



R. Wade Litchfield, Esq.
Vice President and General Counsel

June 28, 2013

- VIA HAND DELIVERY -

Ms. Ann Cole
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

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COMMISSION
CLERK

Re: Docket No. 130007-EI

Dear Ms. Cole:

I am enclosing for filing in the above docket the original and seven (7) copies of Florida Power & Light Company's ("FPL's") Petition for Approval of the Proposed NO₂ Compliance Project for cost recovery through the Environmental Cost Recovery Clause ("ECRC"), together with a CD containing the electronic version of same.

Also enclosed for filing are the original and fifteen (15) copies of the prefiled testimony and exhibits of FPL witnesses Terry J. Keith, Randall R. LaBauve, Martin P. Domenech, Juan E. Enjamio and Michael DeBock.

If there are any questions regarding this transmittal, please contact me at (561) 691-7101.

Sincerely,

R. Wade Litchfield

Enclosures
cc: Counsel for Parties of Record (w/encl.)

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**BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION**

In re: Environmental Cost

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Docket No. 130007-EI

Dated: June 28, 2013

PETITION FOR APPROVAL OF ENVIRONMENTAL COST RECOVERY

Pursuant to Section 366.8255, Florida Statutes, Florida Power & Light Company (“FPL”) hereby petitions this Commission for approval of FPL’s proposed NO₂ Compliance Project for cost recovery through the Environmental Cost Recovery Clause (“ECRC”). In support of this petition, FPL incorporates the prepared written testimony of Randall R. LaBauve, Terry J. Keith, Juan E. Enjamio, Michael DeBock, and Martin Domenech.

I. Environmental Requirement – EPA’s NAAQS for NO₂

1. Under Section 109(c) of the Federal Clean Air Act (“CAA”), Congress established the National Ambient Air Quality Standards (“NAAQS”) for, *inter alia*, nitrogen dioxide (“NO₂”) emissions standard (“NO₂ Standard”) and gave the Environmental Protection Agency (“EPA”) a non-discretionary duty under Section 109(d) of the CAA to review the science every five (5) years and modify the NO₂ Standard, as necessary, to protect human health and the environment with an adequate margin of safety.

2. On February 9, 2010, the EPA created an entirely new 1-hour human health-based standard for NO₂ at a level of 100 parts per billion (“ppb”). (75 Fed. Reg. 6474 (Feb. 9, 2010), and the 1-hour NO₂ Standard became effective 60 days later, on April 12, 2010.) This is a significant change because it focuses on short-term exposures rather than long-term exposures. The rule also retained, with no change, the current annual average NO₂ Standard of 53 ppb.

3. The EPA has delegated authority to the Florida Department of Environmental

Protection (“DEP”) to implement the NAAQS in Florida, via a State Implementation Plan (“SIP”) that DEP must submit for EPA approval. On January 22, 2013, DEP confirmed to EPA its authority pursuant to Chapter 403, Florida Statutes, and rules in Chapter 62, Florida Administrative Code, to implement the new 1-hour NO₂ Standard under the SIP. (See Exhibit A - Letter from Katy L. Fenton, Deputy Director, Division of Resource Management, to Gwendolyn Keyes Fleming, Regional Administrator, U.S. Environmental Protection Agency – Region 4, dated January 22, 2013.) The DEP has recommended, and the EPA has designated, all of Florida as presently being “attainment/ unclassifiable” for the new NO₂ Standard. (77 Fed. Reg. 9532 (Feb. 17, 2012), and the effective date is February 29, 2012.) This favorable designation depends on Florida continuing to meet the various NAAQS, including the new 1-hour NO₂ Standard.

4. NO₂ is formed from vehicle, power plant, and other industrial emissions. The new 1-hour NO₂ Standard has a particular impact on the operation of electric utilities’ *peaking* generating units, which operate only at certain times to serve peak demands and do not operate continuously throughout the entire year. This is because the NO₂ emissions measured over a single hour from a peaking unit may be relatively high, while the annual average for that unit is much lower, taking into account that the unit is not operating during most hours. FPL has 48 peaking gas turbines (“GTs”) in total among three generation sites: the Plant Fort Lauderdale (“PFL”), Plant Port Everglades (“PPE”), and Plant Fort Myers (“PFM”). This particular combustion technology was installed at these plants in the 1960s and entered into commercial operation in the early 1970s. These three plants have existing water resources and fuel delivery and transmission infrastructure necessary for plant operations, including the different combustion technologies used on the sites.

5. FPL became aware that the GT combustion technology – with its higher NO_x

emissions and short stacks that are close to property boundaries -- might not adequately facilitate off-site dispersion of stack emissions to concentrations below the new 1-hour NO₂ Standard. FPL therefore performed an analysis of the GTs at these three plants, including stack testing, dispersion modeling, and other data analysis. That analysis, which was completed in early 2013, confirms that emissions from the GTs that are allowed under applicable permits nonetheless will cause or contribute to ambient concentrations in excess of the 1-hour NO₂ Standard at the property boundary.

6. Due to their quick start capability, these GTs constitute extremely important reliability resources for serving load in the South Florida area. If FPL does not address the NO₂ emission environmental regulatory compliance issue for these GTs, it could be faced with a mandatory shutdown of these valuable generation resources by DEP.

II. Compliance Plan Supported by Florida DEP

7. To avoid exceeding the 1-hour NO₂ Standard and concomitant potential for having to shut down, FPL has agreed to a plan with DEP that allows FPL to continue operating the GTs until the end of 2016, in exchange for FPL's commitment to meet the 1-hour NO₂ Standard at the plants' property boundaries by that time. *See Exhibit B – Letter from Randall LaBauve of FPL to Brian Accardo of DEP, dated June 3, 2013.*

8. FPL investigated a series of compliance alternatives to determine how to meet the new 1-hour NO₂ Standard at the least cost to FPL's customers. FPL identified three potential approaches: retrofitting the GTs with emission control equipment that would reduce NO₂ emissions sufficiently to meet the standard; retiring all of the GTs and then accelerating the next planned generating unit (a combined cycle ("CC") unit) as needed to maintain system reliability; and changing out the plants' GT combustion technology in favor of highly efficient combustion

turbines (“CTs”) that have much lower NO₂ emissions and also meet system reliability requirements.

9. As shown in the testimony of FPL witness Enjamio, the third alternative is the most cost-effective solution. It will allow FPL to comply with the 1-hour NO₂ Standard and maintain the required reliability at a cost to customers that is \$56 million lower on a cumulative present value of revenue requirements (“CPVRR”) basis than the next-best alternative.

10. The existing GTs at the PFL, PPE, and PFM plants represent a small but important portion of the power generation at these sites, which also have or will have large CC units that serve FPL’s base load continuously throughout the year. These other combustion technologies at the sites comply with the new 1-hour NO₂ Standard and thus do not have the same environmental compliance issue as the GTs. The modern CTs that FPL would operate at these sites will have less peaking capacity in the aggregate than the GTs and accordingly will not add generation capacity to FPL’s system. Rather, this more efficient, lower emissions combustion technology will enable FPL to comply with the NO₂ Standard environmental regulation in a cost-effective manner, maintain system reliability, and avoid significant expenditures on increased transmission capability that would otherwise be required if the GTs were simply retired, in lieu of changing out the combustion technologies as proposed.

11. Under the plan to which FPL and DEP have agreed, FPL will be filing permit applications within the next two months for these CT facilities, including a federal greenhouse gas air permit from the EPA, the approval for which can take several years to obtain. In addition to licensing and permitting, FPL also will require sufficient time to order the equipment and construct the project. As a result, DEP has agreed that, to allow FPL sufficient time to implement its plan for resolving the offsite impact issues related to the new NO₂ standard, FPL will have until December 31, 2016 to bring the CTs into service. DEP has acknowledged that

FPL may operate the existing GTs, as permitted, to serve its load requirements until the CTs are in service. To meet this compliance deadline, licensing of the project must begin immediately, and within two months of this filing, FPL plans to file the necessary air construction permit applications for the construction of the CTs. This will provide adequate time for DEP and EPA to issue these permits to FPL and for FPL to implement and construct the project by December 31, 2016. FPL will file in this docket copies of the permit applications once they have been submitted to DEP, as well as copies of the permits when issued by DEP.

III. Commission's Criteria for ECRC Recovery

12. Section 366.8255(1)(d), Florida Statutes, defines "environmental compliance costs" for purposes of recovery through the ECRC in pertinent part as including:

... all costs or expenses incurred by an electric utility in complying with environmental laws or regulations, including but not limited to:

1. *In-service capital investments*, including the electric utility's last authorized rate of return on equity thereon.
2. Operation and maintenance expenses. ...

(Emphasis Added)

"Environmental laws or regulations" are defined as "all federal, state, or local statutes, administrative regulations, orders, ordinances, resolutions, or other requirements that apply to electric utilities and are designed to protect the environment." Fla. Stat. §366.8255(1)(c).

13. The Commission's criteria for recovery through the ECRC are set forth in Order No. PSC-94-0044-FOF-EI, issued January 12, 1994 in Docket No. 930613-EI, In re: Gulf Power Company, as follows:

- i. all expenditures will be prudently incurred after April 13, 1993;

- ii. the activities are legally required to comply with a governmentally imposed environmental regulation that was created, became effective, or whose effect was triggered after the company's last test year upon which rates are based; and
- iii. none of the expenditures are being recovered through some other cost recovery mechanism or through base rates.

14. The proposed NO₂ Compliance Project meets these criteria.

a. These costs will be incurred starting in mid-2013, more than 20 years after the first criterion's threshold date.

b. The project is required to meet the new 1-hour NO₂ Standard, the effect of which was triggered after the test year was projected for FPL's last rate case. The DEP did not confirm its authority to implement that new standard in Florida until January 2013, and FPL did not complete the analyses that confirmed the need to address NO₂ emissions from the GTs in order to meet the standard until early 2013. FPL's test year projections for its last rate case (Docket No. 120015-EI) were prepared considerably earlier -- in late 2011 and early 2012.

c. Finally, the costs associated with this environmental compliance project to replace the GTs are not being recovered through another cost recovery mechanism or through base rates. Because the test year projections in FPL's last rate case were prepared in late 2011 and early 2012, FPL would have had no basis to -- and did not -- include the costs of this environmental compliance project in base rates. FPL has not sought to recover these costs through any other cost recovery mechanism.

15. As discussed above, FPL has determined that the least cost, viable alternative to comply with the NO₂ Standard is to change out the GT combustion technology in favor of CTs

that are highly efficient and have low NO₂ emissions. FPL evaluated the potential for retrofitting the GTs with emission control equipment, but concluded that this would not be technically feasible for the GTs at PFL and PPE and would not be a cost-effective solution for PFM. FPL also considered retiring the GTs in lieu of changing out the technology, but this would require transmission upgrades and acceleration of FPL's next planned CC unit in order to meet reliability requirements, and it would result in a much higher CPVRR to customers.

16. The proposed modification to the peaking unit technology at the three plant sites is essential for the sites to meet the new requirement. In essence, it is a change to the peaking unit combustion technology so that the sites can operate more efficiently, with lower emissions and thus achieve compliance with the 1-hour NO₂ Standard. As noted previously, this modification will not result in an increase in FPL's overall generation capacity; to the contrary, FPL's total generation capacity will *decrease* by 300 MW because FPL will only install enough CTs to continue meeting reliability requirements.

17. In sum, the cost for installing highly efficient and clean CTs qualifies for ECRC recovery because the project meets the three established Commission criteria for cost recovery, and the costs are prudently incurred because this project represents the lowest-cost, viable alternative to comply with applicable environmental regulatory requirements. The change to CT technology represents a cost-effective modification to these sites to ensure environmental compliance and system reliability at the lowest overall cost to FPL's customers.

18. In the past, the Commission has approved cost recovery for the capital costs of large construction projects for existing power plant sites, when the costs are required to comply or remain in compliance with an environmental regulation. For example, by the end of 2013, FPL will have incurred over \$522 million in capital investments in order to comply with the EPA's Clean Air Interstate Rule ("CAIR"), which the Commission has approved for cost

recovery as an ECRC project. (See Order No. PSC-12-0613-FOF-EI, issued November 16, 2012, in Docket No. 120007-EI.) Moreover, the 2013 ECRC projections filings in Docket No. 120007-EI show that the capital investment in Duke Energy Florida's approved CAIR/Clean Air Mercury Rule ("CAMR") compliance project at its Crystal River plant is approximately \$1.3 billion, and Gulf Power Company has invested about \$800 million in its approved CAIR/CAMR/Clean Air Visibility Rule ("CAVR") compliance project. For FPL's NO₂ Compliance Project, the overall CPVRR cost to customers associated with the new CTs is lower than any retrofit or other viable alternative.

IV. NO₂ Compliance Project Scope and Amount Requested for ECRC Approval

19. As discussed further in the testimony of FPL's witnesses, this environmental compliance project will result in the construction and operation of some of the cleanest and most efficient peaking units in Florida, while also providing significant public welfare benefits, including the creation of hundreds of jobs at peak construction and a combined \$13 million in new tax revenue to local governments and school districts.

20. Changing out the technology will require (1) the retirement of 48 GTs at PFL, PPE, and PFM and (2) installation of five new CTs at PFL and three new CTs at PFM. No new CTs will be installed at PPE. Instead, the CTs for Broward County will be consolidated at PFL because of the increased economies of scale by constructing, operating, and maintaining the CTs at one site, the better resources available at PFL, and the need to avoid interference with the modernization construction project that is under way at PPE. The CT units at both PFL and PFM will use natural gas as the primary fuel when available and also will be capable of burning a light fuel oil, more specifically ultra-low sulfur distillate with a maximum sulfur content of 0.0015% as a back-up fuel. The project will utilize existing fueling infrastructure to the greatest extent

possible and will receive back-up fuel from truck deliveries.

21. For PFL, the project would result in the retirement of 24 35 MW GTs with a combined summer peak capacity of 840 MW and installation of five CTs with a combined summer rating of 1005 MW. For PFM, the project would result in the retirement of 12 54 MW GTs with a combined summer rating of 648 MW and an installation of three CTs with a combined summer peak capacity of 603 MW. For PPE, the project would result in the retirement of 12 35 MW GTs with a combined summer rating of 420 MW. FPL estimates that the total cost for the entire project will be \$822 million. Principal components include the power block at \$771 million and transmission interconnection and integration at \$51 million. FPL estimates that the ECRC recoverable NO₂ Compliance Project costs will be \$0.4 million for 2013 and \$6.8 million for 2014.

22. Soliciting proposals for third parties to build and provide peaking capacity on other sites (in lieu of the proposed CTs) would not result in the identification of alternatives that could offer the economic and strategic benefits associated with the NO₂ Compliance Project at either PFL or PFM. The primary benefits of the FPL proposed option at these locations are that (1) the plant sites remain intact and operational; (2) they would require only minimal transmission enhancements, (3) they have existing gas delivery and back-up fuel infrastructure, and (4) the land is available and already dedicated to generation of electricity. Any other proposed alternative sites and associated power plant facilities proposed by a third party through a solicitation process would incur significant costs in each of these areas, making any alternative site a more costly alternative to these proposed sites.

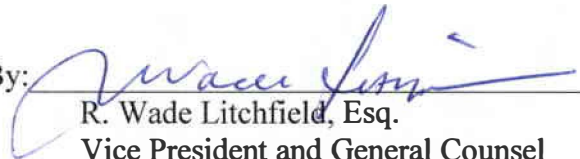
23. Consistent with FPL's historic practice for construction of significant capital projects, the actual CT selection and the Engineering, Procurement, and Construction ("EPC) contractor, which represents over 90% of the total project cost, will be based on a competitive

bid process, ensuring the greatest cost benefit for FPL's customers. FPL has significant experience installing and operating CTs to achieve the best possible efficiencies. Further, FPL has proven its ability to upgrade or modify older plant technologies on time and at or under budget to achieve greater efficiencies and cost savings for its customers. FPL will utilize this existing experience to help ensure that the NO₂ Compliance Project is completed on time and within budget.

WHEREFORE, for the foregoing reasons, FPL respectfully requests that the Commission approve the NO₂ Compliance Project as an environmental compliance project that is eligible for cost recovery through the ECRC.

Respectfully submitted,

By:



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CERTIFICATE OF SERVICE

Docket No. 130007-EI

I HEREBY CERTIFY that a true and correct copy of Florida Power and Light Company's Petition for Approval of the Proposed NO₂ Compliance Project for cost recovery through the Environmental Cost Recovery Clause ("ECRC") has been furnished by hand delivery (*) or U.S. Mail on June 28, 2013 to the following:

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**RICK SCOTT
GOVERNOR**

**JENNIFER CARROLL
LT. GOVERNOR**

**HERSCHEL T. VINYARD JR.
SECRETARY**

January 22, 2013

**Ms. Gwendolyn Keyes Fleming
Regional Administrator
U. S. Environmental Protection Agency (EPA) – Region 4
61 Forsyth Street, SW
Atlanta, GA 30303-8909**

Dear Ms. Keyes Fleming:

Re: Air Program: State Implementation Plan Infrastructure Submittal for the 2010 Revised National Ambient Air Quality Standard for Nitrogen Dioxide

On behalf of the Florida Department of Environmental Protection, I hereby confirm that, to the best of my knowledge, the requirements of Sections 110(a)(1) and 110(a)(2) of the Clean Air Act are adequately addressed in Florida's existing approved State Implementation Plan (SIP) with respect to the implementation of the 2010 revised national ambient air quality standard for nitrogen dioxide (NO₂). A notice of hearing appeared in the Florida Administrative Register on December 14, 2012 (enclosed), and a hearing, if requested, was to be held January 16, 2013. A hearing was not requested and therefore not held. EPA was the only entity that submitted comments. These comments have all been addressed in the following document, which explicitly demonstrates the correlation between the Section 110(a)(2) infrastructure elements and the Florida Statutes and SIP-approved Florida rules that address each such element. An exact duplicate of this submittal in a searchable format has been e-mailed to the Air Planning Branch. If you have any questions on this submittal or need additional information, please contact Chad Stevens at (850) 717-9089. Thank you for your continued support of our efforts to implement the Clean Air Act in Florida.

Sincerely,

A handwritten signature in blue ink, appearing to read "Katy L. Fenton".

**Katy L. Fenton, Deputy Director
Division of Air Resource Management**

CRS/mb

Enclosure

cc: **Scott Davis, Chief, Air Planning Branch, EPA Region 4 (by electronic mail)**

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

**State Implementation Plan Infrastructure Confirmation for the
2010 Revised National Ambient Air Quality Standard for
Nitrogen Dioxide**

Introduction

The United States Environmental Protection Agency (EPA) revised the national ambient air quality standard (NAAQS) for Nitrogen Dioxide (NO₂) on February 9, 2010. *See* 75 Fed. Reg. 6474 (Feb. 9, 2010). Within three years of EPA's promulgation of a revised NAAQS, states must address basic SIP "infrastructure" elements listed under section 110(a)(2) of the Clean Air Act (CAA), including emissions inventories, monitoring, and modeling to assure attainment and maintenance of that new NAAQS. *See* 42 U.S.C. § 7410(a)(1) & (2). EPA has historically referred to the submittals in which states must address these requirements as "infrastructure SIPs."¹

Section 403.061(35), Florida Statutes, grants the Florida Department of Environmental Protection (DEP) the broad authority to "[e]xercise the duties, powers and responsibilities required of the state under the federal [CAA], 42 U.S.C. ss. 7401 et seq" and "implement the programs required under that act in conjunction with its other powers and duties." By virtue of this statute, DEP has the authority and responsibility to act on behalf of the State of Florida to develop and revise a SIP as required by CAA section 110(a)(1) and to ensure that the SIP adequately addresses the required infrastructure elements prescribed under CAA section 110(a)(2).

DEP hereby confirms that the requirements of sections 110(a)(1) and the infrastructure elements required by sections 110(a)(2)(A)-(M) of the CAA are adequately addressed in Florida's existing approved SIP with respect to the implementation of the 2008 revised national ambient air quality standard for NO₂. Furthermore, DEP confirms that all elements of Florida's approved SIP have undergone public notice in accordance with the requirements of 40 CFR 51.102. This document demonstrates the correlation between the section 110(a)(2) infrastructure elements and the Florida Statutes and SIP-approved Florida rules that address each such element.

Rules and Statutes

Florida's existing SIP consists largely of Florida Administrative Code (F.A.C.) rules adopted by DEP and approved by EPA through the SIP revision process. The complete list of DEP rules approved and incorporated by reference into Florida's SIP is published by EPA in the United States Code of Federal Regulations at 40 CFR 52.520(c). The list includes each F.A.C. rule section number and effective date, with a corresponding EPA approval date for each rule section. The F.A.C. rules are available online at the Florida Department of State website (<https://www.flrules.org/default.asp>) and at the DEP Division of Air Resource Management website (<http://www.dep.state.fl.us/air/rules/current.htm>).

¹ This specific term does not appear in the statute, but EPA uses the term to distinguish this particular type of SIP submission designed to address basic structural requirements of a SIP from other types of SIP submissions designed to address other different requirements, such as "nonattainment SIP" submissions required to address the nonattainment planning requirements of part D, "regional haze SIP" submissions required to address the visibility protection requirements of CAA section 169A, NSR permitting program submissions required to address the requirements of parts C and D, and a host of other specific types of SIP submissions that address other specific matters.

There are five rule chapters of the F.A.C. that contain SIP-approved rule sections that directly or indirectly address implementation of the NO₂ NAAQS:

- **Chapter 62-204, F.A.C., Air Pollution Control –General Provisions.** All EPA regulations cited throughout DEP’s air pollution rules are adopted and incorporated by reference in Rule 62-204.800, F.A.C. The purpose and effect of each such adopted regulation is determined by the context in which it is cited. This rule is referenced in the discussion below regarding the requirements in sections 110(a)(2)(A), (B), (C), (D), (F), (J), and (K) of the CAA.
- **Chapter 62-210, F.A.C., Stationary Sources –General Requirements.** This rule chapter establishes definitions and the general requirements for major and minor stationary sources of air pollutant emissions. It provides criteria for determining the need for an owner or operator to obtain DEP authorization by permit to conduct certain activities involving sources of air pollutant emissions, and it establishes reporting requirements and requirements relating to estimating emissions. This chapter also sets forth special provisions related to compliance monitoring, stack heights, circumvention of pollution control equipment, and excess emissions. This rule chapter is referenced in the discussion below regarding the requirements in sections 110(a)(2)(A), (B), (C), (D), (F), (J), and (K) of the CAA.
- **Chapter 62-212, F.A.C., Stationary Sources –Preconstruction Review.** This rule chapter establishes the preconstruction review requirements for proposed new emissions units, new facilities, and modifications to existing units and facilities. The requirements of this chapter apply to those proposed activities for which an air construction permit is required. This chapter includes general preconstruction review requirements and specific requirements for emissions units subject to both attainment and nonattainment area preconstruction review (i.e., New Source Review). This rule chapter is referenced in the discussion below regarding the requirements in sections 110(a)(2)(A), (B), (C), (D), (F), (J), and (K) of the CAA.
- **Chapter 62-296, F.A.C., Stationary Sources –Emission Standards.** This rule chapter establishes emission limiting standards and compliance requirements for stationary sources of air pollutant emissions. It establishes emission limitations for specific categories of facilities and emissions units, including reasonably available control technology (RACT). This rule chapter is referenced in the discussion below regarding the requirements in section 110(a)(2)(A), (D), and (F) of the CAA.
- **Chapter 62-297, F.A.C., Stationary Sources –Emissions Monitoring.** This rule chapter establishes test procedures for determining the compliance of air pollutant emissions units with emission limiting standards. This rule chapter is referenced in the discussion below regarding the requirements in sections 110(a)(2)(A) and (F) of the CAA.

As mentioned above, many of the current SIP-approved rules have been adopted by DEP under the authority of section 403.061(35), Florida Statutes. Beyond the broad authority given to DEP by this statute to implement the CAA, DEP relies on other Florida Statutes for authority to conduct various air program activities such as permitting, monitoring, fee collection, compliance assurance, enforcement, and emergency response. These statutes are essential to Florida’s implementation of the NO₂ NAAQS and are referenced in the discussion below regarding the requirements of section 110(a)(2) of the CAA. For the most part, the Florida Statutes are referenced only to confirm DEP’s legal authority to implement the SIP; however, certain statutes have been approved and incorporated into Florida’s SIP and are noted as such. The Florida Statutes are available online at <http://www.leg.state.fl.us/Statutes>.

Section 110(a)(2) Elements – Implementing Rules and Statutes

110(a)(2)(A) – Emission limits and other control measures: SIPs must include enforceable emission limits and other control measures, means, or techniques; schedules for compliance; and other related matters.

- **Rules:** SIP-approved rule chapters 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C., collectively include emission limits and other control measures for pollutant-emitting activities that contribute to NO₂ concentrations in the ambient air and provide authority for DEP to establish such limits and measures as well as schedules for compliance through SIP-approved permits.
- **Statutes:** Section 403.061(9), Florida Statutes, authorizes DEP to “[a]dopt a comprehensive program for the prevention, control, and abatement of pollution of the air... of the state,”) and section 403.8055, Florida Statutes, authorizes DEP to “[a]dopt rules substantively identical to regulations adopted in the Federal Register by the United States Environmental Protection Agency pursuant to federal law....”

110(a)(2)(B) – Ambient air quality monitoring: SIPs must provide for the establishment and operation of ambient air quality monitors; the compilation and analysis of ambient air quality data; and the submission of these data to EPA upon request.

- **Rules:** SIP-approved rule chapters 62-204, 62-210, and 62-212, F.A.C., require the use of Federal Reference Method or equivalent monitors and also provide authority for DEP to establish monitoring requirements through SIP-approved permits.
- **Statutes:** Section 403.061(1), Florida Statutes, authorizes DEP to “[a]pprove and promulgate current and long-range plans developed to provide for air and water quality control and pollution abatement.” Section 403.061(9), Florida Statutes, authorizes DEP to “[a]dopt a comprehensive program for the prevention, control, and abatement of pollution of the air and waters of the state....” Section 403.061(11), Florida Statutes, authorizes DEP to “[e]stablish ambient air quality... standards for the state as a whole or for any part thereof.”
- **Note:** As of the date of this infrastructure submittal the development of the NO₂ monitoring network is ongoing; therefore Florida’s NO₂ monitoring strategy will be established per the requirements set forth in the 2012 and any subsequent Annual Monitoring Network plan relevant to the development of Florida’s NO₂ monitoring network.

110(a)(2)(C) – Program for enforcement of control measures and new source review: SIPs must include a program that provides for: enforcement of all SIP measures; statewide permitting of minor sources; and permitting of the construction of new or modified stationary sources to meet prevention of significant deterioration (PSD) and nonattainment new source review (NNSR) requirements.

- **Rules:** SIP-approved rule chapters 62-204, 62-210, and 62-212, F.A.C., collectively establish a preconstruction, new source permitting program that meets the PSD and NNSR requirements under parts C and D of the CAA for pollutant-emitting activities that contribute to NO₂ concentrations in the ambient air and also provide for the enforcement of NO_x emission limits and control measures. DEP’s EPA-approved preconstruction review program applies to both major and minor sources. New major sources and major modifications that are subject to PSD or NNSR permitting must demonstrate that the source or modification will not cause or contribute to a violation of any NAAQS or PSD increment and provide an analysis of additional impacts of the source or modification, including impacts on visibility. All new or modified major sources of

NO_x emissions will apply the Best Available Control Technology (BACT) to reduce NO_x emissions in accordance with the CAA and EPA PSD permitting requirements.

- **Statutes:** Section 403.061(6), Florida Statutes, requires DEP to “[e]xercise general supervision of the administration and enforcement of the laws, rules, and regulations pertaining to air and water pollution.” Section 403.121, Florida Statutes, authorizes DEP to seek judicial and administrative remedies, including civil penalties, injunctive relief, and criminal prosecution for violations of any DEP rule or permit.
- **Note:** EPA has promulgated a Federal Implementation Plan (FIP) for the Florida PSD program to address the preconstruction permitting of Greenhouse gases (76 FR 82246). The FIP in conjunction with the above referenced SIP approved rules and Florida Statutes meet the requirements of Section 110(a)(2)(C).

110(a)(2)(D)(i) – Interstate transport: SIPs must include provisions prohibiting any source or other type of emissions activity within the state emitting any air pollutant in amounts which will (i) contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to any such primary or secondary NAAQS or (ii) interfere with measures required to be included any other state’s SIP to prevent significant deterioration of air quality or to protect visibility.

- **Rules:** SIP-approved sections of Chapters 62-204, 62-210, and 62-212, F.A.C., require any new major source or major modification to undergo PSD or NNSR permitting and thereby demonstrate that it will not cause or contribute to a violation of any NAAQS or PSD increment in Florida or any other state and require that the owner or operator provide an analysis of additional impacts of the source or modification, including impacts on visibility. All new or modified major sources of NO_x emissions will apply the Best Available Control Technology (BACT) to reduce NO_x emissions in accordance with the CAA and EPA PSD permitting requirements. The above chapters, along with Chapter 62-296, F.A.C., also provide for implementation of the EPA Clean Air Interstate Rule (CAIR).
- **Statutes:** Section 403.061(14), Florida Statutes, authorizes DEP to “[e]stablish a permit system whereby a permit may be required for the operation, construction or expansion of any installation that may be a source of air pollution....” (with the definition of “pollution” provided in section 403.031(7), Florida Statutes), and section 403.087, Florida Statutes, provides specific requirements for implementation of a permit system for operation of reasonably expected sources of air pollution.
- **Note 1:** Florida’s regional haze plan for addressing visibility-impairing pollutants is, as of the date of this infrastructure submission, proposed to be fully approved under Florida’s SIP by EPA (77 FR 73369). This plan ensures that Florida will not interfere with visibility protection in other states.
- **Note 2:** DEP understands per EPA’s November 2012 memorandum addressing the vacatur of the 2011 Cross-State Air Pollution Rule,² that EPA does not expect this SIP infrastructure submission to address the requirement for SIPs to prohibit significant contribution to nonattainment in, or interfere with maintenance by, any other state with respect to any such primary or secondary NAAQS.

110(a)(2)(D)(ii) – Interstate and international transport provisions: SIPs must include provisions ensuring compliance with the applicable requirements of sections 115 or 126(b) of the CAA.

² McCarthy, Gina, Assistant EPA Administrator, Memo to Air Division Directors, Regions 1-10, Re: Next Steps for Pending Redesignation Requests and Pending State Implementation Plan Actions Affected by the Recent Court Decision Vacating the 2011 Cross-State Air Pollution Rule, November 19, 2012.

- **Rules:** SIP-approved sections of Chapters 62-204, 62-210, and 62-212, F.A.C., require any new major source or major modification to undergo PSD or NNSR permitting and thereby provide notification to other potentially affected federal, state, and local government agencies.
- **Statutes:** Section 403.061(14), Florida Statutes, authorizes DEP to “[e]stablish a permit system whereby a permit may be required for the operation, construction or expansion of any installation that may be a source of air pollution...” (with the definition of pollution provided in section 403.031(7), Florida Statutes), and section 403.087, Florida Statutes, provides specific requirements for implementation of a permit system for operation of reasonably expected sources of air pollution.

110(a)(2)(E) – Adequate resources and authority, conflict of interest, and oversight of local government: States must provide for adequate personnel, funding, and legal authority under state law to carry out its SIP and related issues; comply with conflict-of-interest requirements under CAA section 128; and ensure adequate oversight of any local government agency responsible for implementation of any SIP provision.

- **Statutes:** Section 403.061(2), Florida Statutes, authorizes DEP to “[h]ire only such employees as may be necessary to effectuate the responsibilities of the department.” Section 403.061(4), Florida Statutes, authorizes DEP to “[s]ecure necessary scientific, technical, research, administrative, and operational services by interagency agreement, by contract, or otherwise.” Section 403.182, Florida Statutes, authorizes DEP to approve local pollution control programs. Section 320.03(6), Florida Statutes, authorizes DEP to establish an Air Pollution Control Trust Fund and use a \$1 fee on every motor vehicle license registration sold in the state for air pollution control purposes. Section 112.3143(4) and section 112.3144, Florida Statutes, both of which have been adopted and incorporated into Florida’s SIP and, together, require disclosure of conflicts of interest by public officials consistent with the requirements of CAA section 128.
- **Note:** The DEP understands that when EPA does a completeness determination and final approval for any SIP submittal, it implicitly determines that the requirements of CAA section 110(a)(2)(E) are met. Each submittal must provide for adequate personnel, funding, and legal authority under state law to carry out the proposed SIP revision. In order for a submittal to be deemed complete, any local and regional implementation plans must be submitted through the state agency. In Florida’s case, no local or regional areas submit implementation plans; DEP is solely responsible for the SIP.

110(a)(2)(F) – Stationary source emissions monitoring: SIPs must provide for the establishment and operation of emissions monitoring systems by source owners or operators, and for the submission of periodic emissions reports from such sources.

- **Rules:** SIP-approved sections of Chapters 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C., to the extent such rule sections require emissions monitoring and reporting for pollutant-emitting activities that contribute to NO₂ concentrations in the ambient air, including requirements for the installation, calibration, maintenance, and operation of equipment for continuously monitoring or recording emissions, or provide authority for DEP to establish such emissions monitoring and reporting requirements through SIP-approved permits; and require reporting of NO_x emissions in such manner as to allow the state to correlate such data with applicable emission limitations and comply with the provisions of the EPA Air Emissions Reporting Rule.
- **Statutes:** Section 403.061(13), Florida Statutes, which authorizes DEP to “[r]equire persons engaged in operations which may result in pollution to file reports which may contain... any other such information as the department shall prescribe...”; also, section 403.8055, Florida Statutes, which authorizes DEP to “[a]dopt rules substantively identical to regulations adopted in the Federal Register by the United States Environmental Protection Agency pursuant to federal law....”

110(a)(2)(G) – Emergency powers: States must have authority comparable to that in section 303 of the CAA to address activities causing imminent and substantial endangerment to public health and to provide contingency plans to implement such authority.

- **Statutes:** Section 403.131, Florida Statutes, authorizes DEP to: seek injunctive relief to enforce compliance with this chapter or any rule, regulation or permit certification, or order; to enjoin any violation specified in section 403.061(1), Florida Statutes (i.e., the failure to obtain a permit or comply with any DEP permit or rule or comply with any Florida Statute administered by the DEP); and to seek injunctive relief to prevent irreparable injury to the air, waters, and property, including animal, plant, and aquatic life, of the state and to protect human health, safety, and welfare caused or threatened by any violation.” Section 120.569(2)(n), Florida Statutes, authorizes DEP to issue emergency orders to address immediate dangers to the public health, safety, or welfare; both of which have been adopted and incorporated into Florida’s SIP.

110(a)(2)(H) – Future SIP revisions: States must have authority to revise its SIP in response to changes in the NAAQS, availability of improved methods for attaining the NAAQS, or any EPA finding that the SIP is substantially inadequate.

- **Statutes:** Section 403.061(35), Florida Statutes, as previously described in the “Introduction” above, grants DEP the broad authority to implement the CAA. Moreover, section 403.061(9), Florida Statutes, authorizes DEP to “[a]dopt a comprehensive program for the prevention, control, and abatement of pollution of the air ... of the state, and from time to time review and modify such programs as necessary.”

110(a)(2)(I) – Nonattainment areas: States must meet the applicable requirements of part D of the CAA relating to nonattainment areas.

- **Note:** DEP understands that EPA does not expect this SIP infrastructure submission to address this element.

110(a)(2)(J) – Consultation with government officials; public notification of NAAQS violations; and compliance with PSD and visibility requirements: States must consult with local governments and federal land managers pursuant to the provisions of section 121 of the CAA; notify the public of instances or areas exceeding the NAAQS pursuant to section 127 of the CAA; and meet the requirements of part C of the CAA (relating to PSD and visibility protection).

- **Rules:** SIP-approved sections of Chapters 62-204, 62-210, and 62-212, F.A.C. require intergovernmental consultation, public notice, and compliance with the requirements of part C and D of the CAA. SIP-approved rule chapters 62-204, 62-210, and 62-212, F.A.C., collectively establish a preconstruction, new source permitting program that meets the PSD requirements under part C of the CAA for pollutant-emitting activities that contribute to NO₂ concentrations in the ambient air. New major sources and major modifications that are subject to PSD permitting must demonstrate that the source or modification will not cause or contribute to a violation of any NAAQS or PSD increment and provide an analysis of additional impacts of the source or modification, including impacts on visibility. All new or modified major sources of NO_x emissions will apply the Best Available Control Technology (BACT) to reduce NO_x emissions in accordance with the CAA and EPA PSD permitting requirements.
- **Statutes:** Section 403.061(21), Florida Statutes, authorizes DEP to “[a]dvise, consult, cooperate, and enter into agreements with other agencies of the state, the Federal Government, other states, interstate agencies, groups, political subdivisions, and industries affected by the provisions of this act, rules, or policies of the department” and section 403.061(20), Florida Statutes, authorizes DEP to “[c]ollect and disseminate information ... relating to pollution.”

- **Note 1:** Notification to the public of instances or areas exceeding the NAAQS and associated health effects is provided through implementation of the Air Quality Index reporting system in all required areas.
- **Note 2:** EPA has promulgated a FIP for the Florida PSD program to address the preconstruction permitting of Greenhouse gases (76 FR 82246). The FIP in conjunction with the above referenced SIP approved new source preconstruction permitting program meet the PSD requirements of part C of the CAA.
- **Note 3:** Florida's regional haze plan for addressing visibility-impairing pollutants is, as of the date of this infrastructure submission, proposed to be fully approved under Florida's SIP by EPA (77 FR 73369). This plan ensures that Florida will meet the visibility requirements in part C of the CAA.

110(a)(2)(K) – Air quality modeling: States must provide for the performance of air quality modeling as required by EPA to predict the effects on air quality of emissions of NAAQS pollutants and for submission of such data to EPA.

- **Rules:** SIP-approved sections of Chapter 62-204, 62-210, and 62-212, F.A.C., require use of EPA-approved modeling of pollutant-emitting sources that contribute to NO₂ concentrations in the ambient air.
- **Statutes:** Section 403.061(13), Florida Statutes, authorizes DEP to “[r]equire persons engaged in operations which may result in pollution to file reports which may contain information relating to locations, size of outlet, height of outlet, rate and period of emission, and composition and concentration of effluent and such other information as the department shall prescribe to be filed....” Section 403.061(18), Florida Statutes, authorizes DEP to “[e]ncourage and conduct studies, investigations, and research relating to pollution and its causes, effects, prevention, abatement, and control.”
- **Note:** DEP has the technical capability to conduct or review all air quality modeling associated with the NSR program and all SIP-related modeling, except photochemical grid modeling which is performed for DEP under contract. All such modeling is conducted in accordance with the provisions of 40 CFR Part 51, Appendix W, “Guideline on Air Quality Models.” DEP agrees to submit any NSR or SIP modeling files to EPA upon request.

110(a)(2)(L) – Permitting fees: States must assess permitting fees to cover the costs of reviewing, approving, implementing, and enforcing major stationary source permits.

- **Statutes:** Paragraph 403.087(6)(a), Florida Statutes, directs DEP to “require a processing fee in an amount sufficient, to the greatest extent possible, to cover the costs of reviewing and acting upon any application for a permit....”
- **Note:** The subject costs are covered by the Air Pollution Control Trust Fund, which is made up of various funding sources.

110(a)(2)(M) – Consultation and participation by affected local entities: States must provide for consultation and participation in SIP development by local political subdivisions affected by the SIP.

- **Statutes:** Section 403.061(21), Florida Statutes, authorizes DEP to “[a]dvise, consult, cooperate, and enter into agreements with other agencies of the state, the Federal Government, other states, interstate agencies, groups, political subdivisions, and industries affected by the provisions of this act, rules, or policies of the department.”
- **Note:** DEP has specific operating agreements with eight county air pollution control agencies (Duval, Orange, Hillsborough, Pinellas, Sarasota, Palm Beach, Broward, and Miami-Dade) that delineate the duties and responsibilities of each such county in carrying out Florida's air program, including applicable portions of the SIP.



June 3, 2013

Mr. Brian Accardo
Director
Division of Air Resource Management
Florida Dept. of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399

Re: Analysis and Plan regarding the new 1-hour NO₂ National Ambient Air Quality Standard

Dear Mr. Accardo:

I am writing to you on behalf of Florida Power & Light Company ("FPL") in regards to our recent discussions related to the impact of the new 1-hour NO₂ standard on FPL facilities.

As you are aware, on January 22, 2010, the U.S. Environmental Protection Agency ("EPA") strengthened the National Ambient Air Quality Standard ("NAAQS") for NO₂. Specifically, EPA created an entirely new 1-hour human health-based standard for NO₂. This new 1-hour standard marks a significant change in the form of the NO₂ standard by focusing on short term exposures rather than long term exposures. EPA set the new 1-hour standard at 100 parts per billion.

Earlier this year, the Florida Department of Environmental Protection ("DEP") submitted a revision to its State Implementation Plan ("SIP") to implement the new 1-hour NO₂ standard pursuant to its statutory duty and authority under Chapter 403, Florida Statutes, and rules adopted under Chapter 62, Florida Administrative Code, to protect and maintain Florida's air quality, including ensuring NAAQS attainment. Based on DEP's recommendation, EPA has already designated all of Florida as attainment/unclassifiable for the new NO₂ standard. In reviewing the potential impacts of this new NO₂ standard, FPL became aware that emission units with higher NO_x emissions and shorter stacks, and which are located closer to property boundaries, may not adequately facilitate off-site dispersion of stack emissions to concentrations below the new 1-hour standard.

FPL conducted an analysis of three of its electrical generating facilities with older-generation peaking gas turbines ("GTs") that have these characteristics. Specifically, FPL analyzed the GTs at the following facilities: Lauderdale Plant, located in the City of Dania, Broward County; Port Everglades Plant, located in the City of Hollywood, Broward County; and Fort Myers Plant, located in the City of Tice, Lee County. FPL has 48 peaking GTs at these three facilities, which were installed in the 1960s and entered into commercial operation in the early 1970s. The GTs do not operate on a continuous basis during the entire year, but rather are used occasionally in order to serve peak demands. Thus, while their less frequent operation did not pose concerns relative to the prior annual NO₂ standard, even occasional operation is relevant to the new 1-hour NO₂ standard. Regardless, due to their quick-start capability, the GTs constitute extremely important reliability resources for FPL for serving load in the South Florida area.

Florida Power & Light Company

700 Universe Boulevard, Juno Beach, FL 33408

Brian Accardo
June 3, 2013
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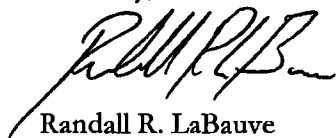
FPL's analysis of these GTs, as presented to DEP, included stack testing, dispersion modeling and other data analysis. This analysis showed that emissions from the GTs, which are allowed under applicable permits, nonetheless would not disperse sufficiently to bring off-site concentrations below the new 1-hour standard. If left unresolved, such emissions could thus lead to EPA designating the area as nonattainment. FPL's evaluation concluded that the most cost-effective solution is to remove 48 of the existing GTs at the three facilities and replace them with new, highly efficient combustion turbines (CTs) with low NO₂ emissions. This solution, as FPL's analysis demonstrated to DEP, resolves the offsite impacts at these three facilities.

As a result of its analysis, FPL discussed with DEP its need for certainty regarding a timely resolution of this issue, while ensuring its ability to reliably meet demand. FPL understands that completing this project as expeditiously as practicable is necessary to DEP's implementation of the NAAQS program and Section 172 of the Clean Air Act. As FPL explained in our meetings, a substantial lead time is needed to complete this project. Specifically, FPL must apply for and receive the necessary permits and approvals for the project. Part of the approval process is to receive a federal greenhouse gas air permit from EPA, which can easily stretch out to two years. Further, FPL must have time, after licensing and permitting, to order the equipment and to construct the project. Therefore, DEP has agreed that, in order to resolve the offsite impact issues related to the new NO₂ standard, FPL will bring the new CTs into service by December 31, 2016. DEP has acknowledged that FPL may operate the existing GTs, as permitted, to serve load until the new CTs are in service.

In order to meet this in-service deadline, licensing of the project must begin immediately. In that regard, FPL will file the necessary air construction permit applications by this summer for construction of the new CTs. This should allow adequate time for DEP and EPA to issue the permits and for FPL to implement and construct the project by December 31, 2016. FPL understands that this response plan and timing is acceptable to DEP.

Thank you for the opportunity to meet with you and your staff to find a mutually agreeable path forward to reduce those off-site impacts to a level below this new regulatory air standard, on a timetable that meets FPL's operational needs.

Sincerely,



Randall R. LaBauve
Vice-President
Environmental Services