

# PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DEP File No. 0090006-005-AC  
Florida Power and Light Company (FPL)  
Cape Canaveral Conversion Project  
Brevard County

**Applicant:** The applicant for this project is FPL. The applicant's authorized representative and mailing address is: Mr. Randall R. LaBauve, Vice President, FPL, 700 Universe Boulevard, Juno Beach, Florida 33408.

**Facility and Location:** FPL operates the existing Cape Canaveral Plant (CCP), which is located in Brevard County at 6000 North U.S. Highway 1, between Cocoa and Titusville. The plant is located approximately 185 kilometers (km) east of the Prevention of Significant Deterioration (PSD) Class I Chassahowitzka Wilderness Area. The facility UTM coordinates are Zone 17, 523.1 km East and 3,149.6 km North. The existing facility consists of two residual fuel oil-fired steam electrical generators.

**Project:** FPL proposes to construct a nominal 1,250 megawatts (MW) natural gas-fueled combined cycle unit and to shut down and dismantle the two 400 MW residual oil and gas-fueled units (and their 397-foot exhaust stacks) at the existing CCP. The CCP will be renamed the Cape Canaveral Energy Center (CCEC). This project does not trigger PSD and a determination of best available control technology (BACT) is not required.

Combined cycle Unit 1 will consist of: three nominal 265 MW combustion turbine-electrical generators (CTG) with evaporative inlet cooling systems; three supplementary-fired heat recovery steam generators (HRSG) equipped with selective catalytic reduction (SCR) reactors and duct burners (DB); three 149 foot exhaust stacks; and a common nominal 500 MW steam turbine-electrical generator (STG).

Additional equipment includes: a small auxiliary boiler; two diesel-fueled emergency generators; two natural gas fired fuel heaters; one diesel-fueled fire pump engine; and a natural gas-fueled gas compression station.

The CCEC will be permitted to operate continuously while firing inherently clean natural gas. Use of ultra low sulfur diesel (ULSD) fuel oil (0.0015 percent sulfur) will be allowed as backup fuel up to the fuel equivalent of 3,000 hours aggregated over the three CTG during any calendar year. The gas-fired DB located within each HRSG will be used for limited periods of time to raise additional steam for use in the STG.

There will be very substantial decreases in the regulated air pollutants except for volatile organic compounds (VOC). The maximum potential annual emissions from the new units in tons per year (TPY) are summarized below for comparison with recent annual emissions from the two units slated for shut down.

Pollutant	CCP Baseline Actual Emissions TPY	CCEC Potential Emissions TPY	Net Emissions Increases (Decreases) TPY
Sulfur dioxide (SO <sub>2</sub> )	11,140	203	(10,937)
Particulate Matter (PM/PM <sub>10</sub> )	918/918	189/189	(729)/(729)
Nitrogen Oxides (NO <sub>x</sub> )	7,725	506	(7,219)
Carbon Monoxide (CO)	703	533	(170)
Volatile organic compounds (VOC)	68.4	103.8	35.4
Sulfuric acid Mist (SAM)	495	41	(454)
Lead (Pb)	0.11	0.05	(0.06)

SCR systems with ammonia injection will be used in conjunction with Dry Low-NO<sub>x</sub> combustion to control NO<sub>x</sub> emissions when operating on natural gas. The SCR systems will also be used in conjunction with wet injection when firing back up ULSD. 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. Emission limits are included in the draft permit that are comparable with BACT. The limits further insure that the indicated emission reductions will be achieved and that the individual units comply with the respective requirements pursuant to the Standards of Performance for New Stationary Sources pursuant to 40 Code of Federal Regulations, Part 60. Emissions of CO and NO<sub>x</sub> will be continuously monitored to demonstrate compliance with the conditions of the permit.

Because of the substantial emission reductions, the project did not trigger PSD and an ambient air quality impact analysis including PSD increment consumption modeling was not required. However, the applicant conducted ambient air modeling that demonstrates that (even with the lower stacks) facility operations will continue to comply with the ambient air quality standards (AAQS).

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 significantly reduce visible stack emissions, acid deposition, and fine particulate (PM<sub>2.5</sub>) formation in the environment. The overall impacts due to the project are all favorable. There will also be reductions of hazardous air pollutants (HAP) such as nickel (Ni) with the result that the CCEC (in contrast to the CCP) will not be a major source of HAP.

**Permitting Authority:** Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air construction permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite 4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, Mail Station (MS) 5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

**Project File:** A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the draft air construction permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above. In addition, electronic copies of key documents are available at the following web link:

[www.dep.state.fl.us/Air/permitting/construction/fplcanaveral.htm](http://www.dep.state.fl.us/Air/permitting/construction/fplcanaveral.htm)

**Notice of Intent to Issue Air Construction Permit:** The Permitting Authority gives notice of its intent to issue an air construction permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C.

The Permitting Authority will issue a final air construction permit in accordance with the conditions of the proposed draft air construction permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

**Comments:** The Permitting Authority will accept written comments concerning the proposed draft air construction permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the draft air construction permit, the Permitting Authority shall revise the draft air construction permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

**Petitions:** A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

**Mediation:** Mediation is not available in this proceeding.