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May 22, 2017

-VIA ELECTRONIC FILING-

Ms. Carlotta S. Stauffer
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Re: Florida Power & Light Company'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

Dear Ms. Stauffer:

Enclosed for filing on behalf of Florida Power & Light Company ("FPL") is 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.

Thank you for your assistance. Please contact me should you or your staff have any questions regarding this filing.

Sincerely,

s/ William P. Cox
William P. Cox
Senior Attorney

WPC/msw
Enclosure

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Florida Power & Light Company’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

Docket No: _____

Date: May 22, 2017

PETITION

Pursuant to Rule 25-22.082, Florida Administrative Code (“F.A.C.”), Florida Power & Light Company (“FPL” or the “Company”), respectfully petitions the Florida Public Service Commission (“FPSC” or the “Commission”) for exemption from Rule 25-22.082, F.A.C., the “Bid Rule,” which rule otherwise would direct the issuance of a Request for Proposals (“RFP”) in connection with FPL’s proposed modernization of its existing Lauderdale power plant (to be renamed the Dania Beach Clean Energy Center) (the “Project”),¹ prior to FPL filing a petition for determination of need for the Project with the Commission, and in support thereof states:

I. Introduction and Overview

1. FPL remains committed to delivering clean, reliable electricity to meet Florida’s growing energy needs while keeping typical customer bills among the lowest in the nation. Since 2001, FPL has invested in advanced power generation technology to cost-effectively modernize its energy system – replacing older power plants with highly efficient facilities that produce more energy with less fuel and substantially lower emissions. The Project is the next phase in FPL’s ongoing program to modernize its fleet of power-generating plants with new facilities powered by affordable, clean, U.S.-produced natural gas.

¹ The modernization project will affect only the existing combined cycle (“CC”) units, Lauderdale Units 4 & 5, at the site. The peaking units at the site will be unaffected by the modernization. All references to the existing plant or units, and to the modernization, refer solely to the existing CC units or the new CC unit.

2. With this Project, FPL would propose to: (1) retire in late 2018 two 1990s-era natural gas-fueled 2x1 CC electric generating units (capable of using fuel oil as backup fuel), Lauderdale Units 4 & 5, located at the existing power plant site in Dania Beach in eastern Broward County, totaling 884 MW (Summer) of generating capacity, and (2) to replace them with a single highly efficient, state-of-the-art natural gas-fueled 2x1 CC power plant (capable of using fuel oil as backup fuel) with up to 1,163 MW (Summer) of generation by June 2022.² The Project is currently projected to result in savings to FPL's customers of approximately \$400 million in cumulative present value of revenue requirements ("CPVRR") and will result in more efficient use of natural gas consumption for generation on FPL's system.³

3. The Project is strategically located in the most concentrated area of FPL's customer base in Miami-Dade and Broward Counties and would provide an additional 279 MW of capacity in this critical Southeastern Florida load area. The Dania Beach Clean Energy Center would produce reliable base load capacity in this region on the FPL system where demand is the highest, improve the fuel efficiency of generation at the Lauderdale plant by approximately 22% with the lower heat rate for the new unit, and improve the environmental profile of this site with a 95% reduction in the Nitrogen Oxides ("NO_x") emission rate.

4. Subsection 18 of the Bid Rule provides that an exemption shall be granted upon a finding by the Commission that (1) the proposal will likely result in a lower-cost supply of electricity, *or* (2) will increase the reliable supply of electricity, *or* (3) otherwise will serve the public welfare. FPL's proposal meets all three criteria, although only one is required per

² Renderings of the Lauderdale modernization project showing the site as it exists today, and as it will appear upon completion, are attached as Exhibit A to this Petition.

³ The corresponding reduction in FPL's annual system-wide natural gas consumption as a result of the Dania Beach Clean Energy Center from 2022 to 2047 is attached as Exhibit B to this Petition. Exhibit B also contains the corresponding annual environmental reductions from the Dania Beach Clean Energy Center over the same time-frame.

Subsection 18. Thus, the Bid Rule provides for a broad range of exceptions from what otherwise is a time-consuming and expensive administrative process. The Bid Rule allows an electric utility such as FPL to leverage the significant benefits of existing, already owned land, electric and gas infrastructure, fuel transportation facilities, and water supply, without the time, expense, and delay of a bidding process, thereby providing real value and benefits to its customers and the state of Florida. Also, as described in detail in this Petition, granting the requested exemption will provide greater assurance that this Project will be completed in a timely manner, thereby ensuring the following benefits for FPL's customers: (1) lower-cost supply of electricity, (2) improved system reliability, and (3) significant public welfare benefits.

5. Previously, the Commission granted exemptions from the Bid Rule for three FPL power plant modernizations at Cape Canaveral, Riviera Beach, and Port Everglades – the last three FPL power plant modernization projects to go through the Commission's need determination process under Section 403.519, Fla. Stat. Docket Nos. 080245-EI and 080246-EI, Order No. PSC-08-0591-FOF-EI (issued Sept. 12, 2008); Docket No. 110228-EI, Order No. PSC-11-0360-PAA-EI (issued Aug. 26, 2011). Those projects are very similar to this one. Like the proposed Dania Beach Clean Energy Center, all of these projects leveraged existing land, transmission and gas transportation infrastructure, and water supply for the benefit of FPL customers. Moreover, the projected capital cost (dollars per kW) of the Project are *lower* than the projected capital costs of each of these three completed projects for which exemptions were granted. *Id.* In addition, FPL's customers are ultimately ensured of lowest-cost construction because FPL will competitively bid the construction and procurement of major equipment for the new facility.

6. Granting the exemption from the RFP process for the proposed Project will facilitate timely dismantlement of the existing facility and construction of a highly efficient, reliable source of generating capacity at a critical location on FPL's system. It will serve the public welfare by allowing FPL to proceed more expeditiously with the Project, which will achieve cleaner, more efficient power generation than the existing plant, a reduction in FPL's total air emissions and increased efficiency with which FPL utilizes natural gas as a fuel for generation on a system-wide basis, and the creation of new jobs and tax revenue for Florida's economy. Expediting the schedule through exemption from the Bid Rule process also will enable FPL to more quickly resolve and reduce project uncertainties and their attendant costs, which will further benefit the public interest.

7. FPL submits that conducting an RFP would not result in the identification of any alternative that could offer the economic, reliability, and strategic benefits associated with the proposed Project at the existing Lauderdale site. The primary strategic benefits of this location are (1) it is located within the Broward/Miami-Dade load pocket, (2) it will require no new transmission lines and only minimal transmission enhancements, (3) it has existing gas delivery infrastructure (no new gas pipeline will be needed), (4) it has an adequate existing supply of water for cooling purposes, and (5) FPL owns the property where the Project will be located, which is already dedicated to power generation. Finding another suitable site within the Broward/Miami-Dade load pocket, which could provide a comparable total amount of firm capacity, would be nearly impossible given the limitations on the availability of suitably sized and economically priced land, gas, transmission, and water in this dense urban area. Any other alternative site and associated power plant facility that could be proposed by a third party through an RFP process located within or outside of the Southeastern Florida region of the FPL

service territory would likely incur significant costs in one or more of these areas, making any alternative site a far more costly alternative to the existing Lauderdale site. All other firm capacity solutions that included sites within Southeastern Florida were projected to result in higher costs (CPVRR) to FPL customers. In addition, FPL's analysis indicates that delaying this project beyond the target date of June 2022 will result in higher costs (CPVRR) to FPL customers.

8. FPL has a window of opportunity up to mid-2024 in which to first retire Lauderdale Units 4 & 5, and then modernize the site with a new, highly efficient combined cycle unit before FPL faces a system need for new resources as projected by FPL's reserve margin criteria. This window of opportunity is created by the 2019 commercial operation date of the Okeechobee Clean Energy Center and regional transmission upgrades planned for that same year. In addition, once the 884 MW of total capacity from the existing Lauderdale Units 4 & 5 are retired, FPL has until mid-2025 before it also has a Southeastern Florida regional imbalance (*i.e.*, the balance between regional load, regional generation, and transmission import capability into the region) issue that would require significant generation to be sited in the two-county area or additional transmission import capacity into the two-county area to be built. The Project, a 1,163 MW (Summer) new combined cycle at the Lauderdale site, addresses both the mid-2024 system need and the mid-2025 Southeastern Florida imbalance issue.

9. For these reasons, going through the RFP process would achieve no apparent constructive purpose, and would only serve to extend the project development process. In granting this exemption from the Bid Rule, the Commission would retain full rights to review the merits and projected costs of the project in detail through the determination of need process that FPL anticipates initiating as early as the fall of 2017 and no later than early 2018. Through that

process, FPL would demonstrate to the Commission's satisfaction, consistent with the need determination criteria in Section 403.519, Fla. Stat., that the Project would meet the need for electric system reliability and integrity. That process would further demonstrate the need for adequate electricity at a reasonable cost while providing the most cost-effective source of power, reducing air emission compliance costs, and contributing to the long-term stability and reliability of the electric grid in a critical area of FPL's system.

II. Petitioner and Jurisdiction

10. The Petitioner's name and address are:

Florida Power & Light Company
700 Universe Boulevard
Juno Beach, Florida 33408

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

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11. The Commission has jurisdiction pursuant to Sections 366.04, 366.05, and 366.06, Florida Statutes.

12. FPL is a corporation organized and existing under the laws of the State of Florida and with headquarters at 700 Universe Boulevard, Juno Beach, Florida 33408. FPL is an electric utility as defined in section 366.02(2), Florida Statutes.

13. FPL serves approximately 4.8 million customer accounts throughout Florida. Its service area comprises about 27,650 square miles in 35 Florida counties. Approximately 10 million people live within the area FPL serves, which ranges from St. Johns County in the north to Miami-Dade County in the south, and westward to Manatee County, with the highest concentration of customer load in Southeastern Florida.

14. This Petition is being filed consistent with Rule 28-106.201, F.A.C. The agency affected is the FPSC, located at 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399. This case does not involve reversal or modification of an agency decision or an agency's proposed action. Therefore, subparagraph (c) and portions of subparagraphs (b), (e), (f), and (g) of subsection (2) of that rule are not applicable to this Petition. In compliance with subparagraph (d), FPL states that it is not known which, if any, of the issues of material fact set forth in the body of this Petition may be disputed by any others who may plan to participate in this proceeding. The discussion below demonstrates how the petitioner's substantial interests will be affected by the agency determination.

III. Granting FPL an Exemption from the Bid Rule Complies with Rule 25-22.082(18), F.A.C.

15. Pursuant to Rule 25-22.082(18), F.A.C., and the flexibility it was designed to allow, if FPL demonstrates that an exemption from the issuance of an RFP would: (1) likely result in a lower cost of electricity to FPL's customers; or (2) likely result in an increase in the reliable supply of electricity to its customers; or (3) otherwise service the public welfare, then the Commission "shall" grant the requested Bid Rule exemption.⁴ A Bid Rule exemption requires

⁴ This is an exemption authorized by the Bid Rule itself under specific circumstances; it is not a waiver. Therefore, the requirements of Section 120.542, Florida Statutes, for a rule waiver do not apply.

only that one of the three criteria in the rule be met. For the reasons discussed below, FPL believes that all three criteria will be clearly satisfied should the Commission grant the requested exemption.

A. The Project will likely result in a lower cost supply of electricity

16. Through this modernization project, FPL has the opportunity to provide more cost-effective generation that is critical to the provision of reliable power and electric service in its Southeastern Florida service area (*i.e.*, Miami-Dade and Broward Counties) starting in 2022. Upon completion, the Dania Beach Clean Energy Center will provide lower cost electricity and help maintain the balance between electricity supply and demand in Miami-Dade and Broward Counties. This Project will provide both an incremental 279 MW (1,163 MW from the new unit – 884 MW from the existing units that will be retired) of cost-effective power to serve FPL customers and an increase in reliability as part of the Company’s broader effort to address the critical Southeastern Florida load area.

17. The Lauderdale plant has been modified two times since it began operation in 1927 as FPL’s first power plant. First, its current steam turbine generators (“STGs”) and associated equipment were placed in service in 1957. Second, the steam units were repowered to combined cycle generation technology in 1993 with the addition of the current combustion turbine generators (“CTGs”). However, the existing STGs and other auxiliary equipment built in 1957 remain in use.⁵

⁵ In addition, the original peaking units from 1970 were replaced with modern CTGs in 2016. The proposed retiring of Lauderdale Units 4 & 5, followed by replacement with the addition of a new, highly efficient CC unit, would complete the modernization that began with the replacement of the peaking units in 2016.

18. The Project will replace what will be nearly 30-year-old CC units⁶ (comprised of four CTGs, four heat recovery steam generators (“HRSGs”), and two 60-year-old STGs) with two new CTGs, two new HRSGs, and one new STG. As the next phase in FPL’s ongoing program to modernize its power generation fleet and produce the most efficient and cost-effective energy to serve FPL customers, the Dania Beach Clean Energy Center will replace two CC units that are currently at the bottom of the FPL combined cycle fleet dispatch order. The current CTG steam injection for emissions control requires significant water use and incremental operations & maintenance (“O&M”) expense. In addition, the current STGs, CTGs, and HRSGs all require significant, costly maintenance in the near term to keep the existing plant running properly for continued long-term operation.

19. FPL’s Project proposes to modernize its Lauderdale power plant utilizing CC plant technology similar to that being deployed for FPL’s Okeechobee Clean Energy Center—a new generating unit at a greenfield site—which was selected following an RFP process in 2015 that received no competing bids that met the requirements of the RFP. The primary fuel for the proposed plant will continue to be natural gas, and the plant will be capable of using ultra-low sulfur distillate (fuel oil) as the backup fuel. The estimated installed capital cost of the Dania Beach Clean Energy Center is \$888 million (\$763/kW), which includes both interconnection costs and Allowance for Funds Used During Construction (“AFUDC”) expense. In providing an incremental 279 MW of capacity in Southeastern Florida, the Project will utilize existing gas pipeline capacity, switchyard/substation equipment, and fuel oil tanks, with only minimal offsite transmission upgrades expected.

⁶ Lauderdale Units 4 & 5 will be nearly 30 years old when the proposed Dania Beach Clean Energy Center begins commercial operation (targeted for June 2022).

20. 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. These savings would result from (1) the greater fuel efficiency of the new unit and resulting system-wide efficiency gains in utilizing natural gas,⁷ (2) reduced O&M expenses, and (3) avoided capital replacement costs that would otherwise be needed for long-term operation of the existing units. The heat rate for the new unit (approximately 6,110 Btu/kWh) will be 22% lower than the existing units (approximately 7,800 Btu/kWh). The NO_x emission rate for the new unit (2 parts per million (“ppm”)) will be 95% lower than the existing units (42 ppm), with significant reductions in the Carbon Dioxide (“CO₂”) emission rate as well as total air emissions.⁸ By using existing circulating water intake and discharge structures as well as a new auxiliary cooling system, water use for the new unit will be no greater than the existing unit, even with the increased energy output of the modernized plant. With the cost savings and greater fuel efficiency from the lower heat rate for the Dania Beach Clean Energy Center, FPL will improve the fuel efficiency of the FPL generation fleet and lower its natural gas consumption for generation on a system-wide basis. Furthermore, with the recently completed modernizations at Cape Canaveral, Riviera Beach, and Port Everglades, plus the additional CC capacity at the Okeechobee site (scheduled to be in-service in 2019), the Lauderdale site will further reduce the system-wide growth in natural gas use from what it otherwise might have been due to the high fuel efficiency levels of these new CC units.

⁷ See Exhibit B for FPL’s annual system-wide natural gas consumption reduction as a result of the Dania Beach Clean Energy Center.

⁸ See Exhibit C for NO_x and Total Emissions (tons/year and lb/MWh), Energy (1,000 MWh), and CO₂ Emissions (lb/MWh) comparisons between the existing Lauderdale Units 4 & 5 and the proposed Dania Beach Clean Energy Center.

21. Based on FPL's investigation into the availability of other viable sites (FPL and third-party), it was determined that there are no economically viable sites located within the proximity of FPL's Southeastern Florida service area that have the attributes and resources of the Lauderdale site. The Project site has multiple advantages including adequate property size and zoning as well as access to existing fuel transportation infrastructure (gas pipeline), transmission facilities, and water supply.

22. To match these unique and necessary attributes and resources, a third party would need to find a site suitable for power generation in or near FPL's Southeastern Florida service area that could be acquired and is appropriately zoned. However, the anticipated costs of gas delivery, transmission service, land, and water supply makes the prospect of a third-party plant located in Miami-Dade or Broward County a much more costly and unrealistic option.⁹ As a result, modernizing the existing Lauderdale site will result in significant customer savings when compared to other potential sites -- if any exist -- where FPL or a third party could propose to construct a power plant that meets FPL's economic and reliability needs.

B. The Project will result in a more reliable supply of electricity

23. As discussed above, the Lauderdale plant site in Dania Beach in eastern Broward County is strategically located to serve customers in the most concentrated area of FPL's entire system. FPL needs a highly efficient and reliable generating unit to serve its customers in this area in the most cost-effective manner. Generation sources that are in close proximity to load ensure that system and regional reliability is less dependent on the transmission system to import large amounts of needed power into the area. The power system has been planned and designed

⁹ If a proposed generating unit were built outside of the Miami-Dade/Broward region, additional transmission would be required to achieve an amount of delivered generation capacity for this two county region equivalent to the generation capacity supplied by the proposed modernization project.

to achieve a high level of reliability for FPL customers with the existing Lauderdale units. However, because the existing Lauderdale Units 4 & 5 are older and less efficient, they do not dispatch as often and, in fact, are dispatched last among the units in FPL's combined cycle fleet. As a result, power imports via the transmission system must be used more often. Over time, as loads continue to grow, constraints on the ability to import more and more power into this area over the transmission system would require either (1) out of merit order dispatch of Lauderdale Units 4 & 5 during off-peak periods or (2) more investment in transmission infrastructure than the current and planned transmission infrastructure in the area in order to maintain the same level of reliability. In addition, the existing units are projected to require significant capital and O&M expenditures to continue reliable long-term operation.

24. With the Dania Beach Clean Energy Center, reliability will be significantly enhanced given that the efficiency of the new unit will be baseload-dispatched and will further defer the need for additional new transmission investment to increase import capability. Therefore, the location of the Project will provide reliability benefits to FPL customers that no power generation alternative located outside of Broward and Miami-Dade counties could match without significant transmission infrastructure investment as well as additional gas supply and transportation capacity.

C. The Project will provide other valuable public welfare benefits

25. FPL's proposed Dania Beach Clean Energy Center will result in a number of significant public welfare benefits. The proposed modernization will produce economic benefits associated with the construction and operation of the new plant. Construction of the new unit will create an estimated 650 direct jobs at its peak and also support numerous local businesses. In addition, the new unit alone is estimated to provide more than \$297 million (nominal) in new tax

revenue to Broward County, the school district, and other taxing authorities over its operating life.

26. Because the Project will be more efficient than the existing Lauderdale plant, the emissions of CO₂ and other greenhouse gases (“GHG”) will be significantly reduced. The emission of other compounds, such as Sulfur Dioxide (“SO₂”), Particulate Matter (“PM”), and NO_x, will also be dramatically reduced. In particular, the NO_x emission rate will be reduced by approximately 95% through the use of improved NO_x emissions controls. These air emission reductions have clear environmental and cost savings benefits for FPL’s customers. Specifically, there would be an approximate 70% reduction and over 1,650 tons per year decrease in air emissions of criteria pollutants for which there are federal Environmental Protection Agency (“EPA”) standards.¹⁰ Also, there will be an approximate 25% reduction in the rate of greenhouse gas emissions, which will result in a system wide reduction in GHG emissions. The existing Lauderdale plant generates about 966 pounds of CO₂ per MWh generated based on actual operating data. The Dania Beach Clean Energy Center would generate about 727 pounds of CO₂ per MWh generated based on the design heat rate.¹¹

27. The air quality in the vicinity of the existing Lauderdale plant is already better than stringent EPA air quality standards. When the Dania Beach Clean Energy Center begins operations, air quality in the surrounding areas will be further improved due to the greatly reduced air emissions. Additionally, the air quality and visibility impacts to the sensitive Everglades National Park, which is located southwest of the site, will also be reduced through

¹⁰ This comparison represents the baseline actual highest emissions in a 24 month period over the past five years for Lauderdale Units 4 & 5 as reported to EPA versus the full load emissions for the proposed Project.

¹¹ See Exhibit C for NO_x and Total Emissions (tons/year and lb/MWh), Energy (1,000 MWh), and CO₂ Emissions (lb/MWh) comparisons between the existing Lauderdale Units 4 & 5 and the proposed Dania Beach Clean Energy Center.

reduced emissions of NO_x, PM, and SO₂. The Everglades National Park has special protection related to these air pollutants from large sources, as it is designated a Class I area by Congress and under the jurisdiction of both the EPA and federal land managers.

28. FPL's use of the existing site, including key components of existing energy infrastructure, will prevent additional land use impact. The Project will provide new, highly efficient generation capacity using an existing generating site and other already committed resources such as water. The Dania Beach Clean Energy Center, which will not require any additional property, will actually require no more process water than the existing plant while producing more electricity. An auxiliary cooling system will be used to ensure environmental compliance for plant cooling water discharges. The absence of such impacts with the new plant will benefit FPL's customers.

29. Maintaining a baseload power plant at the Lauderdale site will also continue to provide a necessary warm water refuge during the winter months for the Florida manatee population. Warm water discharges from the existing Lauderdale CC units are essential to the health and safety of manatees during cold weather months in Southeastern Florida. The site also serves as a protective area for manatees due to the restriction to boat access (as many as 947 manatees have been documented at the site in a single day).

IV. The Commission has granted exemptions from the Bid Rule for projects that are similar in scope, benefits, and cost

30. The Commission has granted Bid Rule exemptions for other FPL generation projects with similar scope, benefits, and costs. On September 12, 2008, the Commission granted exemptions from the Bid Rule for two very similar projects: specifically, the modernization of aging power plants at Cape Canaveral and Riviera Beach, Order No. PSC-08-0591-FOF-EI. The

Cape Canaveral power plant consisted of replacing two 1960s-era, oil- and natural gas-fueled steam electric generating units with one highly efficient 1,210-MW combined cycle power plant in 2013. The Riviera Beach power plant also had two 1960s-era, oil- and natural gas-fueled steam electric generating units, which were replaced with one highly efficient 1,212-MW combined cycle power plant in 2014. At the time of the Commission's Need Determination approval Order for these two CC power plants, the Cape Canaveral modernization project total cost was estimated at \$1.1 billion, while the Riviera Beach modernization project total cost was estimated at \$1.3 billion. Order No. PSC-08-0591-FOF-EI at 8.

31. On August 26, 2011, the Commission granted an exemption for a similar modernization project at Port Everglades. Order No. PSC-11-0360-PAA-EI. The Port Everglades modernization project consisted of replacing four 1960s-era, oil- and natural gas-fueled steam electric generating units totaling 1,200 MW of generating capacity with one highly efficient 1,237-MW combined cycle power plant, which began commercial operations in 2016. At the time of the Commission's Need Determination approval Order, the Port Everglades modernization project total cost was estimated at \$1.142 billion. Order No. Order No. PSC-12-0187-FOF-EI at 8-10.

32. The proposed Project will produce many of the same system benefits as those provided by FPL's Cape Canaveral, Riviera Beach, and Port Everglades projects, plus it will do so in the critical Southeastern Florida region which will result in additional regional benefits. Importantly, the proposed project will be an even more efficient plant constructed at a lower cost per kW, will produce reductions in emissions on a system-wide basis, and is projected to result in approximately \$400 million in long-term CPVRR savings for FPL customers. In addition, as

discussed above, the unique location of the Dania Beach Clean Energy Center will provide important reliability benefits for the system.

33. As noted earlier, the estimated \$888 million (\$763/kW) capital cost of this Project compares favorably to the capital cost projections upon which Determinations of Need were granted by the Commission for the Cape Canaveral, Riviera Beach, and Port Everglades projects. See *infra* Table 1, Total Plant Cost Comparison for Cape Canaveral, Riviera Beach, and Port Everglades. Even without adjusting the \$/kW cost estimates of the other modernization projects to 2022 dollars, the Dania Beach Clean Energy Center is projected to be a lower-cost resource option on a dollar per kW basis than Cape Canaveral, Riviera Beach, or Port Everglades.

Table 1 – Total Plant Cost Comparison	Cape Canaveral (2013\$)	Riviera Beach (2014\$)	Port Everglades (2016\$)	Dania Beach (2022\$)
Total Cost/kW¹²	\$914/kW	\$1,057/kW	\$928/kW	\$763/kW

34. FPL has completed the Cape Canaveral, Riviera Beach, and Port Everglades modernizations at, or below, the costs projected in the respective determination of need proceedings.

V. Granting the Petition will provide greater assurance that FPL can bring the benefits of the Project to its customers in a timely manner

¹² The cost per kW of the Lauderdale modernization project would be even more favorable as compared to the other modernization projects if the costs of those projects were adjusted upwards to 2022 dollars.

A. The Bid Rule RFP Process is Not the Exclusive Method for Determining Cost Effectiveness

35. The Commission's Rule 25-22.082(1), F.A.C., specifies the use of the RFP process as "an *appropriate* means to ensure that a public utility's selection of a proposed generation addition is the most cost-effective alternative available." (Emphasis added). While the RFP process is one method available to determine cost effectiveness, it is not and was never intended to be the exclusive means of making such a determination. In fact, from its inception, the Commission intended for the Bid Rule to provide for flexibility and to allow for an exemption from the RFP process if issuing an RFP would be unproductive and an exemption would be in the best interest of an electric utility's customers. See, *e.g.*, In re: Proposed Amendment of Rule 25-22.081, FA.C., Contents of Petition; and Proposed New Rule 25-22.082, FA.C., Selection of Generation Capacity, Hearing Transcript, Docket No. 92188-EU (Sept. 29, 1993), p.20; Special Agenda Conference Transcript, Item No.1 (Dec. 6, 1993), pp. 18-22.

B. An RFP Issued by FPL for a Combined-Cycle Plant May Delay the Project for FPL Customers and Result in a Higher Cost for Generation Capacity

36. By granting the Bid Rule exemption requested in this Petition, the Commission will help ensure that the benefits of the Project discussed above accrue for FPL's customers in a timely manner. The exemption would better enable FPL to address any unforeseen delays in the permitting and construction schedule for the new plant, which is scheduled to be operational in mid-2022.

37. FPL's analysis discussed above clearly demonstrates that it is highly unlikely – based on the unique attributes of the Lauderdale site (*i.e.*, location in proximity to load, gas infrastructure, transmission, and water supply) – that the RFP process would result in a more

cost-effective alternative that would equal or exceed the benefit of the proposed new facility at the Lauderdale site. As noted, the Dania Beach Clean Energy Center is projected to result in approximately \$400 million CPVRR savings for FPL's customers. 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.

VI. The Petition is timely

38. FPL is making this request now based on its ongoing analysis of meeting its generation needs with the most cost-effective resources. Following its April 3, 2017, Ten Year Power Plant Site Plan filing, where FPL reported that it planned to modernize the existing Lauderdale CC units (Lauderdale Units 4 & 5) by retiring these units, then replacing them with a new highly efficient CC unit (the Dania Beach Clean Energy Center), FPL is making this filing expeditiously to provide the Commission with sufficient and reasonable time to address FPL's request prior to the time needed to construct the Project.

VII. Conclusion and Statement of Requested Relief

39. The Commission should grant FPL an exemption from the Bid Rule, in accordance with Rule 25-22.082(18), F.A.C. An exemption is appropriate to ensure the timely construction and operation of cleaner, more efficient power generation than the existing generation facilities, with associated customer cost savings and other public benefits. Compared with the RFP process, granting the requested exemption will provide flexibility in the schedule for constructing and operating the new unit and will also provide a process that will allow for reasonable energy production and expansion.

40. The additional time provided from a grant of the requested Bid Rule exemption will result in greater assurance that FPL will be able to deliver the benefits of the Project to its customers in a timely manner, including: (1) projected CPVRR savings of approximately \$400 million for FPL customers; (2) more efficient utilization of natural gas on FPL's system; (3) increased supply of reliable electricity for FPL's customers, especially those in Southeastern Florida; (4) significant emission reductions; and (5) new jobs, tax revenues, and other benefits to help bolster Florida's economy. As discussed in this Petition, it is highly unlikely that the RFP process would result in a more cost-effective alternative to FPL's self-build option.

41. Under the Bid Rule itself, the Commission has the authority to grant an exemption from the RFP requirement to facilitate the approval process for this important and beneficial project. FPL respectfully submits that the facts and circumstances warrant the Commission exercising that authority in this instance.

WHEREFORE, for the foregoing reasons, Florida Power & Light Company respectfully requests that the Commission exempt FPL from the Bid Rule as provided for in Rule 25-22.082(18), F.A.C., and determine that FPL is not required to issue an RFP to solicit proposals for comparison to the Project described in this Petition, based upon a finding that an exemption would likely result in a lower cost supply of electricity to FPL's customers, increase the reliable supply of electricity to FPL's customers, and serve the public welfare.

DATED this 22nd day of May, 2017.

Respectfully submitted,

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By: s/ William P. Cox

William P. Cox
Florida Bar No. 0093531

Exhibit

A



Existing FPL Power Plant

Dania Beach, Florida

Rendering of existing plant





FPL Dania Beach Clean Energy Center

Dania Beach, Florida

Conceptual rendering of proposed facility
Subject to final engineering

Truescape®

Exhibit

B

**FPL System-Wide Annual Reductions:
 Dania Beach Clean Energy Center vs. Continued Operation of Lauderdale Units 4 & 5 ***

	Natural Gas (MCF)	CO ₂ (tons)	NO _x (tons)	SO _x ⁺ (tons)
2022	-1,568,649	-449,304	-671	-60
2023	-5,373,866	-476,667	-919	-48
2024	-4,672,182	-596,287	-1,007	-85
2025	-5,405,433	-632,604	-1,098	-121
2026	-5,222,019	-670,327	-1,099	-98
2027	-1,255,402	-114,976	-121	-13
2028	-2,908,686	-233,731	-443	-58
2029	-5,054,002	-628,719	-1,052	-112
2030	-4,376,663	-652,910	-1,068	-86
2031	-5,425,048	-559,545	-986	-79
2032	-5,390,179	-501,141	-935	-55
2033	-5,108,724	-499,446	-831	-30
2034	-5,959,038	-394,503	-718	-14
2035	-4,811,570	-474,519	-700	-29
2036	-6,122,930	-362,286	-613	-5
2037	-5,134,214	-439,288	-674	-21
2038	-5,023,872	-477,574	-684	-21
2039	-5,121,950	-458,406	-667	-19
2040	-5,596,148	-363,429	-583	-4
2041	-4,875,725	-444,679	-622	-22
2042	-5,527,868	-323,852	-514	1
2043	-6,529,298	-251,033	-400	17
2044	-5,881,945	-267,666	-411	8
2045	-4,684,633	-431,760	-489	-23
2046	-5,135,872	-341,453	-392	-9
2047	-5,497,931	-321,872	-372	-2
Total:	-127,663,847	-11,367,969 [^]	-18,063	-983

* Negative numbers represent a decrease in consumption or emissions.

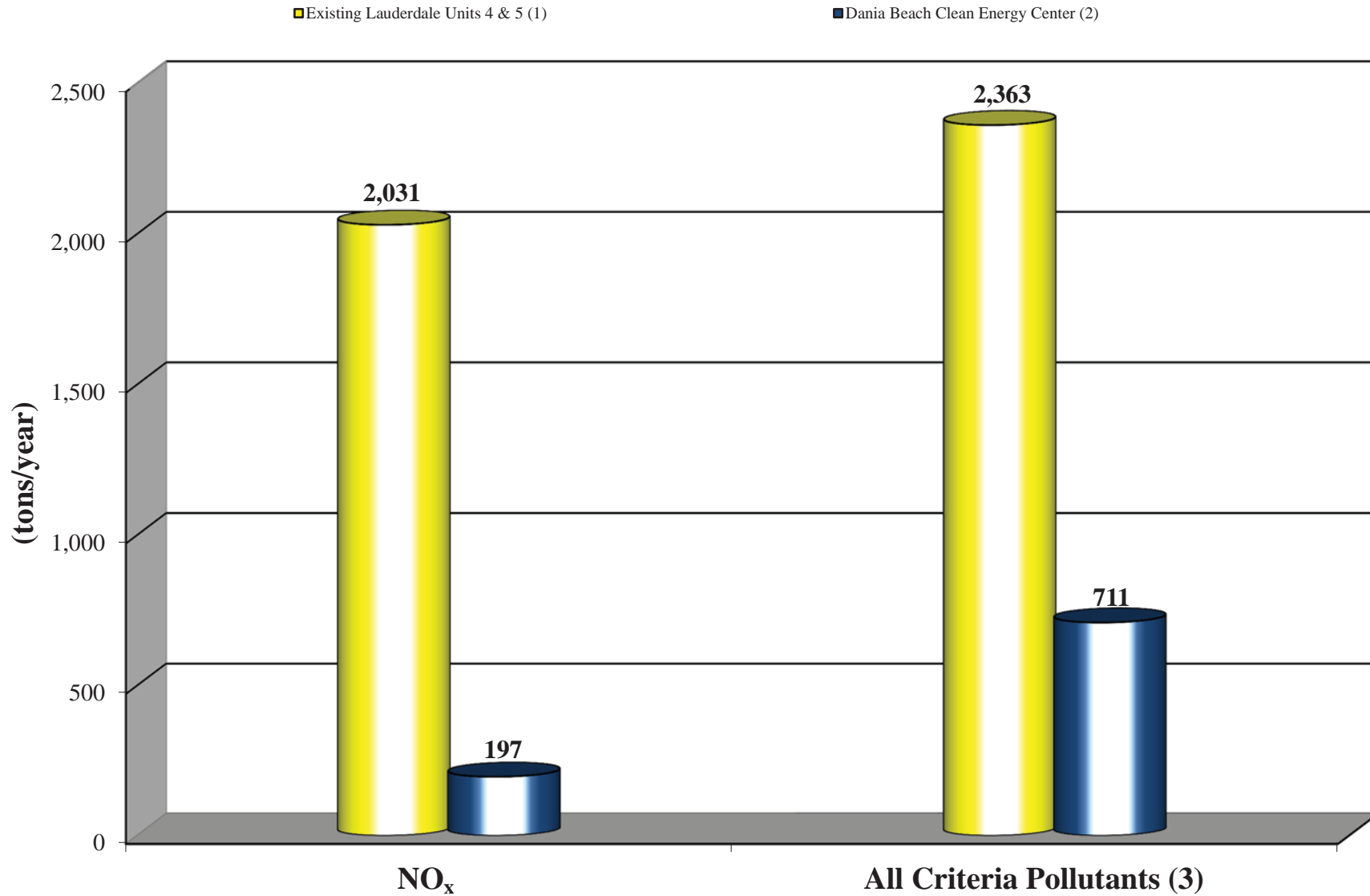
⁺ SO_x emission increases in several years are driven by changes in the economic dispatch of units other than the Dania Beach Clean Energy Center in FPL's system, leading to slightly higher SO_x emissions in the case with Dania Beach Clean Energy Center in three out of the 26 projected years.

[^] The total system-wide reduction in CO₂ emissions between 2022-2047 as result of the Dania Beach Clean Energy Center is equivalent to the removal of approximately 2,178,412 cars off the road for one year based upon the EPA's Greenhouse Gas Equivalencies Calculator (available at: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>).

Exhibit

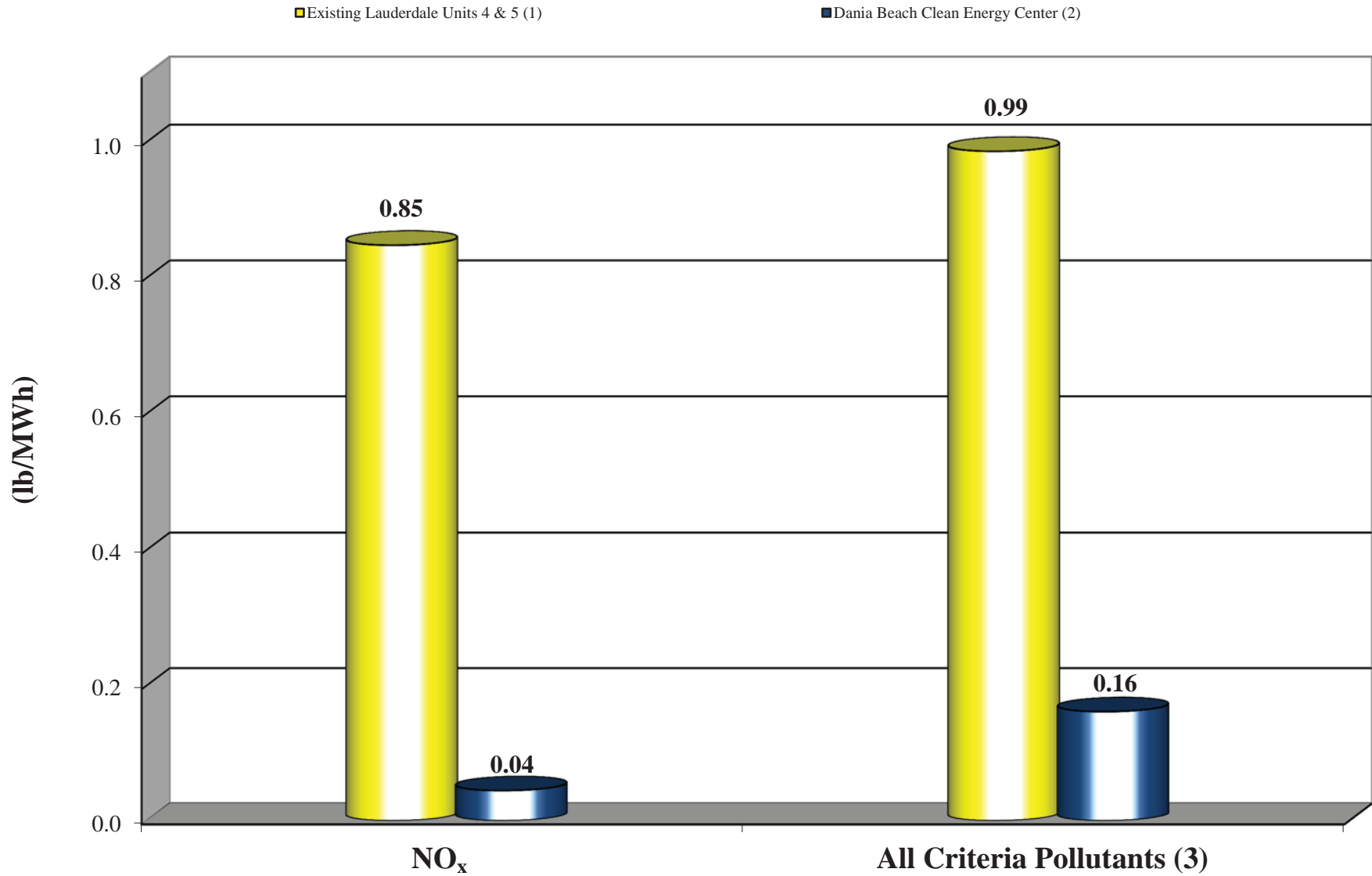
C

NO_x and Total Emissions (tons/year)



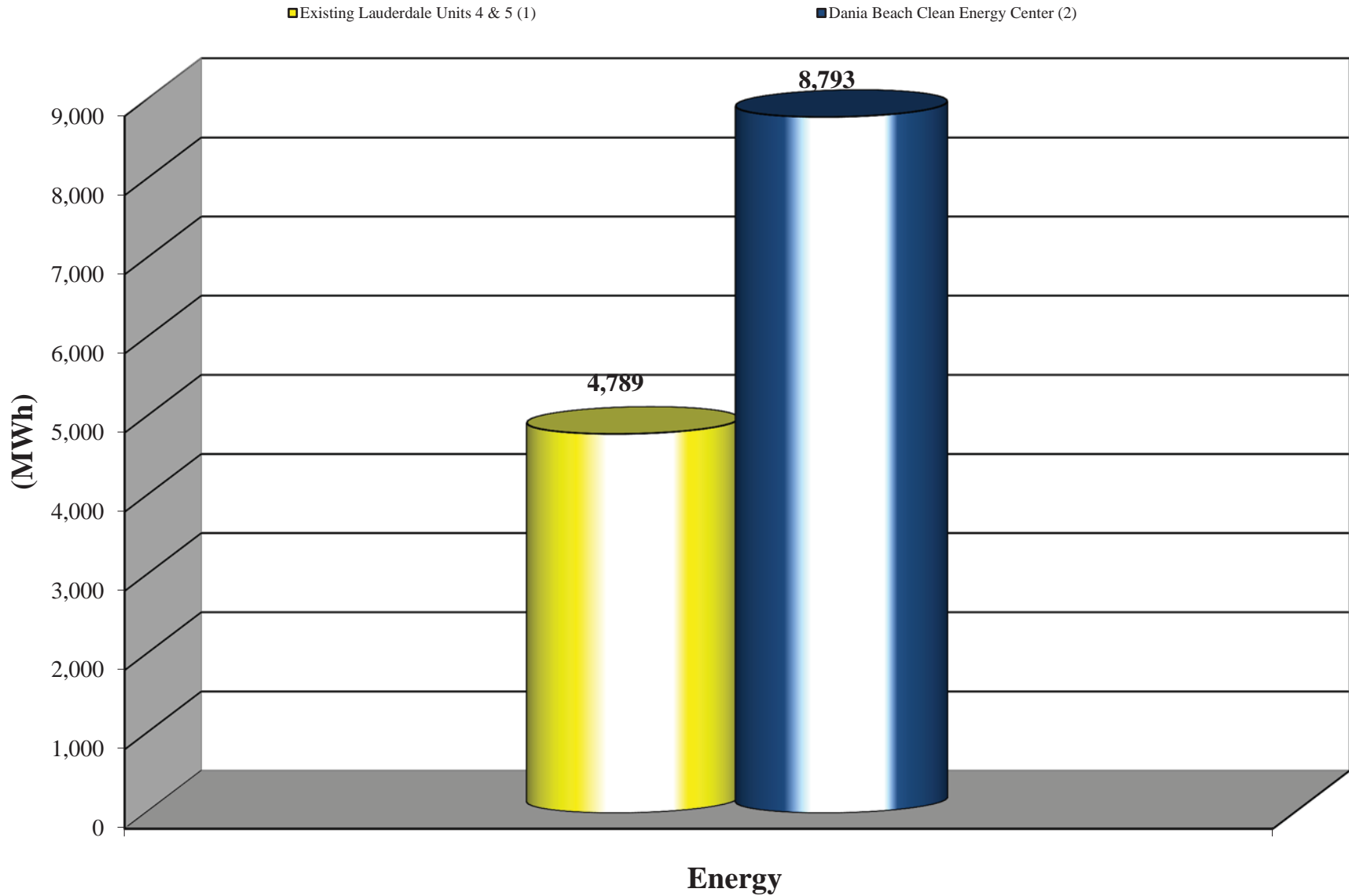
Footnotes: (1) Existing Lauderdale Units 4 & 5 based on "baseline actual emissions" for 2011-2015 (FDEP Rule 62.210.200(28) F.A.C.; highest 24-month annual average); data represents the average of 2011-2012 with Units 4 & 5 at approximately 61.8% capacity factor. (2) Dania Beach Clean Energy Center based on 90% capacity factor on natural gas using expected performance and emission limits for NO_x, PM10/PM2.5, CO, and VOC; SO₂ based on actual sulfur content of gas at Lauderdale plant. (3) All criteria pollutants are the sum of NO_x, PM10/PM2.5, SO₂, CO, and VOC.

NO_x and Total Emissions (lb/MWh)



Footnotes: (1) Existing Lauderdale Units 4 & 5 based on "baseline actual emissions" 2011-2015 and actual generation from EPA Acid Rain database (FDEP Rule 62.210.200(28) F.A.C.; highest 24-month annual average); data represents the average of 2011-2012 with Units 4 & 5 at approximately 61.8% capacity factor. (2) Dania Beach Clean Energy Center based on 90% capacity factor on natural gas using expected performance and emission limits for NO_x, PM10/PM2.5, CO, and VOC; SO₂ based on actual sulfur content of gas at Lauderdale plant. (3) All criteria pollutants are the sum of NO_x, PM10/PM2.5, SO₂, CO, and VOC.

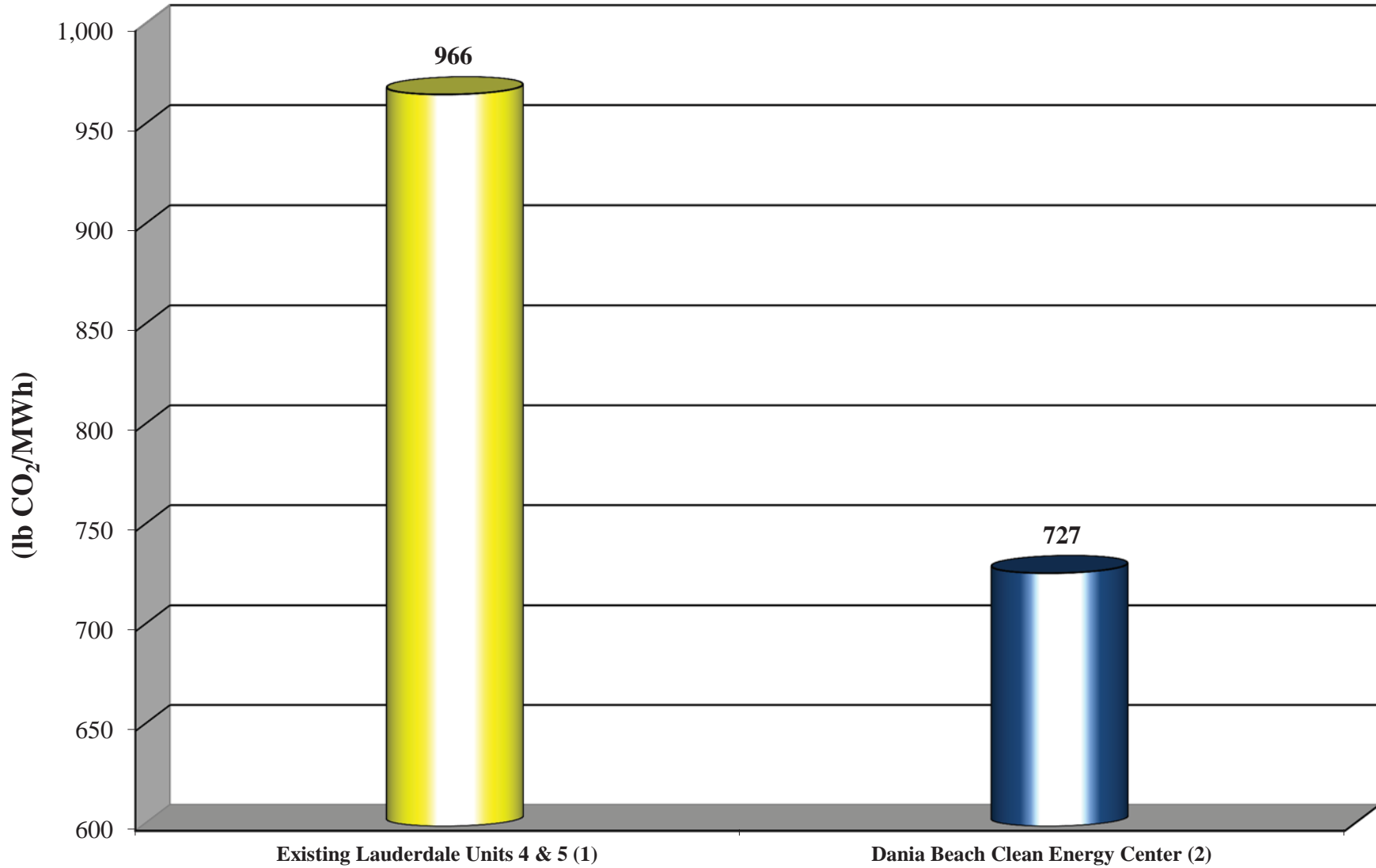
Energy (1,000 MWh)



Footnotes: (1) Existing Lauderdale Units 4 & 5 based on 2011-2015 (FDEP Rule 62.210.200(28) F.A.C.; highest 24-month annual average); data represents approximately 61.8% capacity factor. (2) Dania Beach Clean Energy Center based on 90% capacity factor on natural gas using expected performance.

CO₂ Air Emissions (lb/MWh)

Existing Lauderdale Units 4 & 5 (1) Dania Beach Clean Energy Center (2)



Footnotes: (1) Existing Lauderdale Units 4 & 5 based on "baseline actual emissions" for 2011-2015 and generation (MWh) from EPA Acid Rain Database (FDEP Rule 62.210.200(28) F.A.C.; highest 24-month annual average); data represents the average of 2011-2012. (2) Dania Beach Clean Energy Center based heat rate of 6,110 Btu/kWh (HHV) and natural gas firing.