

# P.E. CERTIFICATION STATEMENT

## PERMITTEE

Florida Power and Light Company (FPL)  
700 Universe Boulevard  
Juno Beach, Florida 33408

Draft Air Permit No. 0110036-010-AC  
Port Everglades Next Generation  
Clean Energy Center (PEEC)

## PROJECT DESCRIPTION

**Project:** FPL proposes to construct a nominal 1,250 megawatts (MW) natural gas-fueled combined cycle unit (Unit 5) including three 250 MW combustion turbine-electrical generators (CTGs) connected to three heat recovery steam generators (HRSGs), a single steam turbine-generator and ancillary equipment. The project includes the permanent shutdown and dismantling of four natural gas and residual fuel oil-fired fossil fuel steam generators with a total nominal capacity of 1,200 MW and their respective 344-foot stacks. A Prevention of Significant Deterioration (PSD) review and determinations of Best Available Control Technology (BACT) were not required pursuant to the Rule 62-212.400, Florida Administrative Code (F.A.C).

The CTGs are subject to the emission standards contained in Title 40 Code of Federal Regulations, Part 60 (40 CFR 60), Subpart KKKK-Standards of Performance for Stationary Combustion Turbines (Rule 62-204.800(8)(b)81, F.A.C. Ancillary equipment includes: an auxiliary boiler; two diesel-fueled emergency generators; two natural gas-fired fuel heaters; one diesel-fueled fire pump engine; a natural gas-fueled gas compression station; and two temporary construction boilers.

There will be very substantial decreases in the regulated air pollutants except for volatile organic compounds and carbon monoxide. The maximum potential annual emissions from the PEEC project are summarized below for comparison with recent annual emissions from the four units slated for shut down.


Pollutant (emissions in tons/year)	Baseline Actual Emissions, Units 1-4	PEEC Potential Emissions	Net Emissions Increases (Decreases)
Sulfur Dioxide (SO <sub>2</sub> )	9,494	211	(9,283)
Particulate Matter (PM/PM <sub>10</sub> )	604	246	(358)
Nitrogen Oxides (NO <sub>x</sub> )	4,260	382	(3,878)
Carbon Monoxide (CO)	885	958	73
Volatile Organic Compounds (VOC)	76.9	106	29.1
Sulfuric Acid Mist (SAM)	422.3	40.4	(382)
Lead (Pb)	0.10	0.05	(0.05)

Selective catalytic reduction (SCR) systems with ammonia injection will be used in conjunction with lean premixed fuel combustion (Dry Low NO<sub>x</sub>) to control NO<sub>x</sub> emissions from the three natural gas-fueled CTGs. The SCR systems will also be used in conjunction with wet injection to control NO<sub>x</sub> when firing back up ULSD fuel oil.

Emissions of CO, PM/PM<sub>10</sub>, SAM, SO<sub>2</sub>, and VOC will be minimized by the efficient, high-temperature combustion of inherently clean fuels. Continuous emission monitoring systems (CEMS) will be used to continuously measure and demonstrate compliance with the permitted NO<sub>x</sub> emission standards. Emissions from ancillary equipment will be controlled by use of inherently clean fuels and the requirements of the applicable New Source Performance Standards at 40 CFR 60 and National Emission Standards for Hazardous Air Pollutants at 40 CFR 63.

The lower NO<sub>x</sub> emissions will reduce ozone (smog) formation potential and nitrate fallout into local watersheds. The lower PM/PM<sub>10</sub>, SO<sub>2</sub> and SAM emissions will minimize visible stack emissions, acid deposition, and fine particulate (PM<sub>2.5</sub>) formation in the environment. The overall air impacts due to the project are all favorable.

**I HEREBY CERTIFY** that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).

  
Alvaro A. Linero, P.E.

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(Date)