July 11, 2017

Chairman Brown, Comm'rs. Brisé, Polmann, and Graham
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, Florida 32399-0850

Re: Florida law precludes FPL's petition in Docket No. 170122

Dear Commissioners:

Sierra Club urges you to deny FPL's petition for an exemption under Rule 25-22.082(18), Florida Administrative Code ("F.A.C."), because it conflicts with the Commission's statutory duty to protect the public from paying for costly new generation when cheaper options may be available. Specifically, the Commission has a duty to take into account options besides the new generation proposed by a utility; this starts with the utility testing the market for options through a competitive bid process known as a "request for proposal" or "RFP." Here, FPL proposes new gas-burning generation to replace existing generation at its Lauderdale power plant in Dania Beach, Florida (the "Project"). At the same time, FPL seeks an exemption from issuing an RFP based on its myopic comparison of building the Project to building nothing at all. But that comparison cannot rule out other options that an RFP may return, because—as even FPL admits—in today's market options abound that can save customers money, such as renewables, storage, and demand-side resources. Absent an RFP, FPL has not disclosed how it will inform the Commission of just how much money its customers could save by pursuing options like these instead of the Project.

Rather, FPL's petition effectively asks for permission to ignore other options. Fortunately, Florida law does not sanction such ignorance. As discussed further below, the statute that controls this matter—Section 403.519, Florida Statutes—precludes FPL's request because it would impede the Commission from carrying out its statutory duties to take into account other options. Moreover, the Commission's criteria for exemptions to RFPs—in the Bid Rule[1]—also precludes FPL's request because FPL has failed to show that the Project (1) lowers electricity costs, (2) increases reliability, or (3) serves the public welfare relative to other options that are certainly available, but that FPL has chosen to ignore. As documented

[1] Fla. Admin. Code R. 25-22.082 [hereinafter "the Bid Rule"].

below, renewables, storage, and demand-side resources all offer cost savings, reliability services, and public welfare benefits that Florida law requires the Commission to consider.

Respectfully, on the record here, the Commission should deny FPL's request or stay this matter with instructions for FPL to file supplemental information regarding how it will provide the Commission the missing information regarding other options, including their current market price. The instructions should specify that the relevant options include adding renewables, storage, and demand-side resources instead of gas-burning generation. That said, should the Commission decide to approve FPL's request, it should do so consistent with its Staff's observation that "granting the exemption will not relieve [FPL] of any requirements during a future [Section 403.519] need determination process."[2] In other words, any such decision should affirm that the exemption in no way prejudges the determination under Section 403.519, Florida Statutes, of whether the Project is the "most cost-effective alternative available." Further, the Commission should ensure that, consistent with Section 403.519, FPL develops the required evidence regarding "whether renewable energy sources and technologies, as well as conservation measures, are utilized to the extent reasonably available."[3]

I. Section 403.519, Florida Statutes, Precludes FPL's Request Because It Would Impede the Commission from Discharging Its Statutory Duty to Take Into Account Potential Money-Saving Options Besides the Project.

Section 403.519, Florida Statutes, prescribes rigorous fact-finding by the Commission to determine whether there is a "need" for new generation in Florida. "In making its determination," the statute states, in pertinent part, "the [C]omission shall take into account … whether the proposed plant is the most cost-effective alternative available, and whether renewable energy sources and technologies, as well as conservation measures, are utilized to the extent reasonably available."[4] Accordingly, the Commission specified in its Bid Rule that utilities must perform a market test—known as a "request for proposals" or "RFP"—and submit the results to the Commission for its review in need determination proceedings. An RFP, the Commission has noted, "provides [it] with valuable information on the available capacity alternatives and is a valid tool for evaluating the cost-effectiveness of proposed generating units."[5] Indeed, by soliciting bids from a wide range of third parties, a well-

---

[2] Staff Recommendation, Docket No. 170122-EI, at 5 (June 29, 2017).

[3] Section 403.519, *Florida Statutes*.

[4] Likewise, section 403.502(4), *Florida Statutes*, which sets out the legislative intent behind the Florida Electric Power Plant Siting Act, Fla. Stat. § 403.501–403.518, reiterates that the Commission cannot approve a new power plant without considering whether the utility has first pursued all "reasonably available" renewable energy resources and conservation measures.

[5] *In re: Petition for Exemption under Rule 25-22.082(18), F.A.C., from Issuing Request for Proposals (RFPs), by Florida Power & Light Company*, Docket No. 060426-EI, Order No. PSC-06-0779,

designed RFP can drive down project costs and reveal superior alternatives that the utility may not have considered.[6] As such, RFPs can generate site-specific and need-specific information on the costs and availability of options that the Commission cannot likely acquire through other methods.[7] Thus, while the Bid Rule identifies certain limited grounds for an exemption from performing an RFP, Section 403.519 precludes such exemptions when they would obstruct the fact-finding prescribed by statute.

Here, Section 403.519 governs FPL's request, as the Bid Rule is the Commission's implementing regulation for developing the record for Section 403.519 need determinations. FPL itself has admitted that that section governs its Project, and Staff clearly agrees.[8] Moreover, the Florida Supreme Court has affirmed that the "powers exercised by the Commission come from [] statute."[9] As a corollary, the Commission can neither change the law,[10] nor interpret the statutory text "contrary to the clear legislative intent."[11] Instead, the Commission must stay within the limits prescribed by statute.[12] Thus, Section 403.519 controls this matter and precludes FPL's request because it would impede the Commission's fact-finding with respect to other options besides the Project.

Indeed, FPL's request to forgo an RFP would almost certainly deny the Commission the information it needs under Section 403.519 regarding other options, such as the market price of renewables, storage, and demand-side resources. While an RFP is certainly not the only way to obtain such information, FPL has failed to identify how it will do so absent an RFP. Nothing in the record here, or in other proceedings, suggests that FPL has obtained these data in recent years. Rather, FPL has pursued new gas generation without any

---

at 3 (F.P.S.C. Sept. 19, 2006).

[6] *In re: Petition by Florida Power Corporation for Waiver of Rule 25-22.082, F.A.C., Selection of Generating Capacity,* Docket No. 981360-EI, Order No. 99-0232, at 10 (F.P.S.C. Feb. 9, 1999) (stating that the RFP requirement "assure[s] that [the] ratepayers benefit from the most economical resource addition").

[7] Indeed, the Commission has stated that, "[a]s a general matter of policy, we believe that bypassing the RFP process ultimately contributes to stifling the economic benefits of competitive generation in Florida." *Id.* at 9.

[8] FPL's Petition to Request Exemption under Rule 25-22.082(18), F.A.C., from Issuing a Request for Proposals for the Modernization of the Lauderdale Plant at 5–6, Docket No. 170122-EI (May 22, 2017) [hereinafter FPL's Petition]; Staff Recommendation, Docket No. 170122-EI, at 1–2 (June 29, 2017).

[9] *Peoples Gas Sys. v. City Gas Co.*, 167 So. 2d 577, 584 (Fla. 3d DCA 1964), *aff'd*, 182 So. 2d 429 (Fla. 1965).

[10] *Fla. Tel. Corp. v. Carter*, 70 So. 2d 508, 510 (Fla. 1954).

[11] *Abramson v. Fla. Psychological Ass'n*, 634 So.2d 610 (Fla.1994) (citing *Dairy Farmers Fed'n v. Borden Co.*, 155 So.2d 699 (Fla. 1st DCA 1963)).

[12] *Citizens v. Graham*, 191 So. 3d 897, 900 (Fla. 2016) (holding that judicial deference "cannot be accorded when the commission exceeds its authority").

meaningful investigation of the market price of incremental additions of renewable, storage, or demand-side resources, as exemplified by FPL's buildout of an all-gas peaking generation fleet. Yet, as FPL itself admits, other options such as solar, storage, and demand-side resources are abundantly available, "can be very cost-effective," and "save customers money."[13] For all these reasons, FPL's request should be denied, or stayed with the above instructions, to assure the Commission that it will be able to discharge its statutory duty to take into account other options besides the Project pursuant to Section 403.519.

II. The Bid Rule Also Precludes FPL's Request.

In addition to violating the statutory requirements of Section 403.519, FPL's fails to meet the criteria for an exemption under the Bid Rule, because it fails to provide sufficient evidence regarding other options to obviate the need to test the market for other options. Indeed, FPL's petition focuses on comparisons between building the Project versus building nothing at all.[14] While such comparisons might inform whether FPL needs to develop generation in the first place, they have no bearing on whether the Project should qualify for an exemption from the RFP requirement under Rule 25-22.082(18). The RFP requirement aims to ensure that "a public utility's selection of a proposed generation addition is the most cost-effective alternative available," *taking as given* the need for new generation.[15] Thus, in deciding whether to grant FPL an exemption from the RFP requirement, the Commission should focus on whether the Project is superior to alternative projects that FPL could solicit through an RFP. FPL's comparisons between the Project and the existing gas units must not distract the Commission from the relevant analysis.

Notably, FPL offers no empirical support for the Project's superiority over third-party alternatives. FPL, for example, makes no attempt to quantify the benefits of the Project over alternative projects that it could expect from an RFP. Instead, FPL asks this Commission to waive the protections of the RFP process based on the same types of broad, qualitative, and largely unsubstantiated assertions that the Commission has criticized in the past.[16] At the same time, FPL's petition ignores the cost savings, reliability services, and public welfare benefits of renewables, storage, and demand-side resources, as discussed in greater detail below. FPL therefore fails to show that the Project will (1) lower electricity costs, (2) increase reliability, or (3) serve the public welfare relative to available alternatives. Thus, because the

---

[13] *See infra* 8.

[14] *See, e.g.*, FPL's Petition at 10 ("The Dania Beach Clean Energy Center currently is projected to produce approximately $400 million CPVRR savings for FPL customers compared to operating the existing plant long-term.").

[15] Fla. Admin. Code R. 25-22.082(1).

[16] *See In re: Petition for Exemption under Rule 25-22.082(18), F.A.C., from Issuing Request for Proposals (RFPs), by Florida Power & Light Company*, Docket No. 060426-EI, Order No. PSC-06-0779, at 3 (F.P.S.C. Sept. 19, 2006) (expressing concern about the "broadness of FPL's petition").

Project does not satisfy any of the three exemption prongs of the Bid Rule, the Commission should deny FPL's petition and order the company to issue an RFP.

a. FPL Has Failed to Show that the Project Lowers Costs Relative to Other Options; Rather, the Project Would Increase Customers' Exposure to Volatile Gas Prices, While Robbing Them of the Savings Offered by Renewables, Storage, and Demand-Side Resources.

In recent years, FPL has developed an expensive addiction to methane gas, with more than 70 percent of its generating capacity relying on this fuel in 2016.[17] FPL's gas overreliance exposes its customers—Floridian families and businesses—to high levels of economic risk because gas markets are prone to wild swings, as demonstrated by spiking prices in 2001, 2003, 2006, and 2008.[18] Indeed, the Commission itself underscored the problem of price shocks in its February 21, 2017, workshop seeking solutions to limit customers' exposure to volatile gas markets.[19] As the Sierra Club highlighted in advance of the workshop, existing efforts to reduce price volatility have imposed significant costs on customers.[20] Between 2002 and 2016, for example, statewide, electric utility customers lost $6.5 billion on fixed volume hedges—financial instruments that mortgage the utility's ability to benefit from declining prices in exchange for greater predictability of fuel costs and more stable energy bills.[21] Notably, FPL's customers shouldered $4.5 billion of these losses due to

---

[17] *See* FLA. POWER & LIGHT, TEN-YEAR POWER PLANT SITE PLAN: 2016–2025, at 91 (Apr. 2016), *available at* http://www.psc.state.fl.us/Files/PDF/Utilities/Electricgas/TenYearSitePlans/2016/Florida%20Power%20and%20Light.pdf; DUKE ENERGY FLORIDA, TEN-YEAR SITE PLAN: 2016–2025, at 2-13 (Apr. 2016), *available at* http://www.psc.state.fl.us/Files/PDF/Utilities/Electricgas/TenYearSitePlans/2016/Duke%20Energy%20Florida.pdf; GULF POWER CO., TEN YEAR SITE PLAN: 2016–2025, at 36 (Apr. 2016), *available at* http://www.psc.state.fl.us/Files/PDF/Utilities/Electricgas/TenYearSitePlans/2016/Gulf%20Power.pdf; TAMPA ELEC. CO., TEN-YEAR SITE PLAN: JANUARY 2016 TO DECEMBER 2025, at 57 (Apr. 2016), *available at* http://www.psc.state.fl.us/Files/PDF/Utilities/Electricgas/TenYearSitePlans/2016/Tampa%20Electric%20Company.pdf.

[18] *See* U.S. ENERGY INFO. ADMIN., *Henry Hub Natural Gas Spot Price*, (July 6, 2017), https://www.eia.gov/dnav/ng/hist/rngwhhdD.htm.

[19] *See* Sierra Club, Comment Letter on Staff and IOU Proposed Natural Gas Hedging Strategies, Document No. 03126-17 (Mar. 6, 2017).

[20] *Id.* at 3–4.

[21] *See* Jerome R. Stockfish, *Utilities Put Hedging on Hold*, TAMPA BAY TIMES (Nov. 3, 2016, 11:25 AM), http://www.tampabay.com/news/business/energy/duke-tampa-electric-co-agree-to-halt-fuel-price-hedging-which-has-cost/2301251.

the utility's heavy reliance on gas.[22] Since 2016, total losses have climbed to nearly $7 billion—and FPL reported additional hedging costs of $223 million in its April, 2017, filings with the Commission.[23] Thus, far from protecting the pocketbooks of its customers, FPL's financial "solutions" to gas price volatility have increased the energy bills for households and businesses across Florida.

FPL's petition, however, discusses neither the issue of price volatility nor the fact that the Project will further skew its already unbalanced generation portfolio. Despite all the money lost to financial hedging practices, FPL asks the Commission to fast-track new gas generation that would exacerbate gas price shocks and their associated costs for customers. To make matters worse, FPL is apparently ignoring cost-effective renewables, storage, and demand-side resources that could directly limit ratepayer exposure to price volatility. Unlike the hedging programs deployed to date, diversification through these non-gas options would strike at the heart of the problem of gas price volatility by reducing FPL's reliance on gas.

Investing in renewables, for example, works to divorce electricity production from the unpredictable gas market. Because wind and solar have negligible operating costs, they are often dispatched ahead of fossil fuel-burning resources.[24] As a result, building these sources of electricity will displace corresponding amounts of gas consumption in Florida and thereby "significantly reduce the exposure of electricity costs to gas price uncertainty."[25] Likewise, by lowering the gross amount of electricity demanded from gas-burning power plants, energy efficiency investments decrease ratepayers' exposure to price shocks.[26] Studies similarly show that demand-side resources—such as peak-shaving demand response programs—reduce total demand on a system wide basis, providing ratepayers with additional protections against price volatility.[27]

---

[22] *See* Robert Walton, *Florida Regulators Hit Pause on Utility Natural Gas Hedging Programs*, UTIL. DIVE (Nov. 4, 2016), http://www.utilitydive.com/news/florida-regulators-hit-pause-on-utility-natural-gas-hedging- programs/429758/.

[23] *See* Transcript of Commission Conference at 22, *In re: Analysis of IOUs' Hedging Practices*, Docket No. 170057-EI (Apr. 4, 2017), Document No. 04184-17; Susan Salisbury, *Hedging Costs Florida Consumers $7 Billion—Why Start Again?*, PALM BEACH POST (Apr. 4, 2017, 6:43 PM), http://www.palmbeachpost.com/business/new-hedging-costs-florida-consumers-billion-why-start-again/igxM10aeNUYncH3hr5ilLJ/.

[24] U.S. ENERGY INFO. ADMIN., *Electric Generator Dispatch Depends on System Demand and the Relative Cost of Operation* (Aug. 17, 2017), https://www.eia.gov/todayinenergy/detail.php?id=7590.

[25] THOMAS JENKIN ET AL., NAT'L RENEWABLE ENERGY LAB., THE USE OF SOLAR AND WIND AS A PHYSICAL HEDGE AGAINST PRICE VARIABILITY WITHIN A GENERATION PORTFOLIO, at vii (Aug. 2013), *available at* http://www.nrel.gov/docs/fy13osti/59065.pdf.

[26] *See* Sierra Club, Comment Letter on Staff and IOU Proposed Natural Gas Hedging Strategies, Document No. 03126-17, at 10 (Mar. 6, 2017).

[27] *See, e.g.*, Steven Nadel, *Demand Response Programs Can Reduce Utilities' Peak Demand an Average*

To be sure, diversification into renewables, storage, and demand-side resources promises to generate deep cost savings for FPL's ratepayers. A 2015 RFP for solar PPAs in Florida, for example, produced bids as low as $59 per MWh.[28] Since then, solar installation costs have fallen by over 20 percent,[29] while national solar module prices have declined by more than 30 percent.[30] Currently, Bloomberg New Energy Finance estimates that the levelized cost of solar in Florida is $49 per MWh, and experts expect this cost to only drop further in the coming years.[31] Meanwhile, demand-side resources have also demonstrated their potential to generate significant savings for Florida ratepayers. In 2016, for example, FPL's own residential and business demand response programs provided a combined net benefit of $429,000.[32] And, as compared to the projected 2022 costs of the Project ($764/kW), FPL's Business Custom ($216/kW), Business Lighting ($181/kW), Residential Build Smart ($439/kW), Business HVAC ($564/kW), and Residential AC ($626/kW) programs to increase energy efficiency all cost less..[33] Likewise, storage is a viable alternative to gas-burning generation, with FPL having already procured (1) 1.5 MW of battery storage in Miami-Date for peak shaving and frequency response and (2) an additional 1.5 MW in Monroe County for backup power and voltage support.[34] In the upcoming years, storage is expected to become even more cost-competitive. By the time that the Project would come online, the average projected price of storage declines by more than 29 percent relative to the current market price.[35]

---

of 10%, Complementing Savings from Energy Efficiency Programs, AM. COUNCIL FOR AN ENERGY-EFFICIENT ECON. (Feb. 9, 2017, 3:58 PM), http://aceee.org/blog/2017/02/demand-response-programs-can-reduce.

[28] JEA 2015 SOLAR RFP—PHASE 2 SUMMARY, at 1 (June 2015), *available at* https://www.jea.com/About/Procurement/Bid_Results/Solar_2015_-_June_11,_2015.aspx (reporting the bid prices submitted in response to JEA's 2015 Solar RFP).

[29] ROBERT MARGOLIS ET AL., U.S. DEP'T OF ENERGY, Q4 2016/Q1 2017 SOLAR INDUSTRY UPDATE, at 48 (Apr. 25, 2017), *available at* http://www.nrel.gov/docs/fy17osti/68425.pdf (showing that the capacity weighted average system price fell 22 percent from 2015 to 2016).

[30] *Id.* at 21 (showing actual and projected declines in module prices).

[31] *See* BLOOMBERG NEW ENERGY FIN., H2 2016 AMER LEVELISED COST OF ELECTRICITY UPDATE (Oct. 2016) (providing estimates of LCOE for solar by state).

[32] FLA. POWER & LIGHT CO., 2016 DSM ANNUAL REPORT 3, 9 (Mar. 1, 2017), *available at* http://www.floridapsc.com/Files/PDF/Utilities/Electricgas/ARDemandSide/2016/Florida%20Power%20and%20Light%20Company.pdf (showing $329,000 in net benefits from FPL's Residential On Call program and $100,000 in net benefits from FPL's Business On Call program).

[33] *See id.* at 4–5, 11–13 (calculated based on the ratio of program costs and the 2016 summer peak demand reduction resulting from the program); FPL's Petition at 16 (reporting the cost estimates for the Project).

[34] FLA. POWER & LIGHT, TEN-YEAR POWER PLANT SITE PLAN 2017-2026, at 86 (Apr. 2017), *available at* https://www.fpl.com/company/pdf/10-year-site-plan.pdf.

[35] ENERGY STORAGE ASSOC., INCLUDING ADVANCED ENERGY STORAGE IN INTEGRATED

FPL itself has recognized that building renewables, storage, and demand-side resources can "save customers money."[36] In recent testimony during FPL's base rate case, the company's president admitted that FPL could now make solar work "cost-effectively at large-scale." [37] In addition, FPL's expert witness, John Reed, conceded that demand-side resources "can be very cost-effective."[38] More striking still, both FPL's Vice President of Finance and the Chairman of NextEra Energy, FPL's parent company, agree that falling storage and solar costs would make certain gas-burning generation—peakers—uneconomical by 2020—two years before the Project's planned start date.[39] FPL therefore clearly comprehends that the economics of electricity have shifted away from fossil fuel technologies and towards cheap renewables, storage, and demand-side resources.

Nevertheless, FPL apparently has not investigated renewables, storage, or demand-side resources as alternatives to the Project. This failure continues FPL's practice of ignoring Florida's significant clean energy potential. FPL, for example, has not issued an RFP for renewable energy since 2007 and 2008,[40] despite widespread interest by in-state developers and strong evidence showing that RFPs in *every* other state in the Southeast have returned abundant, cost-effective solar PV bids.[41] In fact, FPL has not produced up-to-date market

---

RESOURCE PLANNING: COST INPUTS AND MODELING APPROACHES 5 (Nov. 2016), *available at* http://energystorage.org/system/files/attachments/irp_primer_002_0.pdf (calculated based on Figure 2).

[36] Transcript of Prudence Hearing, vol. 12, at 1514, *Sierra Club v. Brown*, No. SC17-82 (Fla. 2017).

[37] Transcript of Prudence Hearing, vol. 2, at 302, *Sierra Club v. Brown*, No. SC17-82 (Fla. 2017).

[38] Transcript of Prudence Hearing, vol. 6, at 611, *Sierra Club v. Brown*, No. SC17-82 (Fla. 2017).

[39] *See* Transcript of Prudence Hearing, vol. 13, at 1592-93, *Sierra Club v. Brown*, No. SC17-82 (Fla. 2017) (containing the testimony of Robert E. Barrett, Jr., FPL's Vice President of Finance); Eric Wesoff, *NextEra on Storage: 'Post 2020, There May Never Be Another Peaker Built in the US,'* GREENTECH MEDIA (Sept. 30, 2015), https://www.greentechmedia.com/articles/read/NextEra-on-Storage-Post-2020-There-May-Never-be-Another-Peaker-Built-in-t (quoting NextEra Energy CEO Jim Robo as saying: "Post-2020, there may never be another peaker built in the United States – very likely you'll be just building energy storage instead.").

[40] *See* Sierra Club, Comment Letter on Review of the 2016 Ten-Year Site Plans of Florida's Electric Utilities, Document No. 08194-2016, at 9 (Oct. 10, 2016) (noting that FPL has provided no explanation for its lapse in RFPs for renewable energy and noting DEF's admission that it received 436 inquiries from third parties interested in developing in-state renewables).

[41] *See id.* at 10 (discussing successful RFPs for renewables in the Southeast). *See also* MARK BOLINGER & JOACHIM SEEL, LAWRENCE BERKELEY NAT'L LAB., UTILITY-SCALE SOLAR 2014: AN EMPIRICAL ANALYSIS OF PROJECT COST,

assessments of renewables, storage, or demand-side resources, even though it understands that the costs of these electricity sources are "plung[ing]."[42]

Absent such market assessments, however, the Commission has no way of knowing whether the Project "will likely result in a lower cost supply of electricity" relative to available alternatives.[43] Thus, FPL's petition fails to meet this criterion for an exemption from an RFP.

b. FPL Has Failed to Show that the Project Increases Reliability Relative to Other Options.

FPL similarly fails to show that the Project will likely "increase the reliable supply of electricity" relative to available alternatives.[44] The company claims that the Project will significantly enhance reliability by replacing existing gas generation with new gas generation.[45] As discussed above, however, such comparisons shed little light on whether FPL has adequately evaluated *available alternatives* to the Project. When FPL does make the

---

PERFORMANCE, AND PRICING TRENDS IN THE UNITED STATES 37 (Sept. 2015) (reviewing several "utility-scale solar PPAs being signed at competitive prices in several *southeastern* states").

[42] *See* Prudence Hearing Exhibit 552 at 74–75, *Sierra Club v. Brown*, Case No. SC17-82 (Fla. 2017) (showing that FPL had not tested the market for solar since 2007 and 2008). *Compare* Transcript of Prudence Hearing, vol. 35, at 5372, *Sierra Club v. Brown*, Case No. SC17-82 (Fla. 2017) (Thomas Koch, FPL's senior manager of demand-side management, admitting that FPL has not investigated any incremental additions of demand-side resources beyond the levels set by the Commission) *with* Transcript of Prudence Hearing, vol. 11, at 1348, *Sierra Club v. Brown*, Case No. SC17-82 (Fla. 2017) (showing that those Commission-set levels for demand-side resources based on information three or more years old). *See also* Transcript of Prudence Hearing, vol. 2, at 292, *Sierra Club v. Brown*, Case No. SC17-82 (Fla. 2017) (Eric Silagy, FPL's president and CEO, admitting that he did not know if FPL had the necessary information to substantiate his "opinion" that energy storage remains "very expens[ive]"); Eric Wesoff, *NextEra on Storage: 'Post 2020, There May Never Be Another Peaker Built in the US*,' GREENTECH MEDIA (Sept. 30, 2015), https://www.greentechmedia.com/articles/read/NextEra-on-Storage-Post-2020-There-May-Never-be-Another-Peaker-Built-in-t ("Robo [Next Era Energy's CEO] said that he and his team expect energy storage prices to experience a similar cost plunge to that of solar costs over the last seven years."). *See generally* FLA. POWER & LIGHT, TEN-YEAR POWER PLANT SITE PLAN: 2016–2025 (Apr. 2016), *available at* http://www.psc.state.fl.us/Files/PDF/Utilities/Electricgas/TenYearSitePlans/2016/Florida%20Power%20and%20Light.pdf.

[43] Fla. Admin. Code R. 25-22.082(18).

[44] *Id.*

[45] *See* FPL's Petition at 11–12.

relevant comparisons between the Project and other options, it only offers a broad and qualitative discussion of reliability.[46]

Had FPL conducted a rigorous and comprehensive reliability analysis, it might have recognized the critical reliability services offered by flexible renewables, storage, and demand-side resources. When large centralized generating units, like those contemplated in the Project, unexpectedly shut down, it can substantially disrupt the grid.[47] Utilities, however, can help protect against these system-wide failures by investing in distributed clean energy resources, including rooftop solar, storage, or energy efficiency. Because these resources are individually small and operationally independent, the system will not fail from the breakdown of any given solar panel or storage unit.[48] And in the aggregate, distributed clean energy resources can substantially contribute to ratepayers' energy demands and reliability needs. The North American Electric Reliability Corporation (NERC), for example, recently showed that solar resources in Florida currently have an effective load carrying capability of approximately 38 percent, implying that 100 MW of solar will contribute 38 MW of generation at peak demand.[49] And in FPL's own 2017 Ten-Year Siting Plan, the utility assumed that three of its newest solar PV facilities will contribute more than 50 percent of their capacity to FPL's Summer peak hour.[50] Demand-side resources and storage also offer a myriad of reliability services, including peak shaving, regulation up/down, load following, frequency regulation and response, ramping, reserve capacity, voltage support, and black start—to name a few. In fact, FPL has already used demand-side resources to cost-effectively reduce summer peak demand, and the utility recently made plans to build "cost-effective" energy storage in the next four years.[51]

---

[46] *See, e.g.*, *id.* at 12.

[47] For example, California has used energy storage to solve the emergency that resulted from the massive gas facility failure at Aliso Canyon. That failure put the entire region at high risk of far-reaching power outages. *See* Jeff St. John, *As Aliso Canyon Gas Shortage Looms, Southern California Looks to Energy Storage*, GREENTECH MEDIA (June 2, 2016), https://goo.gl/JrI0O4.

[48] *See* Chen-Ching Liu, *Distribution Systems: Reliable but Not Resilient?*, IEEE PES (June 2015), http://sites.ieee.org/pes-enews/2015/05/08/distribution-systems-reliable-but-not-resilient/.

[49] N. AM. ELEC. RELIABILITY CORP., 2016 LONG-TERM RELIABILITY ASSESSMENT 25–26 (Dec. 2016), *available at* http://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/2016%20Long-Term%20Reliability%20Assessment.pdf.

[50] *See* FLA. POWER & LIGHT CO., TEN-YEAR POWER PLANT SITE PLAN: 2017–2026, *at* 83–84 (Apr. 2017), *available at* http://www.psc.state.fl.us/Files/PDF/Utilities/Electricgas/TenYearSitePlans/2017/Florida%20Power%20and%20Light.pdf.

[51] *See* FLA. POWER & LIGHT CO., 2016 DSM ANNUAL REPORT 3, 9 (Mar. 1, 2017), *available at* http://www.floridapsc.com/Files/PDF/Utilities/Electricgas/ARDemandSide/2016/Florida%20Power%20and%20Light%20Company.pdf; Transcript of Settlement Hearing at 84, 86,

FPL's petition, however, mentions none of this. Instead, the company offers the Commission two flawed arguments. First, FPL claims that third-party alternatives could not match the Project's low transmission costs because the Project makes use of existing transmission infrastructure. This conclusion, however, overlooks distributed clean energy's demonstrated record of avoiding transmission investments and reducing congestion costs. In recent years, utilities have reported billions of dollars in savings from geographically targeted energy efficiency programs that defer or avoid large transmission and distribution expenditures.[52] Likewise, studies have documented substantial cost savings from energy storage's ability to reduce transmission- and distribution-related maintenance.[53] For example, the Texas utility, Oncor, cited over $625 million in projected customer savings when seeking approval to build 5,000 MW of energy storage in 2014.[54] In light of this evidence, it is misleading for FPL to tout the Project's transmission-related advantages without considering energy efficiency, demand response, and storage's verified potential to reduce and displace transmission investments.

Second, FPL defends its request to fast-track the Project by raising the specter of greater-than-expected demand growth.[55] But this is a red herring. For one, FPL's current capacity level already exceeds Florida's reliability requirements.[56] For another, Florida utilities

---

90, 97, 99, *Sierra Club v. Brown*, No. SC17-82 (Fla. 2017).

[52] For instance, in 2011, Consolidated Edison estimated that including the effects of geographically-targeted efficiency programs in its 10-year forecast reduced costs by over $1 billion. Additionally, since 2012, ISO New England identified over $400 million in deferred transmission investments due to efficiency. *See* Chris Neme & Jim Grevatt, *Energy Efficiency as a T&D Resource: Lessons from Recent U.S. Efforts to Use Geographically*, NE. ENERGY EFFICIENCY P'SHIPS 12 (2015), *available at* https://goo.gl/AXRf3m.

[53] *See, e.g.*, MASS. DEP'T OF ENERGY RESOURCES, STATE OF CHARGE: MASSACHUSETTS ENERGY STORAGE INITIATIVE STUDY 86–89 (2016), *available at* https://goo.gl/D3zviD (concluding that 600 MW of storage capacity installed by 2025 would save ratepayers $800 million in system costs).

[54] BRATTLE GROUP, THE VALUE OF DISTRIBUTED ELECTRICITY STORAGE IN TEXAS PROPOSED POLICY FOR ENABLING GRID-INTEGRATED STORAGE INVESTMENTS 14 (2014), *available at* https://goo.gl/fv2mYF.

[55] *See* FPL's Petition at 18 ("Further, completing the Project by June 2022 will increase economic benefits for FPL customers and ensure the electric grid does not experience system reliability or regional imbalance problems even if electrical load grows faster than currently forecasted.").

[56] See the detailed briefing by Public Counsel, filed July 15, 2015, in Docket No. 160096-EI, Joint petition for approval of modifications to risk management plans by DEF, FPL, Gulf and TECO. Also see the joint petition filed by Public Council, filed Dec 9., 2015, in Docket No. 150196-EI, In re: Petition for determination of need for Okeechobee Clean Energy Center Unit 1, by Florida Power & Light Company, *available at* https://goo.gl/wBgl2S.

have *over-estimated* load growth for the past eight consecutive years.[57] And they appear set to extend this streak. In particular, these utilities project that peak demand will grow faster than one percent annually between 2016 and 2025—more than half again the rate experienced between 2004 and 2015 (0.76 percent CAAGR).[58] In contrast, the U.S. Energy Information Administration predicts only a 0.7 percent annual growth rate through 2025.[59] The Commission should therefore discount the improbable risk of faster-than-expected load growth, and instead focus on the very real risk that FPL sinks huge, inflexible capital outlays into gas-burning generation when superior alternatives exist.

c. FPL Has Failed to Show that the Project Serves the Public Welfare Better than Other Options.

FPL inflates the public welfare benefits of the Project by comparing it to the existing gas generation at the Lauderdale power plant. Given such a low bar for comparison, the utility unsurprisingly concludes that new gas-burning generation would pollute less than gas generation built in the 1920's.[60] When measured against renewables, storage, and demand-side resources, however, the Project is a losing proposition for FPL's customers and the public at large.

Zero-emission sources of electricity, for example, provide far greater environmental benefits than the Project. Relying on gas, especially gas that is extracted through unconventional methods known as fracking, harms the environment in myriad ways, as evidenced by a growing body of peer-reviewed science: Extraction and transportation generate local water and air pollution, while leakage and combustion contribute significantly to climate change.[61] Gas is, itself, a potent greenhouse gas—with studies placing the global

---

[57] *Compare* John Odom, FRCC 2014 Presentation at 7 ("Forecasted energy sales and winter firm peak demands are lower in 2014 TYSP compared to 2013 TYSP and forecasted summer firm peak demands are higher from 2017 forward."), *available at* https://goo.gl/ACqiVT *with* Stacy Dochoda, FRCC 2015 Presentation at 7 ("Forecasted energy sales and firm peak demands are lower in 2015 TYSP compared to 2014 TYSP"), *available at* https://goo.gl/mn4gUf (open "2015" dropdown; then follow "Florida Reliability Council" hyperlink) *with* Stacy Dachado, FRCC 2016 Presentation at 8 ("Forecasted energy sales and firm peak demands are lower in 2016 TYSPs compared to 2015 TYSPs"), *available at* https://goo.gl/UScXlk.

[58] Sierra Club, Comment Letter on Review of the 2016 Ten-Year Site Plans of Florida's Electric Utilities, Document No. 08194-2016, at 6 (Oct. 10, 2016).

[59] *Id.*

[60] FPL's Petition at 13.

[61] *See, e.g.*, Jake Hays & Seth B.C. Shonkoff, *Toward an Understanding of the Environmental and Public Health Impacts of Unconventional Natural Gas Development: A Categorical Assessment of the Peer-Reviewed Scientific Literature, 2009–2015*, 11 PLoS ONE 1, 1 (2016) (finding, based on a review of 685 peer-reviewed scientific articles published from 2009–2015, strong evidence

warming effects of methane, the primary component of gas, at about twenty-five times those of carbon dioxide.[62] And burning gas produces heat-trapping carbon dioxide.[63] As a result, the Project would increase the climate risks for a population that is particularly vulnerable to a warming world. By 2030, for instance, sea levels could rise by as much as ten inches above 1992 levels, damaging the beaches, mangroves, and lowland wetlands that define Florida's unique ecology.[64] By 2050, these rising tides will threaten an estimated $15-36 billion of Florida coastal property.[65] In addition, global warming will make storm patterns more unpredictable, increase the incidence of severe weather events, and induce coral bleaching.[66] Thus, far from generating environmental benefits, FPL's continued reliance on gas will harm the Florida public.

Likewise, the Project's purported jobs benefits diminish when placed alongside those of renewables, storage, and demand-side resources. Even though over two thirds of Florida's electricity comes from gas,[67] the state's clean energy sector currently employs four times

---

that unconventional gas development produces public health hazards, leads to water contamination, and elevates air pollutant emissions); ANTHONY ZAMMERILLI ET AL., U.S. DEP'T OF ENERGY, ENVIRONMENTAL IMPACTS OF UNCONVENTIONAL NATURAL GAS DEVELOPMENT AND PRODUCTION, 1–3 (2014) (reviewing the climate, air quality, water use and quality, land use, and habitat fragmentation effects of unconventional gas development); UNION OF CONCERNED SCIENTISTS, *Environmental Impacts of Natural Gas* http://www.ucsusa.org/clean-energy/coal-and-other-fossil-fuels/environmental-impacts-of-natural-gas#bf-toc-2 (last visited July 6, 2017) (reviewing the environmental harms produced across the life cycle of fracked gas).

[62] U.S. EPA, *Overview of Greenhouse Gases: Methane Emissions*, https://www.epa.gov/ghgemissions/overview-greenhouse-gases#methane (last visited July 6, 2017).

[63] *Id.*

[64] Erika Bolstad, *Seas Rising but Florida Keeps Building on the Coast*, SCI. AM. (June 20, 2016), https://www.scientificamerican.com/article/seas-rising-but-florida-keeps-building-on-the-coast/.

[65] *Id.*

[66] *See, e.g.*, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, MANAGING THE RISKS OF EXTREME EVENTS AND DISASTERS TO ADVANCE CLIMATE CHANGE ADAPTION 111 (2012), *available at* https://www.ipcc.ch/pdf/special-reports/srex/SREX_Full_Report.pdf ("A changing climate leads to changes in the frequency, intensity, spatial extent, duration, and timing of weather and climate extremes, and can result in unprecedented extremes."); NOAA, *How Does Climate Change Affect Coral Reefs?*, https://oceanservice.noaa.gov/facts/coralreef-climate.html (last visited July 7, 2017) (discussing the effects of climate change on coral reef ecosystems).

[67] *See* U.S. EIA, NET GENERATION BY STATE BY TYPE OF PRODUCER BY ENERGY SOURCE (1990-2015), https://www.eia.gov/electricity/data/state/ (showing that gas accounted for 66 percent of Florida's total electric power sector generation).

more workers than its fossil fuel sector.[68] Meanwhile, other states in the Southeast have already demonstrated the job-catalyzing potential of clean energy. North Carolina's renewable energy policies, for example, helped create 4,000 local jobs and $2 billion in direct investment, not to mention brought in more than $126 million in federal tax credits in 2014 alone.[69] Indeed, FPL itself has touted solar as a job creator when it recently announced a partnership with Veterans Florida to provide more than 2,000 U.S. military veterans with careers in the "growing renewable energy industry."[70] Significantly, this initiative promises to generate more jobs on a per-megawatt basis than the Project.[71]

In short, FPL ignores the wide-ranging public welfare gains that would come from developing renewables, storage, and demand-side resources. From an environmental and jobs perspective, the utility's myopic pursuit of gas is indefensible. FPL clearly fails to meet any of the three criteria for an exemption under the Bid Rule. In fact, the record here underscores that an RFP is necessary to assure the Commission that it will have the information it needs to evaluate the Project relative to other options.

III. Conclusion

For the foregoing reasons, Sierra Club respectfully urges the Commission to deny FPL's request or stay this matter until FPL files supplemental information regarding how it will provide the Commission the missing information regarding other options, including their current market price. The instructions should specify that the relevant options include adding renewables, storage, and demand-side resources instead of gas-burning generation.

---

[68] Clean energy jobs include those associated with energy efficiency, wind, solar, storage, and smart grid technologies. Fossil fuel jobs include coal, oil, and gas jobs in both the electric sector and fuel extraction. *See* U.S. DEP'T OF ENERGY, 2017 U.S. ENERGY AND JOBS REPORT STATE CHARTS 56–61 (Jan. 2017), *available at* https://energy.gov/downloads/2017-us-energy-and-employment-report.

[69] Sarah Odio, *Solar Powers Economic Development in NC*, UNC SCH. OF GOV'T (Mar. 3, 2016), https://ced.sog.unc.edu/solar-powers-economic-development-in-nc/.

[70] ELEC. LIGHT & POWER, *FPL, Veterans Florida, Partners to Create Clean Energy Opportunities for Vets* (Apr. 6, 2017), http://www.elp.com/articles/2017/04/fpl-veterans-florida-partners-to-create-clean-energy-opportunities-for-vets.html (quoting Eric Silagy, president and CEO of FPL).

[71] FPL predicts that the 1,163-MW Lauderdale Project will generate 650 direct jobs, for a ratio of roughly 0.56 jobs per MW constructed. *See* FPL's Petition at 12. On the other hand, FPL expects to employ "more than 1,500 people in 2017" as it "builds nearly 2,100 megawatts of new solar in Florida in the coming years," for a ratio of roughly 0.71 jobs per MW constructed. *See* FLA. POWER & LIGHT, *FPL, Veterans Florida and Key Partners Come Together to Create Clean Energy Opportunities for America's Heroes* (Apr. 6, 2017), http://newsroom.fpl.com/2017-04-06-FPL-Veterans-Florida-and-key-partners-come-together-to-create-clean-energy-opportunities-for-Americas-heroes.

That said, should the Commission decide to approve FPL's request, it should do so consistent with its Staff's observation that "granting the exemption will not relieve [FPL] of any requirements during a future [Section 403.519] need determination process." In other words, any such decision should affirm that the exemption in no way prejudges the determination under Section 403.519, Florida Statutes, of whether the Project is the "most cost-effective alternative available." Further, the Commission should ensure that, consistent with Section 403.519, FPL develops the required evidence regarding "whether renewable energy sources and technologies, as well as conservation measures, are utilized to the extent reasonably available."[72]

Respectfully submitted,

/s/ Quentin Karpilow
Quentin Karpilow
Legal Summer Associate
Sierra Club
50 F St. NW, 8th Floor
Washington, DC 20001
202-548-3053 (direct)
Quentin.Karpilow@SierraClub.org

Julie Kaplan
Senior Attorney
Sierra Club
50 F St. NW, 8th Floor
Washington, DC 20001
202-548-4592 (direct)
Julie.Kaplan@SierraClub.org

Diana Csank
Staff Attorney
Sierra Club
50 F St. NW, 8th Floor
Washington, DC 20001
202-548-4595 (direct)
Diana.Csank@SierraClub.org

[72] Section 403.519, *Florida Statutes*.