

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In re: Petition for determination of need for Dania Beach Clean Energy Center Unit 7, by Florida Power & Light Company

DOCKET NO.: 20170225-EI

FILED: January 29, 2018

**CITIZEN'S POST-HEARING BRIEF**

The Citizens of the State of Florida, through the Office of Public Counsel, pursuant to the Order Establishing Procedure in this docket, Order No. PSC-2017-0426-PCO-EI, issued November 6, 2017, hereby submit this Post-Hearing Brief.

**STATEMENT OF BASIC POSITION**

FPL is proposing to retire its existing Lauderdale Units 4&5 and replace them with a new 2-on-1 advanced CC unit in June 2022 called the Dania Beach Clean Energy Center sited at the existing Lauderdale plant site in Broward County, Florida. (TR 64) The proposed Dania Unit 7 will produce 1,163 MW, which is an additional 279 MW more than what the current Lauderdale units produce. (TR 66) FPL alleges this proposal is \$337 million cumulative present value of revenue requirements (CPVRR) less expensive than retaining the existing units and \$1,288 million CPVRR less expensive than the equivalent amount of firm capacity in Southeast Florida supplied by solar and batteries sited in the Southeast. (TR 64) However, a review of the testimony and exhibits submitted by FPL demonstrates FPL has not met its burden to show a need for the Dania Unit in 2022.

First, FPL's 2016 Ten Year Site plan (TYSP) did not project a need to add new resources to its system until 2024 to meet system reliability. (TR 74) In addition, according to the 2017 Projection of FPL's Resource Needs, FPL's 2024 Summer Total Reserve Margin will be 19.8%,

which is only 54 MW below a full 20% margin reserve. (HE 3) Furthermore, the addition of the Corbett-Sugar-Quarry (CSQ) 500 kV line in mid-2019 provides a transmission import ability of approximately 1,200 MW which addresses the Southeast regional needs through 2030. (TR 82, 85) Assuming the retirement of Lauderdale Units 4&5 in late 2018 and the installation of the CSQ line in mid-2019, FPL's analysis and projections do not show a regional imbalance until 2025. (TR 85) Thus, FPL's own supporting documentation demonstrates that there is no need for a new unit before 2024.

Second, FPL's analysis to support its proposals relies on the assumption that a 4-year period between the retirement of the Lauderdale Units 4&5 and its replacement power is necessary and that all 1,163 MW of firm capacity must be replaced. (TR 87-88) However, FPL has not demonstrated that its reliance on either of these assumptions is supported by the evidence. While FPL supposedly considered scenarios of a one- and two-year delay, these scenarios included the unsupported "4-year" period between retirement and replacement of its current units to conclude the delays were uneconomic. (TR 87-88) Yet, FPL has not demonstrated that retiring the Lauderdale Units 4&5 in late 2018 with a delay in replacement power until 2024 is not more economical than FPL's proposed Dania replacement in 2022. (TR 87-88, 91-93) Moreover, since FPL's scenarios rely on matching the replacement of MW with the same timing as the Dania proposal, FPL failed to consider replacing the MW based on the need to meet margin reserves at the least cost possible.

For the reasons discussed in the following issues, the Commission should not grant FPL's determination of need for Dania Unit 7 to go into service as proposed in 2022. As described in Issue 1, there is no need for additional generation capacity until 2024. Moreover, FPL has not adequately evaluated whether solar and battery storage might be used to meet FPL's 20% margin

reserve needs in 2024 as discussed in Issue 2. As outlined in Issue 4, the addition of Dania Unit 7 will have minimal impact on fuel diversity since the proposed Dania Unit 7 uses natural gas and would replace the Fort Lauderdale Units 4&5 that currently use natural gas even if the new unit is a more efficient unit. Further, the Dania Unit 7 as proposed is not the most economical alternative as outlined in Issues 3 and 5. A six year delay scenario produces an approximately \$27 million CPVRR customer savings and a five year delay also likely produces a net CPVRR benefit to customers. (TR 156-157) Delaying Dania Unit 7 by a year or two and retiring Fort Lauderdale Units 4&5 in late 2018 is the least costly option based on the evidence provided in this case.

### ISSUES AND POSITIONS

**ISSUE 1:** Is there a need for the proposed Dania Beach Clean Energy Center Unit 7, 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. FPL’s own analysis demonstrates that there is no need for a new unit before 2024.

FPL’s 2016 Ten Year Site plan did not project a need to add new resources to its system until 2024 to meet system reliability. (TR 74) FPL Witness Sim testified the 2016 analyses showed that a regional imbalance would occur in the Southeastern Florida (SE) region in the 2024 timeframe. (TR 74) He further explained that “[w]hen an imbalance condition is projected, resources (generation, transmission, and/or DSM) need to be added either inside the region or, in the case of transmission, both inside and outside the region, to at least maintain, and hopefully enhance, regional balance.” (TR 76) Witness Sim noted that the SE region is 44% of FPL’s total load, is highly developed and continues to grow, and is near the end of the Florida peninsula. (TR 74)

In its 2016 TYSP, FPL used an un-sited CC unit as a placeholder for new generation need

in 2024. (TR 74) Based on this 2016 analysis, FPL decided to build and place into service the Corbett-Sugar-Quarry (CSQ) 500 kV line in mid-2019 which provides a transmission import ability of approximately 1,200 MW. (TR 82, 85, 147) The addition of the CSQ line addresses the Southeast regional needs through 2030 assuming no other changes in projected load, generation, and/or transmission capability. (TR 85) Furthermore, even assuming the retirement of Lauderdale Units 4&5 in late 2018 which produce 884 MW and the installation of the CSQ line in mid-2019, FPL's analysis and projections still do not show that a regional imbalance will occur until 2025. (TR 85, 111) Thus, FPL's own supporting documentation demonstrates that there is no need for a new unit before 2024.

Moreover, according to the 2017 Projection of FPL's Resource Needs, FPL's 2024 Summer Total Reserve Margin will be 19.8%, which is only 54 MW below a full 20% margin reserve assuming Fort Lauderdale Units 4&5 were to retire in late 2018 and that no new generation would be placed into service in 2024. (HE 3) Yet, FPL wants its customers to have to pay \$27 million more to place the Dania Unit 7 into service a full two years before it is actually needed. (TR 156-157) In fact, the reserve margin for 2023 without any new generation additions results in a projected 21% reserve margin. (HE 3) In 2023, Witness Sim's analysis projects an additional 233 MW above what is needed to meet the 20% reserve margin. (HE 3)

***Reserve Margin Planning Criterion***

Witness Sim testified he believed the 20% reserve margin was a minimum for both resource planning and need determination purposes. (TR 147-148) A review of FPL's TYSPs from 2013 through 2017 demonstrates that FPL's actual, annual reserve margins are frequently well above the 20% reserve margin for planning purposes, to-wit: (1) in 2013 – 28%; in 2014 – 28%; in 2015 – 26.7%; in 2016 – 22%; and 2017 - 21.3%. The Order adopting the Stipulation

which set a minimum 20% reserve margin planning criterion states that in:

[a]ll current and future proceedings under the Electrical Power Plant Siting Act, including those for the consideration of merchant plants, and all statutes, rules, regulations, and policies bearing on the Commission's determination of need for new generation (including the need determination criteria in [sec.] 403.519, Florida Statutes); . . . are unaffected by the Stipulation and the approval thereof.

Order No. PSC-99-2507-S-EU, issued December 22, 1999, in Docket No. 981890-EU at pp. 9-10. The Stipulation also states that the 20% reserve margin planning criterion will be a minimum and that "no maximum or cap will be represented or implied by this criterion." *Id.* at 8. Although there is no maximum or cap for the reserve margin planning criterion in the Stipulation, the language clearly suggests that in a need determination the reasonableness of costs is a significant balancing criteria (i.e. solicitations for generation, use of conservation and cost-effective resource alternatives) to be considered. *Id.* at 9-10. Yet, FPL is attempting to use this planning criteria as a justification for placing Dania Unit 7 into service a full three years before FPL's own planning criteria shows that it will barely be below the 20% reserve margin minimum. Assuming that the Fort Lauderdale Units 4&5 are retired in late 2018 without the addition of new generation, FPL shows a 19.8% projected margin reserve in 2024, only .2% below the stipulated 20% margin. (HE 3)

Furthermore, the Stipulation provided that "[s]hould any IOU exercise its prerogative to change its twenty percent (20%) minimum reserve margin planning criterion discussed herein, such IOU will make a good faith effort to provide notice of the change to the Commission." *Id.* at p. 9. Thus, under this Stipulation, FPL retains that option of changing this reserve margin criteria, either higher or lower than the 20% reserve margin, on its own with only notice to the Commission. The only firm, objective planning reserve margin criteria was adopted by the Commission in Rule 25-6.035, Florida Administrative

Code (F.A.C.), which establishes a minimum 15% planned margin reserve. Rule 25-6.035,

F.A.C., provides:

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 a 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. Even if the 20% reserve margin criteria is used as the planning reserve margin criteria, the Commission should adhere as closely to the 20% target. Otherwise, as the case herein demonstrates, ratepayers will end up paying for unnecessary additional capacity without a demonstrable need to serve a utility's customer load resulting in the overbuilding of generation.

As Sierra Club Witness Hausman stated, the 20% reserve margin represents that the combined accredited capacity of all resources on FPL's system including DSM must equal or exceed 120% of peak load. (TR 289) He also noted FPL has recently started using a generation-only reserve margin (GRM) meaning that FPL's accredited capacity excluding DSM must meet or exceed 110% of peak load. (TR 289) However, FPL's recently adopted GRM criteria is not being used by FPL as a justification for this need determination. Witness Hausmann also testified that the 20% reserve margin is an extremely conservative reliability criteria. (TR 290) He explained that the industry standard for reliability is to have sufficient reserves to achieve loss of load probability (LOLP) of one day in ten years. He further testified that, while FPL also considers LOLP, it rigidly relies on

the 20% reserve margin and the 10% GRM. (TR 290) Witness Hausman stated the 20% reserve margin criteria and GRM misled FPL to over-procure capacity that is not needed to meet the industry LOLP standard. (TR 290-291) In fact, FPL's overly generous application of the 20% reserve margin is leading it to procure excess capacity in 2022.

Witness Hausmann further testified that beyond the industry LOLP standard the marginal increase in reliability benefit diminishes rapidly, as the risk of capacity-related failure becomes diminishingly small. (TR 290) He stated that, even though load forecasts and other expectations about the future are inherently uncertain, this uncertainty does not justify placing Dania Unit 7 in service in 2022, two or three years earlier than any anticipated need. Moreover, Witness Hausman testified that, if FPL exceeds the standards approved by the Commission, then FPL is erring on the side of charging customers more than the appropriate level of balance. (TR 372)

#### ***4-Year period***

In producing FPL's economic analysis of the top three "competitive" plans, Witness Sim acknowledged that he designed these plans "to maintain the same roughly 4-year period in which a major Southeastern Florida generation component would be missing as is assumed in Plan 2." (TR 93) In an attempt to support FPL's argument that a delay of one or two years is uneconomic, Witness Sim used this "4-year" period as an artificial constraint on the plans he reviewed. Thus, his one and two-year delay scenarios showed an approximately \$12 million and \$38 million cost increase, mainly due to increases in maintenance costs and fuel costs for operating the Fort Lauderdale Units 4&5 at the same level over this additional one or two-year period. (TR 93, 96) However, Witness Hausman correctly noted that these one-year and two-year delay plans (Plans 4 and 5) assume this 4-year period independent of a reliability need (i.e. regional imbalance in the 2024-26 timeframe). (TR 303) Witness Hausman testified that "there is no apparent reason why four years is any kind of 'magic number,' except that it is the amount of time that would occur

under FPL's proposed plan." (TR 303)

In an attempt to justify its use of the 4-year period in the analysis, Witness Sim testified it was based on the specific guidance of FPL's system operations staff. (TR 155) Yet, he did not include in his direct testimony this supposed justification for the use of the 4-year period. In fact, only during rebuttal testimony did FPL attempt to justify this artificial 4-year period through the use of a newly created criteria (i.e. area reliability margin calculation).

FPL Witness Sanchez testified that his use of the term "area reliability margin calculation" combines aspects of a reserve margin calculation and load flow analysis. (TR 405) However, he conceded that his area reliability margin calculation and regional imbalance are very similar. (TR 496) And Witness Sanchez acknowledged that FPL is not showing a regional imbalance until 2025. (TR 500) With the retirement of the Fort Lauderdale Units 4&5 in late 2018, the CSQ line being placed in service in mid-2019, and no new generation being added, Witness Sanchez calculated an area reliability margin reserve of 1,415 MW in 2024. This shows 178 MW in additional capacity being available in the SE region even if the SE region's largest unit, Port Everglades Unit 5 (1,237 MW), was out of service. (TR 501). In 2017, Witness Sanchez' area reliability margin calculation showed that FPL had an actual area reliability margin of 1,244 MW (planned area reliability margin of 1,501 MW). With the retirement of the Fort Lauderdale Units 4&5 in late 2018, the CSQ line placed in service in mid-2019, and no new generation being added, this new calculation shows a 1,523 MW area reliability margin which is higher than the planned or actual 2017 area reliability margin. (TR 503) Thus, consistent with the established regional imbalance calculation, the area reliability margin does not demonstrate a need for additional generation capacity until at least 2024.

While Witness Sanchez attempts to justify the earlier placement of Dania Unit 7 into service



in 2022 because of the need for a “more robust” area reliability (TR 407), this is based on his desire to be able to address multiple unexpected situations. (TR 405) He stated FPL’s obligation to serve means that, within 30 minutes after the loss of a generation resource or transmission or substation facility, it must replace this amount of generation and be able to address the next contingency. (TR 406) However, this operating reserve obligation is defined by Rule 25-6.035, F.A.C., 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 load reserves address the contingency preparation requirement established by the Commission and the need to make sure that customers can be served reliably. As Witness Hausmann correctly noted, the addition of excess capacity beyond the industry standard LOLP leads to diminishing reliability returns as the risk of capacity-related failure becomes vanishingly small. (TR 290) He testified the 20% reliability reserve margin and the GRM are already extremely conservative reliability criteria when compared to the industry standard LOLP. (TR 290) Witness Hausman further testified that he did not believe there would be a net benefit to FPL’s customers as a result of the additional “marginal” reliability (i.e., above the 20% reserve margin) because the costs exceed any small reliability benefit. (TR 371) Thus, requiring customers to pay for “additional” or “more robust” reliability is unnecessary and uneconomical to ratepayers.

## ***Conclusion***

In evaluating the need for additional capacity, the previously approved and independently verifiable reserve margin criteria should be used. Rule 25-6.035, F.A.C., establishes a 15% minimum reserve margin, even though the Commission has through a stipulation adopted a 20% minimum reserve margin for planning purposes. Given that a 20% reserve margin is already a higher than the industry standard reserve margin, any excess capacity caused by the addition of new plant should not result in the projected reserve margin being more than slightly above the 20% standard. FPL's own analysis shows that its reserve margin will not go below 20% until 2024, even with the retirement of the Fort Lauderdale Units 4&5 in late 2018. (HE 3) In addition, the established regional imbalance calculation, as well as the area reliability margin, do not show a need for additional generation capacity until at least 2024. Thus, FPL's own analysis demonstrates that there is no need for a new unit before 2024.

**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 Dania Beach Clean Energy Center Unit 7?

**POSITION:** FPL has not adequately evaluated whether solar and battery storage might be used to meet its 20% margin reserve needs in 2024.

FPL Witness Sim stated that he evaluated a solar and battery storage alternate (Plan 3). (TR 87-88) In Plan 3, he assumed the retirement of the Fort Lauderdale Units 4&5 in late 2018 and an equivalent amount of solar and battery power being added to approximate 1,163 MW of firm capacity. (TR 88) Plan 3 also assumed 1,033 MW of solar with 755 MW of battery storage sited in the SE region by 2022. (TR 88) Based on these assumptions, Witness Sim's economic

analysis found the Plan 3 alternative to be approximately \$1,288 million more expensive than the addition of Dania Unit 7 in 2022. (TR 92)

However, as Sierra Club Witness Hausman properly noted, there is a flaw with Witness Sim's analysis of the renewable energy sources and technologies or conservation measures. Witness Hausman put forth an illustrative example of a lower cost alternative to use renewable and conservation measures to meet the reliability needs. (TR 317) He noted that FPL's analysis could have considered the deployment of these clean energy resources when they are needed to meet reliability requirements, and not in a way that imposes unnecessary costs by attempting to mimic a resource with very different practical, operational, and financial characteristics such as a gas-fired CC. (TR 317)

Witness Hausman's illustration used a combination of solar, battery, and demand response resources deployed in lower MW amounts over later time periods starting in 2024 than assumed in FPL's Plan 3. (TR 318-319) While he did not perform an economic analysis, Witness Hausman testified that "the capital costs would be many hundreds of millions of dollars less than under FPL's Plan 3 in an NPVRR basis, and could be cost competitive with Plan 2" (Dania Unit 7). (TR 320) He further testified FPL's Plan 3 was not designed to yield the lowest cost scenario for relying on clean energy resources, and that it should not be used to disqualify renewable energy sources and technologies or conservation measures due to lack of cost effectiveness without substantial additional analysis. (TR 320)

Witness Sim attempted to refute Witness Hausman's criticism of FPL's Plan 3 by arguing that universal solar sites (i.e. 74.5 MW of solar per site) in the SE region are at a disadvantage because of the cost of land. (TR 571) In response to criticism of frontloading MW in the solar

scenario, Witness Sim limited his discussion to distributive generation (DG) solar installation, and excluded universal solar projects. (TR 566-568) However, Witness Hausman's criticism towards FPL related to its failure to address a realistic use of renewables and conservation measures to meet reliability in the alternative plan. (TR 318-320) Witness Hausman testified the factors that necessary to evaluate a renewable energy and technology alternative plan should have included: (1) minimum amount of new storage as required; (2) use of universal solar versus DG solar with appropriate RFPs; and (3) third-party DR aggregators via a RFP process and operation and transmission upgrades option into the SE region. (TR 321) He pointed out that such inquiry should be informed by RFPs to allow third-party providers to propose universal solar options without consideration of the size limits in the Florida bid rule (i.e. under 75 MW not being subject to bid). (TR 321) Yet, Witness Sim acknowledged that FPL decided not to bid out this need determination. (TR 614)

As a result, FPL did not adequately pursue renewable energy sources and technologies or conservation measures that were reasonably available, which might have mitigated the need for the proposed Dania Beach Clean Energy Center Unit 7. FPL's alternative Plan 3 places unnecessary strictures on the implementation and timing of solar and battery technology. Thus, FPL has not adequately evaluated whether solar and battery storage might be used to meet its 20% margin reserve needs in 2024.

**ISSUE 3:** Is there a need for the proposed Dania Beach Clean Energy Center Unit 7, 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. FPL's own analysis demonstrates that there is no need for a new unit before

2024.

FPL is proposing to retire its existing Lauderdale Units 4&5 and replace them with a new 2-on-1 advanced CC unit called the Dania Beach Clean Energy Center in June 2022 sited at the existing Lauderdale plant site in Broward County, Florida. (TR 64) The proposed Dania Unit 7 will produce 1,163 MW, which is an additional 279 MW more than the current Fort Lauderdale units generate. (TR 66) FPL alleges this proposal is \$337 million CPVRR less expensive than keeping the existing units and \$1,288 million CPVRR less expensive than the equivalent amount of firm capacity in Southeast Florida supplied by solar and batteries sited in the Southeast. (TR 64)

For the reasons addressed in Issue 1, FPL has not established a need for a new unit before 2024. In a six-year delay scenario, the retirement of the Fort Lauderdale Units 4&5 in late 2018 and the placing of new generation in service in 2024 would result in a \$27 million CPVRR in customer savings. A five-year delay scenario (with the retirement Fort Lauderdale Units 4&5 in late 2018 and new generation placed in service in 2023) would also likely produce a net CPVRR benefit to customers. (TR 156-157) Witness Hausman calculated the net CPVRR resulting from these 5 or 6-year delay scenarios to be \$33 million and \$63 million, respectively. (TR 315-316) While Witness Sim argued that placing the Dania Unit 7 into service in 2022 is the most cost effect alternative, this only holds true if the 4-year period between retirement of the older units and placement of the new units is maintained. (TR 92-93, 156-157) As demonstrated by FPL's own analysis, a new generation unit is not need until 2024.

**ISSUE 4:** Is there a need for the proposed Dania Beach Clean Energy Center Unit 7, taking into account the need for fuel diversity and supply reliability, as this criterion is used in Section 403.519(3), Florida Statutes?

**POSITION:** No. The proposed Dania Unit 7 uses natural gas and would replace the Fort Lauderdale Units 4&5 that use natural gas. At best, the replacement with a more efficient natural gas plant has scant impact on FPL's overall reliance on natural gas. However, FPL's own analysis demonstrates that there is no need for a new unit fueled by natural gas or otherwise before 2024.

FPL is proposing to retire its existing Lauderdale Units 4&5 and replace them with the new Dania Beach Clean Energy Center in June 2022. (TR 64) The proposed Dania Unit 7 will produce 1,163 MW, which is an additional 279 MW more than the current Fort Lauderdale units generate. (TR 66) Witness Sim stated that because of the high level of fuel efficiency, Dania Unit 7 is projected to use a lower total amount of natural gas than if the Fort Lauderdale Units 4&5 continue to operate. (TR 68) While Witness Sim mentions increased fuel source diversity due to the new Sabal Trail/Florida Southeast Connection pipeline system (Sabal Trail), the pursuit of solar projects via the SoBRA and new nuclear facilities at its Turkey Point site (TR 68-69), none of these references are part of this need determination or have any impact as to whether the Dania Unit 7 project adds additional fuel diversity.

As Sierra Club Witness Hausman testified, Dania Unit 7 is not an effective way to enhance FPL's fuel diversity and supply reliability relative to alternative solutions available to the Company. (TR 321) For FPL, its reliance on natural gas as a fuel source for its fleet is at 71%. (TR 322) The Dania Unit 7 project is larger and produces more MW than the existing Fort Lauderdale Units 4 & 5. (TR 322)

While Dania Unit 7 will lower system usage of natural gas compared to the status quo scenario (TR 594), the Dania Unit 7 will not enhance fuel diversity. Witness Sim's statement that the new unit will improve "fuel diversity" due to this overall decrease in use of natural gas is based upon the Fort Lauderdale Units 4&5 continuing to operate at the same level. (TR 594) If Fort Lauderdale units were retired in late 2018 and renewable resources or DSM were utilized to replace the power, then fuel diversity would actually be enhanced.

However, the simple fact is that the proposed Dania Unit 7 uses natural gas and would replace the Fort Lauderdale Units 4&5 that also use natural gas. At best, the replacement with a more efficient natural gas plant has scant impact on FPL's overall reliance on natural gas. Moreover, FPL's own analysis demonstrates that there is no need for a new unit fueled by natural gas or otherwise before 2024.

**ISSUE 5:** Will the proposed Dania Beach Clean Energy Center Unit 7 provide the most cost-effective alternative available, as this criterion is used in Section 403.519(3), Florida Statutes?

**POSITION:** No. Retiring the Fort Lauderdale Units 4&5 in late 2018 with a delay in replacement power until 2024 is more economical than FPL's proposed Dania Unit 7 replacement into service in 2022.

Witness Sim conceded that he did not perform an initial economic analysis in which the Fort Lauderdale Units 4&5 are taken out of service in 2018 and a new generation unit is placed into service after 2023 or 2024. (TR 156-157) Nor did he consider a scenario where a unit was placed into inactive reserve in 2018. (TR 107, 108) However, when asked in discovery to look at a six-year delay scenario, Witness Sim acknowledged that a \$27 million CPVRR customer savings was likely, and that net CPVRR benefit to customers in a five-year delay scenario was also

probable. (TR 156-157)

Witness Hausman testified that the cost savings associated with just delaying the in-service date of the Dania unit by one or two years more than offsets any small increase in project costs due to inflation over the same timeframe. (TR 375). He further testified that, by not making customers pay for this resource two years before it is needed, this will itself save customers money. (TR 375) Witness Hausman calculated the net CPVRR due to a 5-year delay or 6-year delay between retirement of the Fort Lauderdale Units 4&5 and the placement of Dania Unit 7 into service results in customer saving of \$33 million and \$63 million, respectively. (TR 315-316) He further testified that, while there may be a “fuel penalty” due to a delay, the bulk of the additional costs are due to delaying the retirement of the Fort Lauderdale Units 4&5 which can be avoided by retiring them on the current schedule. (TR 375-376) Witness Hausman confirmed that delaying Dania Unit 7 by a year or two and retiring the Fort Lauderdale Units 4&5 in late 2018 is the least costly option based on all the circumstances provided in this case. (TR 376-377) Thus, retiring the Fort Lauderdale Units 4&5 in late 2018 with a delay in replacement power until 2024 is more economical than FPL’s proposed Dania Unit 7 being placed into service in 2022.

**ISSUE 6:** Based on the resolution of the foregoing issues and other matters within its jurisdiction which it deems relevant, should the Commission grant Florida Power & Light’s petition to determine the need for the proposed Dania Beach Clean Energy Center Unit 7?

**POSITION:** No, not at this time. Delaying Dania Unit 7 by a year or two and retiring the Fort Lauderdale Units 4&5 in late 2018 is the least costly option based on all the circumstances provided in this case.

If Dania Unit 7 is placed into service in 2022, as requested in this need determination, FPL’s projected Summer Reserve Margin is 26.7%. (HE 62) With the addition of the Dania Unit



7 in 2024, the projected Summer Reserve Margin would still remain above the 20% reserve margin criteria (21.7% in 2022 and 21.0% in 2023). (HE 3) Moreover, the “area reliability margin” calculation, for reference only, shows that with the addition of Dania Unit 7 in 2022 the additional regional capacity would be 3,254 MW. (HE 61) This is 2,017 MW of additional capacity available in the SE region even if the SE largest unit, Port Everglades Unit 5 (1,237 MW) was out of service in 2022. (TR 501) While this additional capacity will be reduced over time due to increase in load, FPL will still have an additional excess capacity available for sale on the market of approximately 1,608 MW in 2025.

At least one Commissioner expressly asked what would happen with this excess capacity. (TR 615-616) Witness Sim responded that he believed this would certainly enhance the opportunities by which sales could be made to the benefit of FPL’s customers because it would offset costs. (TR 616) However, Witness Sim later noted that such sale would be under asset optimization. (TR 615) Under the asset optimization, market sales which result in incremental gains above \$40 million would be partially retained for the benefit of FPL’s shareholders. Order No. PSC-16-0560-AS-EI, issued December 15, 2016, in Dockets Nos. 160021-EI, 160061-EI, 1600062-EI, and 16-0088-EI, at p. 27.

While it may be beneficial to incent FPL to maximize unused capacity on a spot basis, it is not good policy to allow the utility to add excess capacity two years before the evidence demonstrates a need, such as the case herein. Moreover, the Florida Supreme Court in *Tampa Elec. Co. v. Garcia*, 767 So. 428, 434 (2000), stated “[a] determination of need is presently available only to an applicant that has demonstrated that a utility or utilities serving retail customers has specific committed need for **all** of the electric power to be generated at a proposed plant.” (*Emphasis added*) In the *Tampa* case, Duke Energy New Smyrna Beach Power Co., Ltd

(Duke), who was not a Florida retail electric utility at the time, proposed building a 514 MW plant; however, at the time of the need determination Duke had only established that 30 MW were committed to New Smyrna for its retail customers. *Id.* at 430. The remaining 484 MW was uncommitted and intended to be made available for sale at competitive wholesale rates to utilities that directly serve retail customers. *Id.* The Court found that “the statutory scheme embodied in the Siting Act and FEECA was not intended to authorize the determination of need for a proposed power plant output that is not **fully** committed to use by Florida customers who purchase electrical power at retail rates.” *Id.* at 435 (*Emphasis added*). If the Dania Unit 7 is allowed to go into service two to three year before FPL’s has a need for the capacity for retail use, the excess capacity of approximately 2,017 MW in 2022 (reduced to approximately 1,608 MW in 2025) is functioning as a merchant plant in the wholesale market for the benefit of FPL’s shareholders.

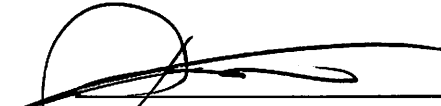
For the reasons discussed in the foregoing issues, the Commission should not grant FPL’s determination of need for Dania Unit 7 to go into service as proposed in 2022. As described in Issue 1, there is no need for an additional generation capacity until 2024. Furthermore, the Dania Unit 7 as proposed is not the most economical alternative. A six-year delay scenario produces an approximately \$27 million CPVRR in customer savings and a five-year delay also likely produces a net CPVRR benefit to customers. (TR 156-157) Delaying Dania Unit 7 by a year or two and retiring the Fort Lauderdale Units 4&5 in late 2018 is the least costly option based on all the circumstances provided in this case.

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

**POSITION:**      Yes

Respectfully submitted,

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of the State of Florida

**CERTIFICATE OF SERVICE**  
**Docket No. 20170225-EI**

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by electronic mail on this 29<sup>th</sup> day of January, 2018, to the following:

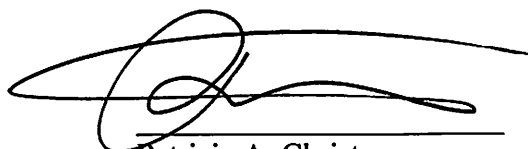
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