

# Florida Department of Environmental Protection

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

Jell koukaniji - Covernor

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December 14, 2007

Mr. Mark J. Hornick (<u>mjhornick@tecoenergy.com</u>) General Manager Tampa Electric Company P.O. Box 111 Tampa, Florida 33601-0111

Re: Request for Additional Information Regarding Change in Fuel Blend at Polk Power Station

File No.: 1050233-021-AC

#### Dear Mr. Hornick:

The Department has received your air construction permit application for the Polk Power Station for the purpose of increasing the allowable petcoke/coal fuel blend from 60/40% and 3.5% sulfur to 85/15% and 4.4% sulfur. However, in order to continue processing this application, the Department is requesting the additional information outlined below. Should your response to any of the listed items require new calculations or result in changes to the submitted information, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form, certified by your Professional Engineer.

The submitted information regarding the test burn results for sulfuric acid mist (SAM) emissions from the combustion turbine at the varying percentages of petcoke/coal do not follow a logical progression. One reason may be that the projected emissions were based on pounds per hour rather than on pounds per million British thermal units (lbs/MMBtu). The emissions of sulfur dioxide (SO<sub>2</sub>) also appear to decrease as the sulfur content of the fuel blend increases. Furthermore, the application makes reference to possible modifications that may be made at the plant equipment to ensure that adequate sulfur removal from the syngas is achieved to avoid any significant increases in SO<sub>2</sub> and SAM emissions. We also understand that TECO is contemplating immediately following this application with a prevention of significant deterioration (PSD) application to further increase the sulfur percentage of the fuel blend to 6%. In order to approve either of these requests, a better understanding of future SO<sub>2</sub> and SAM emissions will be needed. If PSD is going to be avoided, sufficient monitoring will be needed to ensure that the future actual emissions do not increase above the significant emissions rates of 7 tons per year for SAM and 40 tons per year for SO<sub>2</sub>.

- 1. Please provide an explanation for the unexpected trend in SAM emissions at the different fuel blends that were tested.
- 2. Please provide a comparison of past actual annual SO<sub>2</sub> and SAM emissions from the combustion turbine to future projected annual emissions on a lb/MMBtu basis. For reasonable assurance purposes, in addition to the SO<sub>2</sub> continuous emissions monitor, please propose a method for regularly monitoring emissions of SAM from the combustion turbine to ensure that there are no PSD significant emissions increases from the project.
- 3. Please propose and provide details for the control devices or methods that will be installed to avoid any significant increases in SO<sub>2</sub> and SAM emissions from the sulfuric acid plant. Also, for reasonable assurance purposes, please propose a method for regularly monitoring emissions of SO<sub>2</sub> and SAM from the sulfuric acid plant to ensure that there are no PSD significant emissions increases from the project.

Polk Power Station, Project No. 1050233-021-AC December 14, 2007 Page 2 of 2

4. If it is determined that it will be more expedient to process this request and the pending future request to burn 6% sulfur fuel at the same time, please provide a complete application for a PSD permit, including details and descriptions for any needed control devices that satisfy best available control technology (BACT) requirements.

The above comments require a written response to the Department within ninety days of receipt of this notice unless additional time is requested pursuant to Rule 62-4.055(1), F.A.C.

If you should have any questions, please contact me at (850) 921-9531.

Sincerely,

Jonathan Holtom, P.E. North Permitting Section

Jepathan Holton

/jh

CC: Mr. Joshua Ellwein, P.E., Tampa Electric Company (jdcllwcin@tecoenergy.com)

Ms. Mara Nasca, DEP, Southwest District Office (mara.nasca@dep.state.fl.us)

Mr. Greg Worley, U.S. EPA Region 4 (worley.gregg@cpamail.cpa.gov)

From:

Mark Hornick [mjhornick@tecoenergy.com]

Sent: To: Monday, January 14, 2008 11:39 AM

To: Cc: Harvey, Mary Joshua Ellwein

Subject:

Re: FW: TECO - Polk Power Station - File #1050233-021-AC

Mary
I have received the subject document.
Thank you,
Mark

Mark Hornick General Manager Polk Power Station Tampa Electric Company 863 428-5988 (office) 813 376 6643 (cell) mjhornick@tecoenergy.com

>>> "Harvey, Mary" <Mary.Harvey@dep.state.fl.us> 01/14/2008 10:30 AM >>>

On December 14th this email was sent to you. I have checked my email and I don't see a read receipt response. If you have received this email please email me back so that I can complete this file on File #1050233-021-AC

العالم الأميسة سهاات الوراثي ليسادلك

- TECO

- Polk Power Station.

Thanks,

Mary

From: Harvey, Mary

Sent: Friday, December 14, 2007 4:10 PM

To: 'JDELLWEIN@TECOENERGY.COM'; Nasca, Mara; 'worley.gregg@epa.gov'; 'Ms.

Kathleen Forney'; 'MJHORNICK@TECOENERGY.COM'

Cc: Holtom, Jonathan; Adams, Patty; Gibson, Victoria Subject: TECO - Polk Power Station - File #1050233-021-AC

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

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The 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.

From:

Harvey, Mary

Sibson, Victoria

Sent:

Friday, December 14, 2007 4:10 PM

To:

'JDELLWEIN@TECOENERGY.COM'; Nasca, Mara; 'worley.gregg@epa.gov'; 'Ms. Kathleen

Read: 12/17/2007 9:14 AM

Forney'; 'MJHORNICK@TECOENERGY.COM'

Cc:

Holtom, Jonathan; Adams, Patty; Gibson, Victoria

Subject:

TECO - Polk Power Station - File #1050233-021-AC

Attachments: Additional Info Request - FILE#1050233-021-AC - LETTER.pdf

Tracking: Recipient Delivery Read

'JDELLWEIN@TECOENERGY.COM'

Masca, Mara

Worley.gregg@epa.gov'

MS-Kathleen Forney'

MJHORNICK@TECOENERGY.COM'

Holtom, Jonathan Delivered: 12/14/2007 4:10 PM Read: 12/17/2007 8:07 AM

Masca, Mara

Read: 12/14/2007 4:49 PM

## Dear Sir/Madam:

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http://www.adobe.com/products/acrobat/readstep.html.

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Thank you,

DEP, Bureau of Air Regulation

in immediate a their dilibrary specified time frame. Please or

From:

Holtom, Jonathan

Sent:

Friday, December 14, 2007 3:58 PM

To:

Harvey, Mary

Cc:

Adams, Patty; Koerner, Jeff

Subject:

Emailing: Additional Info Request

Attachments:

Additional Info Request.pdf



Additional Info Request.pdf (2...

i Mary,

Attached is an additional information request for the TECO - Polk Power Station's fuel blend increase project. The project number is 1050233-021-AC. Please distribute this by email to the people listed on the letter (also shown below).

Thank you, Jonathan.

Mr: Mark J. Hornick (mjhornick@tecoenergy.com) Mr. Joshua Ellwein, P.E., Tampa Electric Company (jdellwein@tecoenergy.com) Ms. Mara Nasca, DEP, Southwest District Office (mara.nasca@dep.state.fl.us) Mr. Greg Worley, U.S. EPA Region 4 (worley.gregg@epamail.epa.gov)

From: Sent: Forney.Kathleen@epamail.epa.gov Tuesday, December 18, 2007 8:09 AM

To:

Harvey, Mary

Subject:

Re: TECO - Polk Power Station - File #1050233-021-AC

#### thanks

\_\_\_\_\_\_

Katy R. Forney Air Permits Section EPA - Region 4 61 Forsyth St., SW Atlanta, GA 30024

Phone: 404-562-9130 Fax: 404-562-9019

"Harvey, Mary" <Mary.Harvey@dep .state.fl.us>

12/14/2007 04:09 PM To

<JDELLWEIN@TECOENERGY.COM>,

"Nasca, Mara"

<Mara.Nasca@dep.state.fl.us>,
Gregg Worley/R4/USEPA/US@EPA,
Kathleen Forney/R4/USEPA/US@EPA,
<MJHORNICK@TECOENERGY.COM>

CC

"Holtom, Jonathan"
<Jonathan.Holtom@dep.state.fl.us>, "Adams, Patty"
<Patty.Adams@dep.state.fl.us>,
"Gibson, Victoria"
<Victoria.Gibson@dep.state.fl.us>
Subject

TECO - Polk Power Station - File #1050233-021-AC

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From: Worley.Gregg@epamail.epa.gov

Sent: Tuesday, December 18, 2007 12:12 PM

To: Harvey, Mary

Subject: Re: TECO - Polk Power Station - File #1050233-021-AC

Gregg M. Worley Chief, Air Permits Section U.S. EPA Region 4 (404) 562-9141 fax (404) 562-9019

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From:

Holtom, Jonathan

To:

Harvey, Mary

Sent:

Monday, December 17, 2007 8:07 AM

Subject:

Read: TECO - Polk Power Station - File #1050233-021-AC

## Your message

To:

'JDELLWEIN@TECOENERGY.COM'; Nasca, Mara; 'worley.gregg@epa.gov'; 'Ms. Kathleen Forney';

'MJHORNICK@TECOENERGY.COM'

Cc: Subject: Holtom, Jonathan; Adams, Patty; Gibson, Victoria TECO - Polk Power Station - File #1050233-021-AC 12/14/2007 4:10 PM

Sent:

was read on 12/17/2007 8:07 AM.

From: Nasca, Mara

Sent: Friday, December 14, 2007 4:13 PM

To: Harvey, Mary

Subject: RE: TECO - Polk Power Station - File #1050233-021-AC

Thanks Mary....have a wonderful weekend

Mara Grace Nasca
District Air Program Administrator
Department of Environmental Protection
Division of Air Resource Management
Southwest District
(813) 632-7600, Ext. 124
Suncom 514-9155, Ext. 124
Fax (813) 632-7668

From: Harvey, Mary

Sent: Friday, December 14, 2007 4:10 PM

To: 'JDELLWEIN@TECOENERGY.COM'; Nasca, Mara; 'worley.gregg@epa.gov'; 'Ms. Kathleen Forney';

'MJHORNICK@TECOENERGY.COM'

**Cc:** Holtom, Jonathan; Adams, Patty; Gibson, Victoria **Subject:** TECO - Polk Power Station - File #1050233-021-AC

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Thank you,

DEP, Bureau of Air Regulation

From:

Gibson, Victoria

To:

Harvey, Mary

Sent:

Monday, December 17, 2007 9:14 AM

Subject:

Read: TECO - Polk Power Station - File #1050233-021-AC

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To:

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Cc:

Holtom, Jonathan; Adams, Patty; Gibson, Victoria TECO - Polk Power Station - File #1050233-021-AC

Subject: Sent:

12/14/2007 4:10 PM

was read on 12/17/2007 9:14 AM.

From:

~Adams, Patty

To:

Harvey, Mary

Sent:

Friday, December 14, 2007 4:49 PM

Subject:

Read: TECO - Polk Power Station - File:#1050233-021-AC

## Your message

To:

'JDELLWEIN@TECOENERGY.COM'; Nasca, Mara; 'worley.gregg@epa.gov'; 'Ms. Kathleen Forney';

'MJHORNICK@TECOENERGY.COM'

Cc: Subject: Holtom, Jonathan; Adams, Patty; Gibson, Victoria TECO - Polk Power Station - File #1050233-021-AC

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