PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Division of Air Resource Management, Office of Permitting and Compliance

Draft Air Permit No. 1210003-008-AC / PSD-FL-428
Duke Energy Florida, Inc. (DEF), Suwannee River Power Plant
Suwannee County, Florida

Applicant: The applicant for this project is Duke Energy Florida, Inc. (DEF). The applicant's authorized representative and mailing address is: Mr. Brian V. Powers, Station Manager, Duke Energy Florida, Inc. (DEF), 299 First Avenue North, FL-903, St. Petersburg, FL 33701-3308.

Facility Location: The existing Suwannee River Power Plant is located within the city of Live Oak in Suwannee County, Florida. The facility can be accessed from River Road south of Route 90.

Project: DEF proposes to construct two nominal 178 megawatt primarily natural gas-fueled General Electric 7FA.03 model simple cycle combustion turbines (CT) and ancillary equipment. Ultra-low sulfur distillate fuel oil will be used as a limited backup fuel in the CT. The natural gas will be limited to 2 grains of sulfur per 100 standard cubic feet of gas while the ULSD fuel oil will be limited to 0.0015% sulfur. The ancillary equipment will include: two new natural gas-fired fuel gas heaters; a new emergency diesel fire pump; a new 2.5 million gallon double-wall fuel oil storage tank; four new circuit breakers; and miscellaneous natural gas piping components. Natural gas will be delivered to the site by the existing pipeline; however, new piping components will be installed to deliver the fuel to the specific area where the new CT will be located. ULSD fuel oil delivery will be by truck.

Each CT will include the following major features:

- Dual fuel firing system using natural gas (primary fuel) or ULSD fuel oil (limited backup fuel);
- The CT are limited to a combined 8,000 hours of operation per year of which 1,000 hours can be while firing ULSD fuel oil; and
- Dry low nitrogen oxides (NO_X) combustion system for NO_X reduction when firing natural gas and water injection for NO_X reduction while firing ULSD fuel oil.

The project includes the permanent shutdown of a fossil fuel steam boiler at the site. Once commercial operation of the CT peaking commences, the existing boiler will be permanently shut down. During the initial startup and shakedown of the CT peaking units, the existing boiler may continue to operate.

Based on the air permit application submitted by DEF, and taking into account the baseline actual emissions from the retired boiler and the potential emissions from the project, the potential net emissions increases and decreases for comparison with the Prevention of Significant Deterioration (PSD) thresholds are:: -49.7 tons per year (TPY) of carbon monoxide (CO); -240.5 TPY of nitrogen oxides (NO_X); 12.5 TPY of particulate matter (PM); 28.9 TPY of PM with a mean diameter of 10 micrometer (µm) or less (PM_{10}); 35.9 TPY of PM with a mean diameter of 2.5 µm or less ($PM_{2.5}$); 36.6 TPY of sulfur dioxide (SO_2); 6.2 TPY of sulfuric acid mist (SAM); 20.9 TPY of volatile organic compounds (VOC); and 669,283 TPY of carbon dioxide equivalents (CO_2e). As defined in Rule 62-210.200, F.A.C., the project results in significant net emissions increases for PM_{10}, $PM_{2.5}$ and CO_2e thereby requiring a Best Available Control Technology (BACT) determination for these pollutants.

The Department is required to determine the BACT and evaluate the applicant's Air Quality Analysis regarding ambient impacts due to the project. The Department's preliminary BACT determinations for the pollutants listed in the previous paragraph are based on: clean, low sulfur fuels to control to control $PM_{10}/PM_{2.5}$ emissions; and the use of natural gas as the primary fuel with the limit use of fuel oil as a backup fuel fired in efficient CT technology to control CO_2e. Low sulfur fuels provide the added benefit of controlling SO_2 and sulfuric acid mist emissions.

The applicant performed ambient air quality analyses as required. Based on the modeling results, the maximum predicted ambient air quality impacts for both PM_{10} and $PM_{2.5}$ did not exceed the Class I significant impact levels (SILs) in micrograms per cubic meter ($\mu g/m^3$) applicable at the nearest PSD Class I areas; Bradwell Bay

Wilderness (BBW), Chassahowitzka Wilderness (CW), Okefenokee Wilderness (OW), Saint Marks Wilderness (SMW), and Wolf Island Wilderness (WIW). Consequently, comprehensive multi-source modeling was not necessary to show that concentrations of these pollutants did not exceed the PSD Class I increments.

Pollutant	Averaging Time	BBW	CW	OW	SMW	WIW	Class I SIL ($\mu g/m^3$)	Significant Impact?
PM_{10} [b]	Annual	0.00192	0.00102	0.00281	0.00281	0.00110	0.16	No
	24-Hour	0.03816	0.02260	0.05758	0.04660	0.02047	0.32	No
$PM_{2.5}$ [a,b]	Annual	0.00192	0.00102	0.00281	0.00281	0.00110	0.06	No
	24-hour	0.03816	0.02260	0.05758	0.04660	0.02047	0.07	No

a. Assumes 100% of PM_{10} consists of $PM_{2.5}$, i.e., the most conservative estimate.
b. Modeled at 100% load with two CT's using ULSD

In addition, the modeling results show that the maximum modeled maximum concentrations based on load and fuel are predicted to be less than the Class II SIL for all pollutants. Consequently, comprehensive multi-source modeling was not necessary to show that concentrations of these pollutants did not exceed the NAAQS or PSD Class II increments.

Pollutant	Averaging Time	Max Impact [b] ($\mu g/m^3$)	SIL ($\mu g/m^3$)	Significant Impact?
$PM_{2.5}$	24-Hour	0.99679	1.2	No
$PM_{2.5}$	Annual	0.14653	0.3	No
PM_{10}	24-Hour	1.21757	5	No
PM_{10}	Annual	0.18073	1	No

Based on the analyses, emissions from the project will not cause, or significantly contribute to, a violation of any ambient air quality standards or applicable increments.

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, F.A.C. The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Division of Air Resource Management's (DARM) Office of Permitting and Compliance is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 2600 Blair Stone Road, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/717-9000.

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 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 and phone number listed above. In addition, electronic copies of these documents are available on the following web site by entering draft permit number: http://www.dep.state.fl.us/air/emission/apds/default.asp.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air 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 applicable 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 Permit in accordance with the conditions of the proposed Draft 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.

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Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit and requests for a public meeting for a period of 30 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 30-day period. In addition, if a public meeting is requested within the 30-day comment period and conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received comments result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft 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. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this written notice of Intent to Issue Air Permit. 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 the attached Public Notice or within 14 days of receipt of this written notice of Intent to Issue Air Permit, 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. A petition for administrative hearing must contain the information set forth below and must be filed (received) with the Agency Clerk in the Office of General Counsel, 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida 32399-3000, Agency.Clerk@dep.state.fl.us, before the deadline. 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, any email address, telephone number and any facsimile number of the petitioner; the name, address any email address, telephone number, and any facsimile 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 of Intent to Issue Air Permit. 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.

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