

# Florida Department of Environmental Protection

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## Memorandum

To: Joseph Kahn, Division of Air Resource Management  
Through: Trina Vielhauer, Bureau of Air Regulation,  
Jeff Koerner, New Source Review Section *JK*  
From: Bruce Mitchell, New Source Review Section  
Date: August 18, 2009  
Subject: Project No. 0570039-043-AC  
Revision to Permit No. 0570039-040-AC  
TECO Big Bend Station, Simple Cycle Combustion Turbines (SCCT4)  
New Ultra Low Sulfur Diesel (ULSD) Fuel Requirements

The final permit for this project is attached for your approval and signature. The project requires a minor air construction permit to allow: interim authorization to fire slightly higher sulfur diesel fuel from the facility's common tank than what is allowed for the SCCT4 by air construction permit No. 0570039-040-AC. The final permit includes two new conditions: a requirement that only ULSD fuel be added to the common tank; and interim authorization to fire higher sulfur diesel fuel from the common tank until monthly sampling and analysis indicates the actual fuel sulfur content meets the ULSD specification of 0.0015% by weight or less. The project will not cause the original project to trigger PSD preconstruction review. The proposed work will be performed at the existing TECO Big Bend Station, which is located in Hillsborough County at 13031 Wyandotte Road in Apollo Beach, Florida. The project is not considered a new source review reform project.

The attached Final Determination summarizes the publication and comment process. There are no pending petitions for administrative hearings or extensions of time in which to file a petition for an administrative hearing. I recommend your approval of the attached final permit for this project.

Attachments

JK/tlv/jfk/rbm

## FINAL DETERMINATION

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### PERMITTEE

Tampa Electric Company  
P.O. Box 111  
Tampa, Florida 32601-0111

### PERMITTING AUTHORITY

Florida Department of Environmental Protection  
Division of Air Resource Management  
Bureau of Air Regulation, New Source Review Section  
2600 Blair Stone Road, MS #5505  
Tallahassee, Florida 32399-2400

### PROJECT

Project No. 0570039-043-AC  
Simple Cycle Combustion Turbines (SCCT4)  
Big Bend Station

This project allows interim authorization to fire slightly higher sulfur diesel fuel from the facility's common tank than what is allowed for the SCCT4 by air construction permit No. 0570039-040-AC. The change will take place at the existing Big Bend Station located at 13031 Wyandotte Road in Apollo Beach, Hillsborough County, Florida. The project results in a minor source air construction permit and was not subject to Prevention of Significant Deterioration (PSD) preconstruction review.

### NOTICE AND PUBLICATION

The Department distributed an Intent to Issue Permit package on July 31, 2009. The applicant published the Public Notice of Intent to Issue in The Tampa Tribune on August 1, 2009. The Department received the proof of publication on August 6, 2009. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed.

### COMMENTS

No comments on the Draft Permit were received from the public, the Environmental Protection Commission of Hillsborough County or the applicant.

### CONCLUSION

The final action of the Department is to issue the permit as drafted and publicly noticed.



# Florida Department of Environmental Protection

Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

August 20, 2009

*Sent by Electronic Mail – Received Receipt Requested*

Mr. Paul L. Carpinone, Director, Environmental Health and Safety  
Tampa Electric Company  
Big Bend Station  
P.O. Box 111  
Tampa, Florida 32601-0111

Re: Project No. 0570039-043-AC  
Tampa Electric Company – Big Bend Station  
Simple Cycle Combustion Turbines (SCCT4: EU-041 and EU-042)  
New Requirements for Ultra Low Sulfur Diesel (ULSD) Fuel

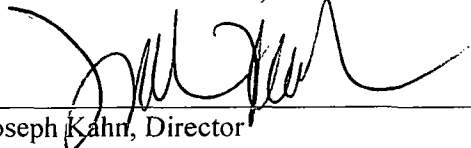
Dear Mr. Carpinone:

The Tampa Electric Company operates the Big Bend Station, which is located in Hillsborough County at 13031 Wyandotte Road in Apollo Beach, Florida. Permit No. 0570039-040-AC authorized the construction of a new 62 megawatt Pratt & Whitney Power System aero-derivative combustion turbine-generator set authorized to fire only ULSD fuel with a maximum sulfur content of 0.0015% by weight. These new emissions units are expected to start up in late August 2009. On July 21, 2009, you requested interim authorization to fire slightly higher sulfur diesel fuel from the common tank. The facility will purchase and fill the common tank with ULSD fuel. Eventually, the diesel fuel in the common tank will meet the maximum sulfur specification for ULSD fuel of 0.0015% by weight. Other units sharing the common tank will also benefit from the ULSD fuel.

The Department approves this request subject to the following attached conditions. This permitting action revises air construction Permit No. 0570039-040-AC. A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit revision is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes 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

  
\_\_\_\_\_  
Joseph Kahn, Director  
Division of Air Resource Management

8/20/09  
\_\_\_\_\_  
(Date)

JK/tlv/jfk/bm

**FINAL PERMIT REVISION**

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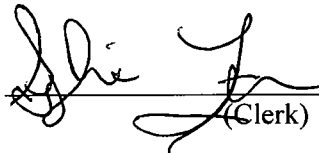
**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that either this Written Notice of Intent to Issue Air Permit Revision (including the Final Air Permit Revision and Final Determination) was sent by electronic mail or by a link to these documents made available electronically on a publicly accessible server, with received receipt requested, before the close of business on 8/20/09 to the persons listed below.

- Mr. Paul L. Carpinone, Tampa Electric Company (plcarpinone@tecoenergy.com)
- Mr. David M. Lukcic, Tampa Electric Company (dmlukcic@tecoenergy.com)
- Mr. Byron T. Burrows, P.E., Tampa Electric Company (btburrows@tecoenergy.com)
- Ms. Julie M. Ward, Tampa Electric Company (jmward@tecoenergy.com)
- Ms. Diana Lee, Hillsborough County Environmental Protection Commission (lee@epchc.org)
- Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@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.

  
\_\_\_\_\_  
(Clerk)

8/20/09  
(Date)

## FINAL PERMIT REVISION

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This permitting action revises air construction Permit No. 0570039-040-AC by adding the following new conditions to Section III of the permit.

### ADDITIONAL REQUIREMENT FOR COMMON TANK

37. Common Tank: The plant currently operates a 4.3 gallon common tank that supplies several emissions units with diesel fuel. Prior to the issuance of original Permit No. 0570039-040-AC for the new Pratt & Whitney FT8-3<sup>®</sup> SwiftPac<sup>®</sup> units (EU-041 and EU-042), the common tank stored diesel fuel with a maximum sulfur content of 0.05% by weight. Because diesel from the common tank will be used for the new Pratt & Whitney FT8-3<sup>®</sup> SwiftPac<sup>®</sup> units, the permittee shall add only ultra-low sulfur diesel oil with a maximum sulfur content of 0.0015% by weight to the common tank. *{Permitting Note: This requirement will reduce actual emissions of sulfur dioxide and sulfuric acid mist from the plant because many of the existing emissions units regularly consume diesel oil. Since receiving Permit No. 0570039-040-AC, the plant lowered the tank level as far as possible and is currently replacing diesel with ULSD fuel. Because some residual higher sulfur diesel remains, the current fuel sulfur content in the common tank is approximately 0.0125% by weight. With subsequent deliveries of ULSD fuel, the actual sulfur content will be to the maximum ULSD fuel specification of 0.0015% by weight or less.}* [Applicant Request and Rule 62-4.070(3), F.A.C.]

### INTERIM REQUIREMENT FOR ULSD FUEL

38. Interim Sulfur Requirements for Diesel Fuel: The permittee is authorized to fire diesel fuel supplied from the common tank with a maximum sulfur content of 0.015% by weight. Within 10 days following each calendar month, the permittee shall take a representative sample from the tank. Each sample shall be analyzed for the fuel sulfur content in accordance with the methods specified in this permit. When three consecutive monthly samples confirm that the actual sulfur content is 0.0015% by weight or less, this condition shall become obsolete and the new Pratt & Whitney FT8-3<sup>®</sup> SwiftPac<sup>®</sup> units (EU-041 and EU-042) shall fire only ultra-low sulfur diesel as specified in this permit. [Rule 62-4-070(3), F.A.C.]

## Livingston, Sylvia

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**From:** Livingston, Sylvia  
**Sent:** Thursday, August 20, 2009 2:32 PM  
**To:** 'plcarpinone@tecoenergy.com'  
**Cc:** 'dmlukcic@tecoenergy.com'; 'btburrows@tecoenergy.com'; 'jmward@tecoenergy.com'; 'lee@epchc.org'; Gibson, Victoria; Mitchell, Bruce; Walker, Elizabeth (AIR)  
**Subject:** TECO - BIG BEND STATION; 0570039-043-AC  
**Attachments:** 0570039-043-AC\_Signatures.pdf

Dear Sir/ Madam:

Attached is the official **Notice of Final Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

*Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).*

**Click on the following link to access the permit project documents:**

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/0570039.043.AC.F\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0570039.043.AC.F_pdf.zip)

**Owner/Company Name:** TAMPA ELECTRIC COMPANY

**Facility Name:** BIG BEND STATION

**Project Number:** 0570039-043-AC

**Permit Status:** FINAL

**Permit Activity:** CONSTRUCTION/ SCCT 4 FUEL OIL SULFUR CONTENT

**Facility County:** HILLSBOROUGH

**Processor:** Bruce Mitchell

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at <http://www.dep.state.fl.us/air/eproducts/apds/default.asp>.

Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation at (850)488-0114.

Sylvia Livingston  
Bureau of Air Regulation  
Division of Air Resource Management (DARM)  
850/921-9506  
[sylvia.livingston@dep.state.fl.us](mailto:sylvia.livingston@dep.state.fl.us)

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <http://www.adobe.com/products/acrobat/readstep.html>.

## Livingston, Sylvania

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**From:** Ward, Julie M. [jmward@tecoenergy.com]  
**Sent:** Thursday, August 20, 2009 5:01 PM  
**To:** Livingston, Sylvania; Carpinone, Paul L.  
**Cc:** Lukcic, David M.; Burrows, Byron T.; lee@epchc.org; Gibson, Victoria; Mitchell, Bruce; Walker, Elizabeth (AIR)  
**Subject:** RE: TECO - BIG BEND STATION; 0570039-043-AC

Sylvania,

The email below and accompanying files have been received.

Thank you

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**From:** Livingston, Sylvania [mailto:Sylvia.Livingston@dep.state.fl.us]  
**Sent:** Thursday, August 20, 2009 2:32 PM  
**To:** Carpinone, Paul L.  
**Cc:** Lukcic, David M.; Burrows, Byron T.; Ward, Julie M.; lee@epchc.org; Gibson, Victoria; Mitchell, Bruce; Walker, Elizabeth (AIR)  
**Subject:** TECO - BIG BEND STATION; 0570039-043-AC

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**Owner/Company Name:** TAMPA ELECTRIC COMPANY  
**Facility Name:** BIG BEND STATION  
**Project Number:** 0570039-043-AC  
**Permit Status:** FINAL  
**Permit Activity:** CONSTRUCTION/ SCCT 4 FUEL OIL SULFUR CONTENT  
**Facility County:** HILLSBOROUGH  
**Processor:** Bruce Mitchell

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## Livingston, Sylvia

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**From:** Burrows, Byron T. [BTBurrows@tecoenergy.com]  
**Sent:** Thursday, August 20, 2009 2:45 PM  
**To:** Livingston, Sylvia  
**Subject:** RE: TECO - BIG BEND STATION; 0570039-043-AC

I can view the documents. Thanks for the diligent turnaround!

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**From:** Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]  
**Sent:** Thursday, August 20, 2009 2:32 PM  
**To:** Carpinone, Paul L.  
**Cc:** Lukcic, David M.; Burrows, Byron T.; Ward, Julie M.; lee@epchc.org; Gibson, Victoria; Mitchell, Bruce; Walker, Elizabeth (AIR)  
**Subject:** TECO - BIG BEND STATION; 0570039-043-AC

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Bureau of Air Regulation  
Division of Air Resource Management (DARM)