**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

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| In Re: FPL's Petition for Determination of Need for Okeechobee Clean Energy Center Unit 1: | DOCKET NO. 150196-EI |
| _____/ | FILED: December 9, 2015 |

**CITIZENS' POST HEARING BRIEF**

Pursuant to Order Nos. PSC-15-0394-PCO-EI, issued September 16, 2015, the Citizens of the State of Florida, by and through the Office of Public Counsel, hereby submit their Post Hearing Brief.

**STATEMENT OF BASIC POSITION**

***Generally***

Florida Power and Light (FPL) has the burden of proof to justify its request for a determination of need to build the Okeechobee Clean Energy Center Unit 1 (OCEC Unit 1). Further, FPL has the burden of proof regarding its proposed change and/or addition to the reserve margin and any other affirmative relief sought, regardless of whether the Intervenors provide evidence to the contrary.

Citizens do not take issue with the use of a loss of load probability (LOLP) analysis to determine whether a particular unit is needed. However, FPL has not asserted in its request for a determination of need that the OCEC Unit 1 is required to be built because the LOLP would be compromised. The LOLP criterion applied by FPL is 0.1 day in a year which means the utility would expect that every ten years you would have one occurrence when the utility would not meet its firm load requirements. (TR 104) In this case, FPL witness Sim acknowledged that without

adding a generation unit in 2019, FPL's LOLP would be .054856, which is less than the 0.1 day LOLP reliability criterion used by FPL to justify new resource additions. (TR 53, 88)

Citizens submit that a 20% reserve margin for long-term planning purposes which is a number that was previously arrived at by stipulation in Order No. PSC- 99-2507-S-EU, issued December 22, 1999, is excessively high, and should be addressed by the Commission in a generic proceeding. However, FPL's proposed and self-serving application of a 20% reserve margin in the context of this need determination as a reliability criterion to address the need for power in 2019 is inappropriate. The stipulation, which was entered into by only investor-owned utilities, was explicit that future Electric Power Plant Siting Act proceedings would be unaffected by the stipulation and its approval by the Commission wherein the IOUs agreed to a planning criterion of 20% for reserve margins. Id. at pp. 9-10. Instead, Citizens submit that the Commission should apply the minimum 15% margin reserve set forth in Rule 25-6.035, Florida Administrative Code. Rule 25-6.035, Florida Administrative Code, states:

> Each electric utility shall maintain sufficient generating capacity, supplemented by regularly available generating and non-generating resources, in order to meet all reasonable demands for service and provide a reasonable reserve for emergencies. Each electric utility shall also coordinate the sharing of energy reserves with other electric utilities in Peninsular Florida. To achieve an equitable sharing of energy reserves, Peninsular Florida utilities shall be required to maintain, at a minimum, a 15% planned reserve margin. The planned and operating reserve margin standards established herein are intended to maintain an equitable sharing of energy reserves, not to set a prudent level of reserves for long-term planning or reliability purposes.

Planning to the minimum 15% reserve margin would not only meet the equitable sharing of energy reserves, but it would also avoid uneconomic and unnecessary overbuilding of generation and the resulting increase in rates to ratepayers. The current in-service date for OCEC Unit 1 is June 1, 2019. However, FPL's margin reserve in 2019 is projected to be 15.7%. Thus, applying the

minimum 15% margin reserve criterion, the OCEC Unit 1 unit is not needed for the proposed in-service date of June 1, 2019.

***10% Generation-Only Reserve Margin***

FPL seeks to introduce a self-serving, self-established standard in the form of a change and/or addition to the reserve margin criteria. When the reserve margin stipulation set a 20% reserve margin (which FPL relies on in this docket), the stipulation stated that "[n]either the adoption by the IOUs of the minimum twenty percent (20%) planning criterion nor the approval of this Stipulation by the Commission shall be deemed to create any presumption that capacity addition must be through any particular mix of generation and/or demand-side resources." PSC-99-2507-S-EU at p. 9. FPL is seeking to modify this stipulation in this docket. FPL is requesting that a 10% generation-only reserve margin criterion (GRM) be considered as an additional condition in evaluating its need determination. While FPL states that it has used this new criterion in Commission dockets since 2014, it has not expressly sought, nor has the Commission expressly approved the use of this so-called 10% GRM criterion. This 10% GRM criterion favors generation over conservation measures which also appears to be in contravention of the requirements of Section 403.519(3), Florida Statutes. That statute requires the Commission to consider whether renewable energy sources and technologies, as well as conservation measures, are utilized to the extent reasonably available. Notably, Section 403.519(3) further requires that "[t]he commission shall also expressly consider the conservation measures taken by or reasonably available to the applicant or its members which might mitigate the need for the proposed plant . . . ." The proposed GRM would seem to eliminate the Commission's ability to fulfill its statutory mandate, rendering it unlawful in addition to its self-serving circumvention of the stipulation.

Moreover, Rule 25-6.035, Florida Administrative Code, already establishes a minimum generation availability through the required "spinning load" that is needed for peninsular Florida. The Rule states as follows:

> The following shall be utilized as the operating reserve standard for Peninsular Florida's utilities: operating reserves shall be maintained by the combined Peninsular Florida system at a value equal to or greater than the loss of generation that would result from the most severe single generating unit contingency. The operating reserves shall be allocated among the utilities in proportion to each control area's peak hour net energy for load for the preceding year, and the summer gross Florida Reliability Coordinating Council (FRCC) capability of its largest unit or ownership share of a joint unit, whichever is greater. Fifty percent shall be allocated on the basis of peak hour net energy for load and fifty percent on the basis of the summer gross FRCC capability of the largest unit. Operating reserves shall be fully available within fifteen minutes. At least 25% of the operating reserves shall be in the form of spinning reserves which are automatically responsive to a frequency deviation from normal.

Under this Rule, the spinning reserves, i.e. generation reserves, are already addressed through a series of determinations made on a "total ulitities" basis at the FRCC. FPL has not established through its proposed evidence that this new 10% GRM criterion is necessary to meet this aspect. Furthermore, it appears to be redundant to the Rule on "spinning reserves" that is already in effect.

Thus, FPL has not established through the evidence submitted in this docket that this new 10% GRM criterion is necessary. Furthermore, it appears that the GRM criterion is in contravention of statutory requirements in Chapter 403, Florida Statutes, and redundant to the Rule on "spinning reserves" that is already in effect. Thus, the addition of a 10% GRM criterion, irrespective of the percentage used, is unnecessary for several reasons. First, FPL has not demonstrated that the usual criteria for evaluating need (loss of line probability and reserve margin percentage) is insufficient in this docket. Second, the additional 10% GRM criterion is unnecessary, is duplicative of the 25% "spinning load" requirement established in Rule, and will likely contribute to uneconomic and unnecessary overbuilding of generation.

## 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 this criterion is used in Section 403.519(3), Florida Statutes?

**POSITION**: *No. Using the 15% minimum reserve margin in Rule 25-6.035, Florida Administrative Code, OCEC Unit 1 is not needed for the proposed in-service date of June 1, 2019. In addition, FPL's proposed 10% GRM criterion is unnecessary for the Commission's determination of reliability and integrity. Further, FPL's proposed 10% GRM should not be adopted or approved by the Commission in making this need determination.*

Florida Power and Light (FPL) has the burden of proof to justify its request for a determination of need to build the Okeechobee Clean Energy Center Unit 1 (OCEC Unit 1). Further, FPL has the burden of proof regarding the establishment of any new or additional criterion its proposes that the Commission adopt relating to the reserve margin criteria and any other affirmative relief sought, regardless of whether the Intervenors provide evidence to the contrary.

In this case, FPL proposes to establish the need for the OCEC Unit 1 plant through the use of three proposed criteria. (TR 12) The three criteria consist of (1) a maximum loss-of-load probability (LOLP) of 0.1 day per year, (2) a minimum total 20% reserve margin, and (3) a minimum 10% GRM. (TR 53) As of 2014, FPL has historically used a dual planning criteria of LOLP and reserve margin. (TR122) LOLP and reserve margin are commonly used as accepted planning criteria or reliability criteria throughout the utility industry. (TR 122, 123) In contrast, the 10% generation-only criterion proposed by FPL for use in this docket is not a commonly accepted or utilized planning criterion throughout the utility industry. (TR 123)

*Loss of Load Probability (LOLP)*

Citizens do not take issue with the use of a loss of load probability (LOLP) analysis to determine whether a particular generation unit is needed. However, FPL has not asserted in its request for determination of need that the OCEC Unit 1 is required to be built because the LOLP would be compromised. The LOLP criterion used by FPL is 0.1 day in a year. (TR 53) This means the utility would expect that every ten years you would have one occurrence when the utility would not meet its firm load. (TR 104)

In this case, FPL witness Sim acknowledged that, without adding a generation unit in 2019, FPL's LOLP would be .054856 which on its face appears to be materially less than the 0.1 day per year LOLP reliability criterion used by FPL to justify new resource additions. (TR 53, 88) In fact, witness Sim acknowledged that if no unit was brought online in 2019, the LOLP would not exceed 0.1 days per year until 2022. While witness Sim claimed that a 0.05 LOLP was coming "pretty close" to FPL's 0.1 LOLP criterion, he conceded that it did not violate it. (TR 124) In fact, he acknowledged that not since the early 1990s has the LOLP criterion been a driver in FPL's resource planning. (TR 123, 124)

The LOLP is projected to be 0.007782 days per year in 2018. (TR 448,449) As Environmental Consideration of Southwest Florida (ECOSWF) witness Rábago testified, 0.007782 is equivalent to approximately 19 hours of outage per 100 years not including "acts of God" such as Hurricanes. This number demonstrates a significantly lower risk of loss of load than the 0.1 day per year LOLP that FPL utilizes. Witness Rábago also notes that this 0.007782 LOLP comes on the eve of the time period that FPL claims the new unit would begin operation. (TR 449) In addition, Witness Rábago testified that this number indicates the proposed OCEC Unit 1 is not required to maintain system reliability or integrity. (TR 449) Moreover, while he agreed that it

was appropriate to use a 0.1 day per year LOLP, he clarified that the 0.1 LOLP is generally used in conjunction with reserve margins of 12% to 16%. (TR 449)

***Reserve Margin***

Citizens submit that the 20% reserve margin used for long-term planning purposes and is a number that was previously arrived at by a virtually unilateral "stipulation" accepted by the Commission in Order No. PSC- 99-2507-S-EU, issued December 22, 1999, is excessively high, and should be re-visited by the Commission in a generic proceeding. However, FPL's proposed application of a 20% reserve margin in the context of this need determination as a reliability criterion to address the need for power in 2019 is inappropriate. The stipulation, which was entered into only by investor-owned utilities, made unequivocal that future Electric Power Plant Siting Act proceedings would be unaffected by the stipulation and its approval by the Commission wherein the IOUs agreed to a planning criterion of 20% for reserve margins. Id. at pp. 9-10.

Instead, Citizens submit the Commission should require FPL to utilize the minimum 15% margin reserve margin set forth in Rule 25-6.035, Florida Administrative Code. Rule 25-6.035, Florida Administrative Code, states:

> Each electric utility shall maintain sufficient generating capacity, supplemented by regularly available generating and non-generating resources, in order to meet all reasonable demands for service and provide a reasonable reserve for emergencies. Each electric utility shall also coordinate the sharing of energy reserves with other electric utilities in Peninsular Florida. To achieve an equitable sharing of energy reserves, Peninsular Florida utilities shall be required to maintain, at a minimum, a 15% planned reserve margin. The planned and operating reserve margin standards established herein are intended to maintain an equitable sharing of energy reserves, not to set a prudent level of reserves for long-term planning or reliability purposes.

The Florida Reliablity Corrdinating Council (FRCC) also uses a 15% reserve margin criterion for Penninsular Florida. (TR 409, 410) Witness Sim, who is the Chair of the Resource Working Group

for FRCC, acknowledged as much. (TR 142, 573) SACE witness Wilson testified that a 15% reserve margin is supported by ongoing and updated analysis conducted by the FRCC in its 2015 annual assessment. (TR 411)

Witness Wilson also testified that the application of the 20% reserve margin to support the need to construct the OCEC Unit 1 is inappropriate. (TR 411) First, he testified that the 20% reserve margin is based on a 1999 Staff evaluation of historical conditions which no longer reflect reality, including but not limited to, the improved operating reliability of existing and new FPL power plants. FPL witness Kingston acknowledged that newer combined-cycle technology is more reliable and efficient than the older technology. (TR 316) She also confirmed that FPL has added solar technology in the last 10 years. (TR 319) She further testified that over the past 10 years FPL has achieved a 92.7% average equivalent availability factor (EAF), which is higher than the utility industry average EAF of 87.1%. Even back in the 1999 stipulation proceeding, FPL's witness Denis recognized that "[i]gnoring the favorable impact of improved unit availabilities on system reliability, as . . . .[Commission staff] suggest in promoting a high reserve margin standard, in effect denies FPL's customers the savings that result from that improvement." (H.E. 79 at p. 12) As witness Wilson testified, if the Commission continues to rely on upon a 20% reserve margin to establish need without adequate, current evidence that such a reserve margin in needed, this will likely result in overbuilding by FPL. (TR 409) The cumulative impact of these failures is higher costs to customers.

Second, Witness Wilson testified that the 20% reserve margin was not based on a commonly accepted analytical method of calculating reserve margins. (TR 411) Third, witness Wilson pointed out that the use of a 20% reserve margin is not supported by a recent studies or substantive analysis demonstrating that it is a proper reserve margin. (TR 411)

While FPL witness Sim testified that it would not make sense to use the FRCC's 15% reserve margin in this docket, he had to concede that FPL previously adovacted for the 15% FRCC reserve margin before the Commission in the 1999 docket. (TR 519) Witness Sim also acknowledged that FPL has not conducted a reserve margin study since the 1999 stipulation was approved over 15 years ago. (TR 540, 541) He further acknowledged that FPL had the opprotunity to have an extenstive, external study done, but declined to do so. (TR 131, 134, 135) Witness Sim tried to argue that FPL's un-filed, internal "studies" point to (whatever that means) a 20% reserve margin. Citizens submit that such unsubstantiated hearsay should not be the basis of the customers incurring costs in excess of $1 billion. (TR 540, 541) Tellingly, Witness Sim admitted that he does not know if the reserve margin would be set higher or lower that 20% based on an actual study such as the external study done for Duke Carolinas. (TR 540-541, H.E. 29)

As ECOSWF Witness Rábago noted, the 20% reserve margin criterion does not ensure that generation capacity is needed. (TR 454) He testified that the standard of proof under Florida law is not satisfied merely by adherence to a 20% reserve margin test. (TR 451) As Witness Rábago submits, the Company has provided no evidence of how the settlement-based reserve margin test ensures system reliability and integrity. (TR 452) He notes that the spirit of Section 403.519, Florida Statutes, seeks the most economic and beneficial resources when there is a demonstrated need for those resources. (TR 453) Witness Rábago suggested that FPL's results-oriented arguments in its application uses the 20% reserve margin criterion as the vehicle for justifying a power plant building campaign which is inconsistent with the spirit of Section 403.519, Florida Statutes. (TR 453)

Planning to the minimum 15% reserve margin would not only meet the equitable sharing of energy reserves, but it would also avoid uneconomic and unnecesary overbuilding of generation

and the resulting increase in rates to ratepayers. (TR 460) The current in-service date for OCEC Unit 1 is June 1, 2019. However, FPL's reserve margin in 2019 is projected to be 15.7%. (TR 425) Thus, applying the minimum 15% reserve margin, the OCEC Unit 1 would not be needed for the proposed in-service date of June 1, 2019.

***10% Generation-Only Reserve Margin***

FPL has introduced a change and/or addition to the reserve margin criteria it wishes to use to justify its $1.23 billion baseload generating plant. (H.E. 63) When the reserve margin stipulation arrived at a 20% reserve margin figure (upon which FPL relies in this docket), the stipulation stated that:

> [n]either the adoption by the IOUs of the minimum twenty percent (20%) planning criterion nor the approval of this Stipulation by the Commission shall be deemed to create any presumption that capacity addition must be through any particular mix of generation and/or demand-side resources.

PSC-99-2507-S-EU at p. 9. FPL is seeking to modify the stipulation by adding a separate criterion. FPL is requesting a 10% GRM be considered as an additional condition in evaluating its need determination. FPL witness Sim claims that FPL has used this new criterion since 2014. (TR 93) However, FPL has not expressly asked for, nor has the Commission expressly approved, the use of the 10% GRM criterion. In fact, Witness Sim acknowledged that FPL did not provide any analysis to support the use of a 10% GRM criterion in its direct case (TR 143), but rather merely had relied on the use of the criterion in its previous 10 year site plans. (TR 142, 143) These plans are non-binding on either the utility or the Commission and can be changed without Commission approval or impacting customer rates. The attempt to justify the legitimacy of the 10% GRM criterion, based on bootstrapping off of a purely information filing, fails to meet even the most basic rudiments of competent substantial evidence.

Witness Sim cited a high winter peak event on January 11, 2010, as the reason FPL decided to explore a GRM criterion. (TR 514) Yet, he conceded that all firm load was met that day while FPL provided service to another utility. (TR 514, 515) Witness Sim tried to argue that if FPL had

been planning to a 15% reserve margin, firm load would not have been met. (TR 515) However, a close examination of SRS-10 shows that if FPL reduced its sale to another utility by 68 MW or more, firm load would have been met by FPL. (H.E. 69)

Witness Sim also argues that the 10% GRM criterion was necessary because of a higher reliance on DSM and the impact on system reliability. (TR 517) Witness Sim contends that a resource plan heavily reliant on DSM options is typically projected to have higher LOLP on FPL's system than another resource plan with less DSM but identical total reserve margin value. (TR 521) The analysis in SRS 11 applies a 10% GRM versus 5% GRM criterion for projecting the LOLP for 2021, the results demonstrated that the ability to meet firm load would only be increased by 11 more years when a 10% GRM versus 5% GRM is applied. (TR 559, 560, H.E. 70) Witness Sim testified that without any generation reserve margin, the generation-only percentage only dropped at its lowest to 4.7%. (TR 97) He acknowledged that FPL has never planned to meet all its resource needs using only DSM. (TR 96) Witness Sims conceded that this proceeding is not based on the LOLP criterion because FPL's LOLP is significantly below 0.1. (TR 562) He further conceded that the LOLP values of .0358 with a 5% GRM and 0.0257 for 10% GRM would not warrant a reliability-based need for new generation. (TR 562)

The creation of the GRM criterion is specifically designed to favor less reliance on DSM in resource planning. In fact, witness Sim contends that the GRM criterion is needed because a resource plan heavily reliant on DSM options is typically projected to have higher LOLP on FPL's system than another resource plan with less DSM but identical total reserve margin value. (TR 521) While Section 403.519(3), Florida Statutes, requires the Commission to take into account the need for electric system reliability and integrity, the statute also requires the Commission to consider whether renewable energy sources and technologies, as well as conservation measures,

are utilized to the extent reasonably available. Section 403.519(3), Florida Statutes, further requires that "[t]he commission shall also expressly consider the conservation measures taken by or reasonably available to the applicant or its members which might mitigate the need for the proposed plant . . . " Therefore, FPL's proposed 10% GRM criterion is in contravention of the express intent of the Section 403.519(3) to ensure that conservation measures including DSM are used to the fullest extent to meet resource needs. The proposed GRM would effectively eliminate the Commission's ability to fulfill its statutory mandate, rendering the 10% GRM criterion unlawful in addition to being a self-serving circumvention of the stipulation.

Moreover, Rule 25-6.035, Florida Administrative Code, already establishes a minimum generation availability through the required "spinning load" that is needed for peninsular Florida. The Rule states as follows:

> The following shall be utilized as the operating reserve standard for Peninsular Florida's utilities: operating reserves shall be maintained by the combined Peninsular Florida system at a value equal to or greater than the loss of generation that would result from the most severe single generating unit contingency. The operating reserves shall be allocated among the utilities in proportion to each control area's peak hour net energy for load for the preceding year, and the summer gross Florida Reliability Coordinating Council (FRCC) capability of its largest unit or ownership share of a joint unit, whichever is greater. Fifty percent shall be allocated on the basis of peak hour net energy for load and fifty percent on the basis of the summer gross FRCC capability of the largest unit. Operating reserves shall be fully available within fifteen minutes. At least 25% of the operating reserves shall be in the form of spinning reserves which are automatically responsive to a frequency deviation from normal.

Under this Rule, the spinning reserves, i.e. generation reserves, are already addressed through a series of determinations made on a "total ulitities" basis at the FRCC. Witness Sim confirmed that spinning reserves by definiton are met through generation-only resources. (TR 90) Hearing Exhibit 59 shows that FPL's reserve sharing obligation is 450 MW. (TR 91) Witness Sim confirmed that this reserve sharing is the amount of operating reserves under Rule 25-6.035,

Florida Administrtive Code, that has been allocated to FPL. (TR 92)

Witness Sim also acknowledged that a 10% GRM criterion has not been adopted by any other state commission. (TR 95) Witness Sim, who is the Chair of the Resource Working Group of the FRCC, also testified that the FRCC does not use a 10% GRM criterion as a planning standard. (TR 94, 95, 573) Witness Sim conceded that the 10% GRM criterion proposed by FPL for use in this docket is not a commonly accepted or utilized planning criterion throughout the utility industry. (TR 123)

FPL has not established through the evidence submitted in this docket that this unsubstantiated and untested 10% GRM criterion is necessary. Furthermore, it appears that the GRM criterion is in contravention of statutory requirements in Chapter 403, Florida Statutes, and redundant to the Rule on "spinning reserves" that is already in effect. Thus, the addition of a 10% GRM criterion, irrespective of the percentage used, is unnecessary for several reasons. First, FPL has not demonstrated that the usual criteria for evaluating need (loss of line probability and reserve margin percentage) is insufficient in this docket. Second, the additional 10% GRM criterion is unnecessary, is duplicative of the 25% "spinning load" requirement established by Rule, and will likely contribute to uneconomic and unnecessary overbuilding of generation.

***Conclusion***

In this docket, FPL has failed to meet its burden of proof to demonstrate that the OCEC Unit 1 plant is needed for reliability and integrity of FPL's system in June 2019. Without the OCEC Unit 1 being placed in service in 2019: (1) the LOLP is projected to be 0.054856 which demonstrates that the plant is not needed based on FPL's LOLP criterion of 0.1 day per year; and (2) the reserve margin is projected to be 15.7% which is higher than the 15% reserve margin established by Commission Rule 25-6.035, Florida Administrative Code, and the FRCC. The 10%

GRM criterion is contravention of Section 403.519(3), Florida Statutes, and thus would be inappropriate to apply in this need determination. Moreover, Commission Rule 25-6.035, Florida Administrative Code, already requires FPL to plan for the availability of 450 MW of spinning reserves and there is no evidence in this proceeding that FPL will not be able to meet this requirement in 2019. Based on the application of Section 403.519(3), Florida Statutes, Rule 25-6.035, Florida Administrative Code, and accepted utility industry criteria (LOLP and reserve margin), FPL has not established a need for OCEC Unit 1 in 2019.

**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?

**POSITION**: *Yes. There may be renewable energy sources and technologies or conservation measures that could have been taken by or reasonably available to Florida Power & Light, which might mitigate the need for the proposed Okeechobee Clean Energy Center Unit 1. However, FPL's DSM and PV solar evaluations were insufficient to determine whether there were ways to increase DSM and PV solar to meet a portion of any need. The introduction of a 10% GRM criterion creates an unlawful bias against finding ways to increase DSM and PV solar to meet a portion of any need.*

FPL witness Sim testified that FPL considered PV solar facilities and evaluated them as part of this need determination. (TR 58) He further contends that PV solar was dismissed because of uncertainty due to obtaining the necessary land, its cost, and the cost of PV equipment. (TR 64) ECOSWF witness Wilson noted that FPL provided incomplete information relating to additional analyses it may have performed regarding solar with respect to meeting the purported need. (TR 424) He further testified that because of the incomplete information regarding PV solar analyses, it was not possible to determine the extent to which solar technologies could substitute for any

need that may exist (now or in the future) for a combined cycle natural gas plant. (TR 424) SACE witness Rábago also criticized the PV solar evaluation because FPL only evaluated the PV solar option for its ability to supply all or a substantial portion of the needed 1,052 firm MW of summer capacity. (TR 458) He notes that FPL's PV solar evaluation was made on the timeframe needed to pursue a new natural gas unit, not the timeframe required to develop PV solar. (TR 458)

SACE witness Rábago testified that FPL evaluated a DSM resource option solely for its ability to meet all of the increase in forecasted need. He notes that this approach is unrealistic and does not consider matching an increase in demand side resources coupled with a smaller natural gas unit. (TR 457) He concludes that the DSM options not considered include sufficient demand side resources to defer the natural gas unit for a single year. (TR 457)

Furthermore, the creation of the GRM criterion is specifically designed to favor less reliance on DSM in resource planning. In fact, Witness Sim contends that the GRM criterion is needed because a resource plan heavily reliant on DSM options is typically projected to have higher LOLP on FPL's system than another resource plan with less DSM but identical total reserve margin value. (TR 521) While Section 403.519(3), Florida Statutes, requires the Commission to take into account the need for electric system reliability and integrity, the statute also requires the Commission to consider whether renewable energy sources and technologies, as well as conservation measures, are utilized to the extent reasonably available. Section 403.519(3), Florida Statutes, also requires that "[t]he commission shall also expressly consider the conservation measures taken by or reasonably available to the applicant or its members which might mitigate the need for the proposed plant . . . ." FPL's proposed 10% GRM criterion is in contravention of the express intent of the Section 403.519 to ensure that conservation measures including DSM are

used to the fullest extent to meet resource needs. Its use would place the Commission in a position of not being able to fulfill a direct mandate of state law.

There may be renewable energy sources and technologies or conservation measures that could have been taken by or reasonably available to Florida Power & Light, which might mitigate the need for the proposed Okeechobee Clean Energy Center Unit 1. However, FPL's DSM and PV solar evaluations are insufficient to determine whether there were ways to increase DSM and PV solar to meet a portion of any need. The introduction of a 10% GRM criterion creates a bias against finding ways to increase DSM and PV solar to meet a portion of any need.

**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?

**POSITION**: *No, using a margin reserve greater than 15% with a 10% GRM criterion will lead to uneconomic and unnecessary overbuilding of generation and result in unreasonable rate increases for FPL's ratepayers.*

As discussed in Issue 1, using the three criteria proposed by FPL will lead to the uneconomic and unnecessary overbuilding of generation and result in unreasonable rate increases for FPL's ratepayers. As witness Rábago testifies, the Company has provided no evidence of how the settlement-based reserve margin test ensures system reliability and integrity. (TR 452) He further testified that the spirit of Section 403.519, Florida Statutes, seeks the most economic and beneficial resources when there is a demonstrated need for those resources. (TR 453) Witness Rábago suggests that FPL's results-oriented arguments provided in its application use the 20% reserve margin criterion and 10% GRM criterion as the vehicle for justifying a power plant building campaign which is inconsistent with the intent of Section 403.519, Florida Statutes. (TR

452, 453) He testified that, while this approach might be beneficial to FPL's shareholders, the likely result is excess capacity and imposes a long-term rate burden on its customers and the electric market in Florida. (TR 453)

Even back in the 1999 stipulation proceeding, FPL's witness Denis recognized that "[i]gnoring the favorable impact of improved unit availabilities on system reliability, as . . . .[Commission staff] suggest in promoting a high reserve margin standard, in effect denies FPL's customers the savings that result from that improvement." (H.E. 79 at p. 12) As witness Wilson testified, if the Commission continues to rely on upon a 20% reserve margin to establish need without adequate, current evidence that such a reserve margin in needed, this will likely result in overbuilding by FPL. (TR 409) Witness Rábago also noted that FPL had paid little or no attention to the risk of overbuilding, despite the potential economic impacts on customers. (TR 460) He testified that since the proposal did not consider the risks and impact of overbuilding, FPL's proposal fails to properly address the requirement for adequate and affordable service. (TR 460) The cumulative impact of these failures is higher costs to customers.

**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?

**POSITION**: *No, the OCEC Unit 1 is a natural gas unit which will needlessly increase FPL's reliance on natural gas.*

FPL Witness Sim testified that "OCEC Unit 1 will not improve FPL's fuel diversity. . . ." (TR51). However, he contends that the addition of this unit will not significantly increase FPL's reliance on natural gas. (TR 51) Witness Sim further acknowledged that with the addition of OCEC Unit 1 added in 2019, natural gas will supply 69.5% of FPL's energy. (TR 194) This is an

increase from 68.2% of FPL energy being supplied by natural gas in 2014. (TR 194) Thus, the addition of this unit will increase FPL's overall reliance on natural gas as a fuel source. (TR 456) As SACE Witness Rábago testified, the risk of this excessive dependence on natural gas is significant for customers, who bear any and all fuel price risks. (TR 456)

Witness Sim insists that the addition of pipeline and improved supply availability will improve the diversity of gas supply. (TR 51) However, Witness Rábago noted that these fuel diversity measures do not quantify the added risks to which customers are exposed compared to a no-plant alternative. (TR 456) He further testified that the gas price volatility risk benefits of other mitigation measures would be far more effective if 1,622 MW of natural gas generation is not added to the fleet in 2019. (TR 456)

The addition of this unit only increases FPL's overall reliance on natural gas as a fuel source which is more than two thirds of its energy supply. The addition of natural gas supply does not mitigate FPL's overall reliance on natural gas as a fuel source. Thus, the OCEC Unit 1 is a natural gas unit which will needlessly increase FPL's reliance on natural gas.

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

**POSITION**: *No. Since there is no need to build generation to meet a need in 2019, the most cost effect alternative is not to self-build any new generation.*

FPL witness Sim claims that OCEC Unit 1 is the most economic self-build option for FPL's customers. (TR 68) He further testifies that the Request for Proposal (RFP) produced no adequate

responses. (TR 70-71) Witness Sim contends that the OCEC Unit 1 as proposed is the most cost effective of all self-build options. (TR 78-79)

As shown in Hearing Exhibit 63, a delay of one year in future capacity would result in significant cumulative present value of revenue requirement (CPVRR) savings. The total CPVRR for a delay of one year is at a minimum $237 million. Since there is no need to build new generation to meet a need in 2019, the most cost effect alternative is not to self-build any new generation.

**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?

**POSITION**: *No. Using the 15% minimum reserve margin in Rule 25-6.035, Florida Administrative Code, OCEC Unit 1 is not needed for the proposed in-service date of June 1, 2019. *

The Commission should not grant FPL's petition for determination of need for OCEC Unit 1 for the reasons discussed in Issues 1 through 5, and herein incorporated by reference. Further, using the 15% minimum reserve margin in Rule 25-6.035, Florida Administrative Code, and recommended by FRCC, the OCEC Unit 1 is not needed for the proposed in-service date of June 1, 2019.

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

**POSITION**: *Yes. *

Dated this 9th day of December, 2015

Respectfully submitted,

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**CERTIFICATE OF SERVICE**
**150196-EI**

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

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