

November 3, 2011

Mr. Jeff Koerner

## RECEIVED

NOV 04 2011

DIVISION OF AIR RESOURCE MANAGEMENT

Via FedEx Airbill No. 7953 6696 3651

Florida Department of Environmental Protection Division of Air Resource Management Office of Air Permitting and Compliance 2600 Blair Stone Road, M.S. 5505 Tallahassee, Florida 32399-2400

Re: Tampa Electric Company

Air Operation Permit

Proof of Publication of the Intent to Issue

DEP File No. 0570040-029-AV 105 0233 -027 - AC

Dear Mr. Koerner:

Pursuant to Rule 62-110.106(5), F.A.C., enclosed is the proof of publication of the Notice of Intent to Issue the Tampa Electric Company Polk Power Station Permit authorizing the installation and operation of a temporary pre-commercial scale demonstration project consisting of a high-temperature syngas cleanup system and an integrated carbon capture and sequestration system at Polk Power Station Unit 1. This notice was published in the legal section of The Ledger on October 31, 2011.

Thank you for your attention to this matter. If you have any concerns or questions feel free to contact me or Rob Velasco at (813) 228-4232.

Sincerely,

Byron T. Burrows, P.E., BCEE

Laure gence

Manager, Air Programs

Environmental, Health & Safety

EHS\rlk\LAP511

Enclosure

c/enc: Cindy Zhang-Torres-FDEP SW District

TAMPA ELECTRIC COMPANY
P. O. BOX 111 TAMPA, FL 33601-0111

(813) 228-4111

## AFFIDAVIT OF PUBLICATION THE LEDGER

## Lakeland, Polk County, Florida RECEIVED

STATE OF FLORIDA) **COUNTY OF POLK)** 

NOV 04 2011

DONGLON OF AIR
RESOURCE MANAGEMENT

Before the undersigned authority personally appeared Carl Holweg who on oath says that he is a Sales Executive at The Ledger a daily newspaper published at Lakeland in Polk County, Florida; that the attached copy of advertisement, being a

## **Public Notice of Intent**

in the matter of **Tampa Electric Company** 

concerning Polk Power Station

was published in said newspaper in the issues of 10-31; 2011

Affiant further says that said The Ledger is a newspaper published at Lakeland, in said Polk County, Florida, and that the said newspaper has heretofore been continuously published in said Polk County, Florida, daily, and has been entered as second class matter at the post office in Lakeland, in said Polk County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Carl Holweg

Sales Executive

Who is personally known to me.

Sworn to and subscribed before me this 315+

Notary Public ANIAL ANIA

My Commission Expires - October 17, 20 22

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT Florida Department of Environmental Protection Air Resource Management, Office of Permitting and Compliance Draft Air Permit No. 1050233-027-AC Tampa Electric Company, Polk Power Station Unit 1 Polk County, Florida

ant: The applicant for this project is Tampa Electric Company (TECO). The applicant's zed representative and mailing address is: Karen Sheffield, Director, TECO Polk Station, Post Office Box 111, Tampa, Florida 33601-0111.

Project: TECO PPS Unit 1 is an existing solid fuel-based integrated gasifica bined cycle (IGCC) with a nominal electrical generating capacity of 260 megar mary solid fuels are coal and petroleum coke. The applicant proposes to conerate a temporary pre-commercial scale demonstration project consistin temperature synthetic gas (syngas) cleanup system and an integrated carbo sequestration system. These cleanup systems will be integrated with Unit 1 approximately 20 percent of the syngas prior to combustion.

The high-temperature syngas cleanup system will include the following processes: a high temperature desulfurization process to remove more than 99.9% of sulfur in the syngas; a trace contaminant removal process that will reduce arsenic, selenium and mercury concentrations in the syngas; and a direct sulfur recovery process that will convert the stuff dioxid (SO2) to commercial-grade elemental sulfur. The high level of sulfur removal in the high temperature desulfurization process will provide a syngas stream which will undergo the water gas shift reaction to convert water (H2O) and carbon monoxide (CO) to hydrogen (H2 and carbon dioxide (CO2). Thereafter, activated methyldiethanolamine (aMDEA) will be used to capture 90% of the CO2 in the cleaned syngas for subsequent geological sequestration.

Emission sources associated with this demonstration project include two small heaters, one sorbent storage hopper, one regenerator lines storage bin and one amine surge drum. The demonstration project will result in the following potential emissions: 3.5 tons/year (TPY) of CO: 6.5 TPY of nitrogen oxides (NOX); 1 TPY of particulate matter (PM). PM with a mean particle diameter of 10 microns or less (PM10) and PM with a mean particle diameter of 2.5 microns or less (PM2.5); 0.7 TPY of sulfur dioxide (SO2); and 0.4 TPY of volatile organic compounds (VOC).

The demonstration project is planned to commence construction in March 2012 and be com-pleted by April 2013. The goal for the operation phase is to achieve at least 8,000 hours of operation during an approximate 18 month demonstration period, which is expected to be completed in the third quarter of 2015.

Permitting Authority: Applications for air construction permits are subject to review in a cordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 6 210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not a empt from air permitting requirements and an air permit is required to perform the proposwork. 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 Division of Air Resource Management. The Permitting Authority's physical address is: 1 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing a dress is: 2500 Blair Stone Road; MS #5505, Tallahassee, Florida 32399-2400. The Permiting Authority's phone 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 the physical address indicated above for the Permitting Authority. The complete project file in cludes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application and and information submitted by the applicant (exclusive of confidential records under Section 408 14.1 SS.) Leberated processing contacts the Description Authority's project one and information submitted by the applicant (exclusive of contidential in 403.111, F.S.). Interested persons may contact the Permitting Author for additional information at the address and phone number listed a tronic copies of these documents are available on the following web sity number (1050233) where indicated:

http://www.dep.state.fl.us/air/emission/apds/default.asp.

Comments: The Permitting Authority will accept written comments concerning the proposet Draft 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.) or period to the end of this 14-day period. If written comments received 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 in

partment of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35 Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled written notice under Section 120.60(3), F.S. must be filed within 14 days of publication of the 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 any 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 indicate above, at the time of filing. The failure of any person to file a petition within the appropriat 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 init ated by another party) will be only at the approval of the presiding officer upon the filing of motion in compliance with Rule 28-106.205, F.A.C.

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; the name address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of when and how the 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 the petitioner on the petitioner 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.

diation: Mediation is not available for this proceeding