



Florida Department of Environmental Protection

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Secretary

Sent by Electronic Mail – Received Receipt Requested

jovick@southernco.com
Mr. James Vick
Environmental Affairs Director
Gulf Power Company
One Energy Place, BIN #0328
Pensacola, FL 32520

Re: Exemption from the Requirement to Obtain an Air Construction Permit
Gulf Power Company, Scholz Electric Generating Plant Units 1 and 2
Project No. 0630014-011-AC
Torrefied Wood Test Burn

Dear Mr. Vick:

On August 10, 2012 Gulf Power Company submitted an application for an air construction permit to allow a minimal amount of biomass, in the form of torrefied wood, to be test burned with the fuel used in one of the two front wall fired, dry bottom boilers (Units 1 and 2) located in Jackson County at Scholz Plant, 1460 Gulf Power Road, Sneads, Florida.

The proposal is to test burn approximately 500 tons over a two week period of the described biomass.

Determination: A complete description of this project is available by entering permit number 0630014-011-AC at the following web site: <http://appprod.dep.state.fl.us/air/emission/apds/default.asp> .

Torrefied wood is produced by heating wood chips in the absence of oxygen. The torrefication process produces a more energy dense (Btu/lb), low moisture product with characteristics similar to coal. The torrefied product is then pelletized which makes a dense fuel, enough like coal that it can be pulverized and co-fired with coal.

The torrefied wood pellets, 500 tons will be transported to the plant by covered trucks. At the plant the pellets will be off-loaded and temporarily stored on the coal pile. Fugitive dust will be controlled as necessary with water fogging or other dust suppression. The torrefied wood pellets will be blended with coal and then pulverized and combusted.

The objective of the torrefied wood test burn study includes: the determination of the maximum percentage of torrefied wood pellets that can be co-fired at the Scholz Plant; and to determine the effect of co-firing torrefied wood on operations, emissions, controls, and efficiency of the boiler.

The front wall fired, dry bottom boilers were originally built to combust coal and number 2 fuel oil. The boilers are equipped with Buell Engineering Co. high efficiency (95% - 99%) electrostatic precipitator for particulate emission controls. Compared with coal and fuel oil, torrefied wood is characterized by lower sulfur, nitrogen and carbon content, as well as lower moisture. The torrefied wood product has approximately 80% of the heating value of coal and also has very low ash content.

The biomass has been tested, burning 100% torrefied wood on other coal fired units and the data has shown nitrogen oxides (NO_x) emissions were approximately 30% less and sulfur dioxide (SO₂) emissions were approximately 75% less than when firing 100% coal. The burning of 100% torrefied wood product also produced lower carbon dioxide (CO₂) and mercury emissions compared to burning 100% coal. The table below gives expected emissions in pounds from the 500 tons torrefied wood test burn at the Scholz Plant.

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Parameter	Total Emissions (lbm/500 tons)
SO ₂	261.625
NO _x	5127.85
CO	6279
PM Filterable	565.11
PM Filterable PM-10	418.6
PM Filterable PM-2.5	366.275
SO ₂ *	152
Total HAPS	610.0332919
Total Organic Compounds	408.135
Volatile Organic Compounds	177.905
CO ₂	2040675

Emission Factors From AP-42 Chapter 1.6, Wood Residue Combustion In Boilers, Dry wood with ESP. Permitted heat input is 645.7 mmBtu/hr. The heat content of torrefied wood is 10465 btu/lbm. Max Emission Rate is assumed at max permitted heat input on torrefied wood in one unit. * SO₂ based off of 3/22/2012 analysis provided by Earth Care Products.

Based on the information given, the Department believes that any changes in emissions due to the test burn would be miniscule by comparison with the effects of torrefied wood variations and coal blend ratios.

Pursuant to Florida Statue Title XXIX Chapter 403 Section 061, Rule 62.4.040(1)(b) of the Florida Administrative Code (F.A.C.) and for the reasons stated above, the Office of Permitting and Compliance determines that the activity will not emit air pollutants "... in sufficient quantity, with respect to its character, quality or content, and the circumstances surrounding its location, use and operation, as to contribute significantly to the pollution problems within the State, so that the regulation thereof is not reasonably justified." Therefore, the project is exempt from the requirement to obtain an air construction permit.

This determination may be revoked if the proposed activity is substantially modified or the basis for the exemption is determined to be materially incorrect. A copy of this letter shall be maintained at the site of the proposed activity. This permitting decision is made pursuant to Chapter 403, Florida Statutes.

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 Permitting Authority responsible for making a permit determination for this project is the Office of Permitting and Compliance in the Department of Environmental Protection's Division of Air Resource Management. The Permitting Authority's physical address is: 2600 Blair Stone Road, Tallahassee, Florida 32301. 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.

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 agency clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions must be filed within 21 days of receipt of this exemption from air permitting requirements. 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

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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 action. 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.

Effective Date: This permitting decision is final and effective on the date filed with the clerk of the Permitting Authority unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this action will not be effective until further order of the Permitting Authority.

Judicial Review: Any party to this permitting decision (order) has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida

for Jeffery F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

JFK/sa/lp

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CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Exemption from Air Construction Permitting was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

James O. Vick, Gulf Power Company: jovick@southernco.com

Gregory Terry, P.E., Gulf Power Company: gnterry@southernco.com

Rick Bradburn, DEP NW District: rick.bradburn@dep.state.fl.us

Heather Ceron, EPA Region 4: ceron.heather@epa.gov

Alisa Coe, Earthjustice: acoe@earthjustice.org

Barbara Friday, DEP OPC: barbara.friday@dep.state.fl.us

Lynn Searce, DEP OPC: lynn.searce@dep.state.fl.us

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.