-550, 582-584 (Sim). Those include both historic and prospective studies and specifically a study of whether FPL's system would remain reliable with a 15% RM versus a 20% RM, as discussed in the prior testimony of FPL representative Rene Silva, found in Exhibit SRS-9 to witness Sim's amended rebuttal testimony. Ex. 68. This analysis notes that FPL's forecast typically projects that the summer peak always occurs in August when there is no scheduled maintenance of power plants and associated outages, but it also points to the fact that unforeseen events, such as significant weather events, can and do occur outside of the month of August during other months that are peak months. These unforeseen events occur approximately one out of every three summers in these peak months, typically in June or July, during which scheduled maintenance outages occur in addition to forced outages. Accordingly, this analysis shows a 15% RM would have potential significant negative consequences for reliability, and a 20% RM should be maintained to address unforeseen events during these peak months. *See Id.* Thus, given unforeseen events such as the January 11, 2010 winter peak event noted above and as detailed in the study found in Exhibit SRS-10 to witness Sim's amended rebuttal testimony, even with an "outrageously low" LOLP projection as characterized by ECOSWF witness Rábago, FPL and other Peninsular Florida utilities utilize the 20% RM to work individually and cooperatively to

avoid and minimize outage events. This again underscores the clear need to maintain the 20% RM and not lower it to a 15% RM because it is better for maintaining system reliability for FPL's customers. Ex. 69; Tr. 129, 492-496 (Sim).

FPL's Use of the 10% GRM Criterion is Necessary to Ensure Reliable Service in the Face of Unforeseen Events

As noted above, the GRM reliability criterion is a third reliability criterion that is separate and distinct from the maximum 0.1 day/year LOLP and 20% minimum total RM reliability criteria that FPL uses. It is designed to complement and not replace those other criteria. Relative to the 20% total RM criterion, the GRM criterion provides guidance regarding what mix of DSM and generation resources should be added to maintain and enhance the reliability of FPL's system while meeting the minimum 20% RM. *See* Ex. 59 (Bates Stamp Nos. 00039-00040). This became important in recent years as FPL noticed that the makeup of the resources with which FPL was projected to meet the 20% RM criterion was becoming more and more dependent on DSM and less on generation, with DSM having a lower LOLP than generation resources, thus resulting in lower system reliability. Tr. 585-586 (Sim). Even though FPL's power plant fleet has become more reliable in recent years, as the intervenors recognize, this trend is countered by the fact that the newer generation units have more rigid planned maintenance schedules than the older units, with an associated loss of flexibility with regard to scheduling planned outages and more required planned outage hours, lending further support to the need for generation resources consistent with the minimum 10% GRM metric. Tr. 100-101 (Sim).

In assessing the need for use of a GRM reliability criterion, FPL conducted analyses that utilized both a resource planning perspective and a system operations perspective. Ex. 59 (Bates Stamp Nos. 00039-00040); Tr. 585-587 (Sim). FPL also used both historical and projected

perspectives in these analyses. *Id.* The analyses looked at pairs of resource plans that had identical total RMs (for example, each of the two resource plans might have a 20.4% total RM), but that total RM would have been reached in one resource plan with more incremental DSM MW/less incremental generation MW, while the other resource plan would have less incremental DSM MW/more incremental generation MW. FPL then used the GRM calculation as a metric by which to refer to these differences in these resource plans. A resource plan with more incremental DSM MW/less incremental generation MW has a lower GRM than a resource plan with less incremental DSM MW/higher incremental generation MW. *See* Ex. 59 (Bates Stamp Nos. 00039-00040).

From the resource planning perspective, a GRM reliability criterion is desirable because it can lower system LOLP projections and thereby increase system reliability. The analyses referred to above demonstrated that the plan with more incremental DSM MW/less incremental generation MW (*i.e.*, a lower GRM) consistently was projected to have higher LOLP values than the other resource plan consisting of less incremental DSM MW/more incremental generation MW (*i.e.*, a higher GRM), even though both resource plans had an identical total RM value. Thus, from an LOLP perspective, a resource plan with a lower GRM results in a less reliable FPL system than a resource plan with a higher GRM. *See* Ex. 59 (Bates Stamp Nos. 00039-00040); Ex. 70; Tr. 590-592 (Sim).

From an operational perspective, a GRM reliability criterion is important for several reasons. If two resource plans have an identical total RM value, but one plan has a 10% GRM and the other a 5% GRM, the 10% GRM can provide operators with hundreds of additional MWs of reserves (generating and/or load management) during severe peaks. The resource plan with a lower GRM was consistently projected to have less MW in reserve for the system

operators to use, compared to the resource plan with a higher GRM, when examining projections of unexpected higher load and/or unexpected higher levels of generating unit unavailability. A GRM criterion of a minimum of 10% matches well with FPL's System Operations Department's need for 2,650 MW of "operational generation reserves", *i.e.*, generation above forecasted load. *See* Ex. 59 (Bates Stamp Nos. 00039-00040); Ex. 70. This is particularly valuable for an unexpected high load day, such as discussed above regarding January 11, 2010. Tr. 586-587 (Sim). Accordingly, the use of the GRM is not about "putting steel in the ground" as alleged by intervenors, rather it is about further ensuring reliable service to FPL's customers, a responsibility FPL takes very seriously.

Despite Office of the Public Counsel's contention to the contrary, this need for additional generation reserves addressed by FPL's GRM criterion is not accounted for or otherwise ensured by meeting the Commission's rule on shared reserves, Rule 25-6.035, F.A.C., which calls for a 15% RM. That rule's requirement is designed for maintaining spinning reserves by electric utilities to assist other utilities in Florida during short-term intervals and states expressly that it is not designed to establish a prudent level of reserves for long-term planning or reliability purposes. In fact, a utility can only ensure adequate spinning reserves if it first ensures a needed level of operational generation reserves is in place. FPL's system operators currently project that approximately 2,650 MW of operational generation reserves is needed for FPL's system, leading to a 10% minimum criterion being set for the GRM. *See* Ex. 59 (Bates Stamp Nos. 00039-00040); Ex. 70. Therefore, the spinning reserve requirement clearly does not supplant the 20% RM for long term planning nor would it likewise fill the role of FPL's GRM. Tr. 89-90, 214 (Sim).

In regard to specific GRM levels and why the 10% level is appropriate for FPL, shortly after the Commission's 2009 DSM Goals decision, when very high levels of DSM were set as FPL's DSM Goals, FPL projected that its GRM would drop to 4.7% near the end of the decade. Consequently, FPL's analyses of the comparative reliability of the FPL system used 5% as a low end of the range of possible GRM values. The upper end of the GRM range that was examined was approximately 13%. The results described above, higher system reliability from both a resource planning perspective and system operations perspective, were consistently projected for all analyses throughout this 5% to 13% GRM range. *See* Ex. 59 (Bates Stamp Nos. 00039-00040); Ex. 70.

FPL decided upon a minimum GRM value of 10% based on a recommendation from its System Operations Department. Their recommendation attempted to ensure that their operators have approximately 2,650 MW of operational generation reserves. This value was based on the following assumptions (MW values are approximate): (i) 1,500 MW for possible loss of the largest unit, (ii) 700 MW as an annual daily average of the total MW out-of-service at any given time for both planned and unplanned maintenance, and (iii) 450 MW for FPL's share of Florida's reserve-sharing obligations. The total 2,650 MW was a close match to and provided the basis for FPL's selection of 10% as its minimum GRM criterion value. This specific value for the GRM is reasonable and appropriate for use in this proceeding and is expected to be reviewed and updated as needed in future FPL reliability analyses. *See* Ex. 59 (Bates Stamp Nos. 00039-00040); Ex. 70.

It is critical for FPL customers to have reliable service based on FPL's three reliability criteria for resource planning

FPL must maintain reliable electric service for its customers. As discussed above, FPL understands what is required to maintain reliable service based on its experience with significant

weather and other unforeseen events over the years. In order to maintain adequate reliability to serve its customers through such events, FPL must have adequate generation resources by adhering to FPL's three reliability criteria. Tr. 78 (Sim). The reality of not having adequate generation resources would be a most undesirable occurrence for FPL's customers - service interruptions. Tr. 78-79 (Sim), 308 (Kingston). There would be an additional associated economic cost associated with not maintaining system reliability - the cost of obtaining additional power purchases on the market with great uncertainty as to whether sufficient amounts of power would even be available, much less at a reasonable cost. *See* Ex. 63 (Bates Stamp No. 00144, Att. 1 and 2).

Turning to the question posed to FPL about a scenario in which the Okeechobee Unit and other projected units are delayed by one year, it is clear that such a scenario fails to capture costs that would arise from having insufficient generation resources, so any savings are grossly overstated. Furthermore, this cost comparison is not an "apples to apples" comparison. Instead, it is a comparison of one resource plan which maintains FPL's current high level of system reliability with a second resource plan with a significantly reduced level of system reliability. *See* Ex. 63 (Bates Stamp No. 00144, Att. 1 and 2). Under this scenario, deferral of the Okeechobee Unit and all subsequent units would have resulted in FPL not meeting its Commission-approved 20% RM, and the 10% GRM, in 2019 and a number of other subsequent years, resulting in a significantly less reliable FPL system. Tr. 78, 580-582, 593 (Sim). Again as noted above, as recently as 2010, FPL experienced actual system conditions, where if the Company had been planning for a 15% RM instead of a 20% RM, there would have been service interruptions. Maintaining FPL's three reliability criteria will continue to ensure reliability and

minimize such interruptions for FPL's customers and those of other Peninsular Florida utilities. Tr. 53-54, 78-80, 506-507, 527-528 (Sim), Tr. 464-465 (Rábago).

ISSUE 2: Are there any renewable energy sources and technologies or conservation measures taken by or reasonably available to Florida Power & Light, which might mitigate the need for the proposed Okeechobee Clean Energy Center Unit 1?

FPL: *****No. In determining its customers' resource needs, FPL accounted for all FPL and Commission-identified cost-effective and reasonably achievable renewable energy and conservation measures reasonably available to FPL that might mitigate the need for the Okeechobee Unit. After accounting for over 200 MW of additional solar PV scheduled to be on FPL's system by 2016 and the level of FPL DSM the Commission has previously determined is reasonably achievable and cost-effective, FPL still has a resource need of over 900 MW in 2019 that grows in subsequent years. The Okeechobee Unit is the best alternative available to meet that need.*

DSM

The Commission has appropriately, and recently, found that the DSM Goals are the utility's cost-effective, reasonably achievable conservation measures. *See, e.g., FPC Hines 3 Need Determination,* Order No. PSC-03-0175-FOF-EI at 12; *FPL Port Everglades Need Determination,* Order No. PSC-12-0187-FOF-EI at 6; *Tampa Electric Company Polk 2-5 Need Determination,* Order No. PSC-13-0014-FOF-EI at 2-3; *DEF Citrus County Need Determination*, Order No PSC-14-0557-FOF-EI at 17. The Commission's rule on DSM (Rule 25-17.0021, F.A.C.) states that the Commission must establish goals for FPL and the other affected Florida electric utilities at a minimum every five years to reduce the growth rates of weather-sensitive peak demand, to reduce and control the growth rates of electric consumption and to increase the conservation of expensive resources, such as petroleum fuels. The Commission completed a proceeding to establish new DSM Goals for FPL and the other affected electric utilities less than one year ago. *See In re: Commission review of numeric conservation goals (Florida Power & Light Company),* Docket No. 130199-EI, *et al.*, Order No. PSC-14-0696-FOF-EU (issued December 16, 2014).

FPL has relied upon the Commission's determination in the 2014 DSM Goals proceeding, as it was entitled to, under the legal doctrines of administrative finality and collateral estoppel. *See* Peoples Gas v. Mason, 187 So.2d 335, 339 (Fla. 1966); Austin Tupler Trucking, Inc. v. Mason, 377 So.2d 679 (Fla. 1979); Florida Power Corporation v. Garcia, 780 So.2d 45 (Fla. 2001); *In Re Turkey Creek, Inc.*, 95 FPSC 11: 625, 628 (November 28, 1995), Order No. PSC-95-1445-FOF-WS; *In Re Tamiami Village Utility, Inc.*, 94 FPSC 2: 358, 364-65 (February 21, 1994), Order No. PSC-94-0210-FOF-WS. Moreover, there has been no showing by intervenors of additional, cost-effective DSM reasonably available to FPL. In fact, FPL has demonstrated that the 2014 DSM amounts approved are less cost effective now than at the time they were approved and would be even less cost-effective if the Commission lowered FPL's RM to 15% as advocated by the intervenors in this proceeding. Tr. 155-157, 507-508, 576-579 (Sim).

In contrast, SACE has simply tried to re-argue for DSM amounts previously rejected by the Commission in 2014, and the Commission struck that testimony based on the doctrine of administrative finality. *See* Order No. PSC-15-0546-PCO-EI (issued November 24, 2015). Likewise, ECOSWF neither performed nor provided an analysis to quantify any additional cost-effective DSM, simply claiming with no support the availability of additional demand response and conservation measures, conveniently ignoring the fact that FPL already has a significant and healthy level of demand response offerings for its customers (approximately 2,000 MW of fast response resources in its residential and commercial/industrial load management programs). Tr. 500-501 (Sim). Accordingly, nothing in the record supports any reasonable available additional cost-effective DSM measures available to FPL that were not included in FPL's reliability and economic analyses supporting this need determination request.

Renewable Energy Sources and Technologies

Likewise, nothing in the record supports any additional cost-effective renewable generation resources being available to FPL to mitigate its need for the Okeechobee Unit in 2019. FPL incorporated into its analysis the firm capacity values for all existing and planned renewable energy generation that has been projected to be cost-effective. That included an additional 223 MW (nameplate) of utility scale solar PV that FPL will bring online in 2016. Tr. 52, 63-65 (Sim).

SACE witness Wilson suggests that a solar alternative was not analyzed by FPL for 2019. Tr. 423 (Wilson). FPL witness Sim has rebutted that contention and provided detail in both his direct and rebuttal testimony of the analysis that FPL undertook to consider a solar PV alternative to meet FPL's 2019 capacity need. Tr. 52, 63-65, 161-162, 197-198, 499-500, 526-527 (Sim). Witness Sim's testimony conclusively demonstrates that neither a pure solar nor hybrid solar/smaller CC or CT alternative was cost-effective to meet FPL's 2019 need. Neither SACE nor any intervenor has provided any evidence of any additional solar or other renewable generation that is cost-effective and available to meet FPL's 2019 need. *See Id.* While it is nice to know that SACE witness Wilson realizes Florida is known as "the Sunshine State", ("Surely in the Sunshine State, the results would be favorable to growth in solar power.") (Tr. 424 (Wilson)), this acknowledgement is no substitute for substantive analysis supporting the idea that additional cost-effective solar is available to FPL to meet its 2019 need. Tr. 424 (Wilson). FPL will continue to look for additional cost-effective solar resources for future development, but there is no evidence that those resources could supplant or defer the need for the Okeechobee Unit. *See* Tr. 526-527 (Sim).

ISSUE 3: **Is there a need for the proposed Okeechobee Clean Energy Center Unit 1, taking into account the need for adequate electricity at a reasonable cost, as this criterion is used in Section 403.519(3), Florida Statutes?**

Yes. The projected cost of the 1,633 MW Okeechobee Unit is $1,231,700,000 or $754/kW. The Okeechobee Unit has outstanding projected operational parameters: an EAF of 95.5%; a POF 3.5% and a FOF of 1.0%. It is projected to have an exceptionally low heat rate of 6,249 BTU/kWh at 75°F. This low projected heat rate will make the Okeechobee Unit the most fuel-efficient CC unit on FPL's already highly efficient system. Having this highly efficient generating unit available to serve customers over 95% of the time will generate significant fuel savings for FPL's customers.

Yes, there is a need for the Okeechobee Unit taking into account the need for adequate electricity at a reasonable cost for FPL's customers. The current projected installed cost of the 1,633 MW Okeechobee Unit is $1,231,700,000 or $754/kW, which is an extremely low cost compared to other CC units in the state of Florida. *See* Ex. 63 (Bates No. 00128, Att. 1); Tr. 335 (Kingston). The current cost estimates for the principal components of the Okeechobee Unit include the power block at $1,056.24 million, transmission interconnection and integration at $52.00 million, and allowance for funds used during construction ("AFUDC") of $123.43 million. *See Id.;* Ex. 26.

FPL's analyses show that the Okeechobee Unit is projected to save FPL's customers $72 million in the base case fuel cost forecast and as much as $153 million CPVRR, as compared to the next best self-build alternative over a range of current fuel cost forecasts. No market alternatives were available to FPL as a result of its March 2015 RFP conducted pursuant to the Commission's Bid Rule. *See* Ex. 59 (Bates Nos. 00138-00141, Att. 2 (Corrected)); Tr. 68-72 (Sim).

The Okeechobee Unit has outstanding projected operational parameters: an EAF of 95.5%; a POF 3.5% and a FOF of 1.0% and a heat rate of 6,249 Btu/kWh at 75°F. *See* Ex. 63 (Bates No. 00128, Att. 1). This low projected heat rate will make the Okeechobee Unit the most fuel-efficient CC unit on FPL's already highly efficient system. Having this highly efficient generating unit available to serve customers over 95% of the time will generate significant fuel savings for FPL's

customers.

FPL has extensive experience building CC power plants on time and on budget. Tr. 296, 326 (Kingston). FPL has competitively bid and negotiated the principal components for the Okeechobee Unit. Tr. 331-332, 336-337 (Kingston). FPL agrees to report annually to the Commission the budgeted and actual costs compared to the estimated total in-service costs of the proposed Okeechobee Unit relied upon in this proceeding. Tr. 307 (Kingston). FPL requests, as part of the Commission's order granting an affirmative determination of need for the Okeechobee Unit in 2019, that the Commission grant FPL the flexibility through its negotiations and analyses to select the technology that best meets FPL customers' needs in terms of reliability and cost-effectiveness. Tr. 76-77 (Sim), 301-302 (Kingston).

FPL would select an enhanced design or model only if the enhanced design or model results in lower projected system CPVRR cost to FPL's customers. In the event FPL selects an enhanced design or model other than the analyzed technology subsequent to the Commission granting a determination of need for the Okeechobee Unit, FPL proposes to make an informational filing with the Commission that documents the projected comparative CPVRR cost advantage of the alternate technology chosen. Tr. 76-77 (Sim), 301-302 (Kingston).

ISSUE 4: **Is there a need for the proposed Okeechobee Clean Energy Center Unit 1, taking into account the need for fuel diversity, as this criterion is used in Section 403.519(3), Florida Statutes?**

FPL: *****Yes. While the Okeechobee Unit will not improve FPL's fuel diversity, it will not significantly increase FPL's reliance on natural gas, given other capacity additions and retirements, plus the high level of fuel efficiency of this new unit. In terms of utilizing other energy sources for its generation portfolio, FPL is actively pursuing additional solar and nuclear energy. This project will improve fuel supply reliability with its use of the new Sabal Trail/Florida Southeast Connection natural gas pipeline.*

Yes, there is a need for the Okeechobee Unit taking into account fuel diversity and fuel supply reliability. While the Okeechobee Unit will not improve FPL's fuel diversity, it will not significantly increase FPL's reliance on natural gas, given other capacity additions and retirements, plus the high level of fuel efficiency of this new unit. Tr. 51 (Sim). The Okeechobee Unit is projected to be the most highly fuel-efficient CC unit that FPL has built and likely in the state of Florida, with a heat rate of 6,249 Btu/kWh. *See* Ex. 63 (Bates Stamp No. 00128, Att. 1); Tr. 50, 75-76 (Sim).

FPL is pursuing other approaches that would improve its fuel diversity in terms of gas supply, the volatility of the cost of gas, and the use of other energy sources. In terms of utilizing other energy sources for its generation portfolio, FPL is actively developing additional solar and nuclear energy projects. Tr. 51, 530-532 (Sim).

More importantly, this project will improve fuel supply reliability with its use of the new third pipeline into Peninsular Florida, the Sabal Trail/Florida Southeast Connection natural gas pipeline, serving FPL's service area from onshore shale gas production areas, with FPL having contracted for such gas pipeline capacity. Tr. 51, 532 (Sim). Recent Commission approval of FPL's Woodford project and Commission Guidelines to govern approval of future similar projects will assist in lowering the volatility of the cost of gas used to serve FPL's customers. *Id.*

Finally, the Okeechobee Unit will maintain supply reliability through its capability to burn light fuel oil as a backup fuel source. The Okeechobee Unit will maintain storage facilities for such amount of fuel oil necessary to operate the plant for at least 72 hours at full capacity using backup fuel in the event of disruption to the natural gas supply for the plant. Tr. 304 (Kingston), 355, 366 (Stubblefield).

ISSUE 5: **Will the proposed Okeechobee Clean Energy Center Unit 1 provide the most cost-effective alternative, as the criterion is used in Section 403.519(3), Florida Statutes?**

*****Yes. The Okeechobee Unit is the most cost-effective alternative to meet FPL's customers' reliability needs. FPL's analyses accounted for all cost-effective, reasonably achievable DSM and renewable energy. The Okeechobee Unit is projected to save FPL's customers $72 million CPVRR in electricity costs (current base case fuel forecast) over the next best self-build alternative analyzed. It is more cost-effective than any solar PV alternative analyzed. A market assessment was done under the Commission's Bid Rule, and no market alternatives were available to FPL. There is no option that is projected to result in lower electric rates for FPL's customers.*

FPL's Economic Analysis and Self-Build Alternatives

FPL's request for an affirmative determination of need for this unit is based on an extensive evaluation designed to identify the best, most cost-effective generation alternative available to meet FPL's resource needs that begin in 2019. Tr. 49-50 (Sim). In mid-2013, FPL's reliability analyses began to project a need for additional resources beginning in the summer of 2019. Therefore, FPL began considering what types of generation facilities and what specific sites might be viable by mid-2019 for a self-build generation option. Tr. 58-60 (Sim). FPL's evaluation began with FPL's assessment of its customers' future generation capacity needs after accounting for all identified cost-effective and reasonably available DSM. Having removed coal-fired technologies and new nuclear capacity from consideration for meeting the 2019 need due to current and prospective environmental and timing concerns, FPL then examined feasible

self-build generation options, including CC units, CT units, and solar PV facilities which potentially could have met the 2019 resource need. FPL also evaluated three specific FPL-owned sites at which new generation facilities could be built. One of these sites is in Okeechobee County, one is in Hendry County, and the third is the site of the recently retired FPL Putnam 1 & 2 units in Putnam County. In regard to CC and CT options, the analyses examined different technologies offered by three vendors: General Electric, Siemens, and Mitsubishi Heavy Industries. More specifically, these analyses examined the technology for the CT component of the CC unit and the subsequent design of the CC unit. *Id.*

At a more granular level, the overall evaluation process consisted of two analysis stages. In the first stage, the best combination of type of generation and site were identified. Also in this first stage, FPL reached a preliminary conclusion regarding the best CT component technology. A CC technology was determined to be the most cost effective option over the best CT and solar PV options. Tr. 60-62 (Sim). It was more cost-effective than either a solar PV alternative or a hybrid solar PV/smaller CC or CT generation alternative, and the solar PV alternatives were also determined to have considerable uncertainties regarding cost and reliability to meet FPL's projected sizeable 2019 need, which eliminated the solar PV alternatives from consideration. Tr. 58, 63-65, 159, 161-162 (Sim).

The second stage then consisted of analyses designed to refine the evaluation of the CT technologies available from all three vendors for incorporation into a CC unit and to reach a final conclusion regarding the best overall self-build choice for FPL's customers. Tr. 66 (Sim). The result of all of these analyses was that the Okeechobee Unit was determined to be FPL's best, most economic self-build option and projected to save FPL's customers up to $291 million CPVRR in electricity costs over the next best alternative. Tr. 43, 79 (Sim). The Okeechobee

Unit would have been selected as FPL's best self-build option regardless of whether the 20% RM or 10% GRM were driving FPL's resource need in 2019. Tr. 57-58, 206 (Sim).

March 2015 Request for Proposals and Third Party Alternatives

FPL then issued in March 2015 an RFP in accordance with Florida's Bid Rule to solicit non-FPL generation options that could be evaluated as an alternative to the Okeechobee Unit. Forty-six entities registered for the RFP, and one submittal was received in response to the RFP. However, upon review by FPL and the independent evaluator for the RFP, Alan Taylor of Sedway Consulting, this submittal did not offer enough capacity to meet the 2019 need and also failed to meet numerous minimum requirements of the RFP. Thus, no viable market alternatives were presented in response to the RFP. Tr. 49-50, 68-72 (Sim). Further, while FIPUG's counsel suggested that existing third-party facilities may have the ability to sell FPL power on terms that are more favorable to customers than the Okeechobee Unit, there is no record evidence that this is the case. Tr. 182-186, 191-193 (Sim). Therefore, based on the extensive evaluation of self-build alternatives discussed above and the results of the RFP process, the Okeechobee Unit was selected as the best, most cost-effective option with which to meet FPL's resource needs beginning in 2019. Tr. 49-50, 76 (Sim).

Updated Economic Analyses

In response to discovery requests from Commission Staff in this proceeding in November 2015, FPL performed updated economic analyses of its best self-build alternatives from its prior analyses, which consisted of natural gas-fired CC and CT alternatives. *See* Ex. 59 (Bates Stamp Nos. 00138-00141, Att. 2 (Corrected)); Ex. 59 (Bates Stamp No. 00024, Update to Ex. SRS-2); Ex. 63 (Bates No. 00128, Att. 1). These analyses included FPL's most recent inputs and assumptions for fuel and load forecasts, resource planning assumptions, and enhanced design

specifications for the Okeechobee Unit. These comprehensive, updated analyses demonstrate that there is still a significant resource need in 2019 of 904 MW, and the Okeechobee Unit with the enhanced 1,633 MW design remains the best and most cost-effective alternative to serve FPL's customers in 2019 and beyond. The Okeechobee Unit with the updated assumptions will save FPL's customers as much as $153 million CPVRR (over FPL's current range of fuel cost forecasts) in electricity costs over the next best self-build alternative, with a savings of $72 million CPVRR using the base case. *See Id.*

ISSUE 6: **Based on the resolution of the foregoing issues, should the Commission grant Florida Power & Light's petition to determine the need for the proposed Okeechobee Clean Energy Center Unit 1?**

*****Yes. The Okeechobee Unit is the best, most cost-effective alternative to maintain reliable electric service for FPL's customers beginning in 2019. This unit was determined to be the most cost-effective option through extensive analyses and a market assessment pursuant to the Commission's Bid Rule, while taking into account all reasonably available, cost-effective renewable energy and DSM. Therefore, the Commission should grant an affirmative determination of need for the Okeechobee Unit with an in-service date of June 1, 2019, based on a finding that this project is the best, most cost-effective choice to meet the needs of FPL's customers in 2019.*

Yes. As demonstrated in detail under Issues 1-5 above, the Okeechobee Unit is the best, most cost-effective alternative with which to maintain reliable electric service for FPL's customers beginning in 2019, taking into account the need for electric system reliability and integrity, the need for adequate electricity at a reasonable cost, the need for fuel diversity and supply reliability, cost-effectiveness, and the availability of renewable or conservation alternatives.

The Okeechobee Unit was determined to be the most cost-effective option through extensive analyses and a market assessment pursuant to the Commission's Bid Rule, while taking into account all reasonably available and cost-effective renewable energy and

conservation measures. Tr. 49-50, 76 (Sim). Therefore, the Commission should grant an affirmative determination of need for the Okeechobee Unit with an in-service date of June 1, 2019, based on a finding that this project is the best, most cost-effective choice to meet the needs of FPL's customers in 2019.

ISSUE 7: **Should this docket be closed?**

FPL: ***Yes. Upon issuance of an order granting FPL's petition to determine the need for OCEC Unit 1, this docket should be closed. FPL will honor its commitments to report annually on construction costs and to make an informational filing for any cost-effective Power Train Components design improvements. Accordingly, FPL has no objections to the Commission including in the final need determination order those commitments.*

Yes. Upon issuance of an order granting FPL's petition to determine the need for the Okeechobee Unit, this docket should be closed. FPL will honor its commitments to report annually on construction costs and to make an informational filing for any cost-effective Power Train design improvements. Tr. 76-77 (Sim); Tr. 301-302, 307 (Kingston). Specifically, those commitments are as follows:

> FPL will annually report to the Commission's Director of Economic Regulation updates to the budgeted and actual cost of OCEC Unit 1, compared to the estimated total in-service cost presented in this Petition.
>
> * * *
>
> FPL also requests that, as part of the Commission's order granting an affirmative determination of need for OCEC Unit 1, the Commission provide that its determination is not predicated on FPL's selection of a particular design or model of CT, HRSG, steam turbine (the "Power Train Components") or other related equipment necessary for operation of the unit, thus providing FPL the flexibility through its negotiations and analyses to select the technology that best meets FPL customers' needs in terms of reliability and cost-effectiveness. FPL would select an enhanced design or model only if the enhanced design or model results in lower projected system CPVRR cost to FPL's customers. In the event that FPL selects an enhanced design or model other than the analyzed technology subsequent to the Commission having granted a determination of need for OCEC Unit 1, FPL proposes to make an informational filing to the Commission that

documents the projected comparative CPVRR cost advantage of the alternate technology chosen.

Tr. 76-77 (Sim); Tr. 301-302, 307 (Kingston).

IV. CONCLUSION

For all of the foregoing reasons, based upon Florida law, the evidentiary record in this proceeding, and Commission precedent, FPL requests that the Commission grant FPL an affirmative determination of need for the Okeechobee Unit to meet its resource needs beginning in 2019.

Respectfully submitted this 9th day of December, 2015.

Charles A. Guyton, Esquire
Gunster Law Firm
215 South Monroe Street
Suite 601
Tallahassee, Florida 32101-1804
Telephone: (850) 521-1722
Facsimile: (850) 671-2505
cguyton@gunster.com

William P. Cox, Senior Attorney
Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL 33408
Telephone: (561) 304-5662
Facsimile: (561) 691-7135
will.cox@fpl.com

By *s/ William P. Cox*
William P. Cox
Florida Bar No. 0093531

CERTIFICATE OF SERVICE
Docket No. 150196-EI

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by electronic mail on this 9th day of December, 2015 to the following:

Kelly Corbari, Esq.
Leslie Ames, Esq.
Division of Legal Services
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, Florida 32399-0850
kcorbari@psc.state.fl.us
lames@psc.state.fl.us

Jon C. Moyle, Jr., Esq.
Karen A. Putnal, Esq.
Moyle Law Firm, P.A.
Attorneys for FIPUG
118 N. Gadsden St.
Tallahassee, Florida 32301
jmoyle@moylelaw.com
kputnal@moylelaw.com

Charles Rehwinkel, Esq.
Patricia Christensen, Esq.
J.R. Kelly, Esq.
Office of Public Counsel
The Florida Legislature
111 West Madison Street, Room 812
Tallahassee, Florida 32399
christensen.patty@leg.state.fl.us
rehwinkel.charles@leg.state.fl.us
kelly.jr@leg.state.fl.us

James Whitlock, Esq.
Gary A. Davis, Esq.
Davis & Whitlock, PC
21 Battery Park Avenue, Suite 206
Asheville, NC 28801
jwhitlock@enviroattorney.com
gadavis@enviroattorney.com

Bradley Marshall, Esq.
Alisa Coe, Esq.
David Guest, Esq.
Earthjustice
111 S. Martin Luther King Jr. Blvd.
Tallahassee, Florida 32301
bmarshall@earthjustice.org
acoe@earthjustice.org
dguest@earthjustice.org

George Cavros
Southern Alliance for Clean Energy
120 E. Oakland Park Blvd., Suite 105
Fort Lauderdale, FL 33334
george@cavros-law.com

By: *s/ William P. Cox*
William P. Cox
Florida Bar No. 0093531