

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 9, 2007

ELECTRONIC MAIL - RECEIVED RECEIPT REQUESTED

Mr. Jason Goodwin, Director – Environmental Health and Safety Calpine Corporation 717 Texas Avenue, Suite 1000 Houston, Texas 77002

Re: Request for Additional Information

Auburndale Energy Complex Project No. 1050221-012-AC (PSD-FL-185) Combined Cycle Gas Turbine (EU-001) Heat Input Increase

Dear Mr. Goodwin:

On July 5, 2007, the Department received your application for an air construction permit to increase the maximum heat input to combined cycle gas turbine (EU-001) by approximately 11 percent when firing natural gas in the wet compression mode at the Auburndale Energy Complex. The application is incomplete. In order to continue processing your application, the Department will need the additional information requested below. Should your response to any of the items below require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

- Please provide actual capacity information for the combined cycle gas turbine to support your request for an increase in the permitted heat input rate. Provide actual short-term heat input rates that validate the curve in Figure 1.
- 2. Provide the actual annual fuel firing rates and heat input rates for the combined cycle gas turbine for the last 5 years of operation.
- 3. Summarize the actual NO_x emissions based on CEMS data and CO emissions based on test data from the combined cycle gas turbine for the last 5 years.
- 4. Provide actual NO_x data supporting operation at the increased heat input rate.
- 5. Please estimate the emissions increases expected from the increase in heat input. Compare the projected actual emissions to baseline emissions as defined in 62-210.200, 62-210.370, and 62-212.300, F.A.C. Will the predicted increases exceed the PSD significant emissions rates?

The Department will resume processing your application after receipt of the requested information. Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. For any material changes to the application, please include a new certification statement by the authorized representative or responsible official. You are reminded that Rule 62-4.055(1), F.A.C. requires applicants to respond to requests for information within 90 days or to provide a written request for an additional period of time to submit the information.

REQUEST FOR ADDITIONAL INFORMATION

If you have any questions regarding this matter, please contact the project engineer, Bruce Thomas, at 850/488-0114.

Sincerely,

Jeffery F. Koerner, Administrator Air Permitting North Section

This letter was sent by electronic mail with received receipt requested to the following people:

Mr. Jason Goodwin, Calpine Corporation (jgoodwin@calpine.com)

Ms. Heidi Whidden, Calpine Corporation (hwhidden@calpine.com)

Mr. Tomas Davis, ECT (tdavis@ectinc.com)

Mr. Mike Halpine, (mike.halpine@dep.state.fl.us)

Ms. Cindy Zhang-Torres, SWD (Cindy.Zhang-Torres@dep.state.fl.us)

Ms. Kathleen Forney (forney.kathleen@epa.gov)

Mr. Jim Little, EPA Region 4 (little.james@epa.gov)

Mr. Dee Morse, National Park Service (<u>Dee Morse@nps.gov</u>)

JFK/bt

From:

Harvey, Mary

Sent:

Thursday, August 09, 2007 3:25 PM

To:

'Mr. Jason Goodwin, Calpine Corporation'; 'Ms. Heidi-Whidden, Calpine Corporation'; 'Mr. Tomas Davis, ECT'; 'Mr. Mike Halpine,'; Zhang-Torres; 'Ms. Kathleen Forney'; 'Mr. Jim Little,

EPA Region 4'; 'Mr. Dee Morse, National Park Service'

Cc:

Thomas, Bruce X.; Adams, Patty; Gibson, Victoria

Subject:

Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-FL-185)

Attachments: Letter - Calpine Corporation - Project #1050221-012-AC.pdf

Tracking:

Read Recipient Delivery

'Mr. Jason Goodwin, Calpine Corporation'

'Ms. Heidi Whidden, Calpine Corporation' 'Mr. Tomas Davis, ECT'

'Mr. Mike Halpine,' \

Failed: 8/9/2007 3:25 PM

Zhang-Torres

Read: 8/9/2007 3:39 PM

'Ms. Kathleen Forney'

'Mr. Jim Little, EPA Region 4'

'Mr. Dee Morse, National Park Service'

Thomas, Bruce X.

Adams, Patty

Read: 8/14/2007 9:52 AM

Gibson, Victoria

Read: 8/9/2007 3:30 PM

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).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

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.

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. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

From: Sent:

Forney.Kathleen@epamail.epa.gov Tuesday, August 14, 2007 5:49 PM

To:

Harvey, Mary

Cc:

Little.James@epamail.epa.gov

Subject:

Re: Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-FL-185)

Attachments:

Letter - Calpine Corporation - Project #1050221-012-AC.pdf



Letter - Calpine Corporation -...

Thanks we got this letter

Katy

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>

08/09/2007 03:25 PM To

"Mr. Jason Goodwin, Calpine Corporation" <jgoodwin@calpine.com>, "Ms. Heidi Whidden, Calpine Corporation" <hwhidden@calpine.com>, "Mr. Tomas Davis, ECT" <tdavis@ectinc.com>, "Mr. Mike Halpine," <mike.halpine@dep.state.fl.us>, "Zhang-Torres" <Cindy.Zhang-Torres@dep.state.fl.</pre> us>, Kathleen Forney/R4/USEPA/US@EPA, James Little/R4/USEPA/US@EPA, "Mr. Dee Morse, National Park Service" <Dee Morse@nps.gov> CC

"Thomas, Bruce X."

<Bruce.X.Thomas@dep.state.fl.us>,
"Adams, Patty"

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

<Victoria.Gibson@dep.state.fl.us>

Subject
Letter - Calpine Corporation Jason Goodwin - Project
#1050221-012-AC (PSD-FL-185)

From:

Harvey, Mary

Sent:

Thursday, August 09, 2007 3:28 PM

To:

Halpin, Mike

Cc:

Thomas, Bruce X.

Subject:

FW: Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-FL-185)

Attachments: Letter - Calpine Corporation - Project #1050221-012-AC.pdf

Tracking:

Recipient

Delivery

Read

Halpin, Mike

Delivered: 8/9/2007 3:28 PM Read: 8/9/2007 3:38 PM Thomas, Bruce X. Delivered: 8/9/2007 3:28 PM Read: 8/9/2007 3:29 PM

From: Harvey, Mary

Sent: Thursday, August 09, 2007 3:25 PM

To: 'Mr. Jason Goodwin, Calpine Corporation'; 'Ms. Heidi Whidden, Calpine Corporation'; 'Mr. Tomas Davis, ECT'; 'Mr. Mike Halpine,'; Zhang-Torres; 'Ms. Kathleen Forney'; 'Mr. Jim Little, EPA Region 4'; 'Mr. Dee Morse, National

Park Service'

Cc: Thomas, Bruce X.; Adams, Patty; Gibson, Victoria

Subject: Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-FL-185)

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).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

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.

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. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

From:

Adams, Patty

To:

Harvey, Mary

Sent:

Tuesday, August 14, 2007 9:52 AM

Subject:

Read: Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-

FL-185)

Your message

To:

'Mr. Jason Goodwin, Calpine Corporation'; 'Ms. Heidi Whidden, Calpine Corporation'; 'Mr. Tomas Davis, ECT'; 'Mr. Mike Halpine,';

Zhang-Torres; 'Ms. Kathleen Forney'; 'Mr. Jim Little, EPA Region 4'; 'Mr. Dee Morse, National Park Service'

Cc:

Thomas, Bruce X.; Adams, Patty; Gibson, Victoria

Subject:

Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-FL-185)

Sent:

8/9/2007 3:25 PM

was read on 8/14/2007 9:52 AM.

From:

√ Dee_Morse@nps.gov

Sent:

Thursday, August 09, 2007 6:19 PM

To:

Harvey, Mary

Subject:

Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-FL-185)

Return Receipt

Your

Letter - Calpine Corporation - Jason Goodwin - Project

document:

#1050221-012-AC (PSD-FL-185)

was

Dee Morse/DENVER/NPS

received

by:

at:

08/09/2007 04:18:35 PM

From:

Zhang-Torres

To:

Harvey, Mary

Sent:

Thursday, August 09, 2007 3:40 PM

Subject:

Read: Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-

FL-185)

Your message

To:

'Mr. Jason Goodwin, Calpine Corporation'; 'Ms. Heidi Whidden, Calpine Corporation'; 'Mr. Tomas Davis, ECT'; 'Mr. Mike Halpine,';

Zhang-Torres; 'Ms. Kathleen Forney'; 'Mr. Jim Little, EPA Region 4'; 'Mr. Dee Morse, National Park Service'

Cc:

Thomas, Bruce X.; Adams, Patty; Gibson, Victoria

Subject:

Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-FL-185)

Sent:

8/9/2007 3:25 PM

was read on 8/9/2007 3:39 PM.

From: Tom Davis [tdavis@ectinc.com]

Sent: Thursday, August 09, 2007 3:27 PM

To: Harvey, Mary

Subject: RE: Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-FL-185)

From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]

Sent: Thursday, August 09, 2007 3:25 PM

To: Mr. Jason Goodwin, Calpine Corporation; Ms. Heidi Whidden, Calpine Corporation; Mr. Tomas Davis, ECT; Mr. Mike Halpine,; Zhang-Torres; Ms. Kathleen Forney; Mr. Jim Little, EPA Region 4; Mr. Dee Morse, National Park Service

Cc: Thomas, Bruce X.; Adams, Patty; Gibson, Victoria

Subject: Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-FL-185)

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).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

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.

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. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

From:

Gibson, Victoria

To:

Harvey, Mary

Sent:

Thursday, August 09, 2007 3:30 PM

Subject:

Read: Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-

FL-185)

Your message

To:

'Mr. Jason Goodwin, Calpine Corporation'; 'Ms. Heidi Whidden, Calpine Corporation'; 'Mr. Tomas Davis, ECT'; 'Mr. Mike Halpine,';

Zhang-Torres; 'Ms. Kathleen Forney'; 'Mr. Jim Little, EPA Region 4'; 'Mr. Dee Morse, National Park Service'

Cc:

Thomas, Bruce X.; Adams, Patty; Gibson, Victoria

Subject:

Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-FL-185)

Sent:

8/9/2007 3:25 PM

was read on 8/9/2007 3:30 PM.

Sent: Thursday, August 09, 2007 3:36 PM

To: Harvey, Mary
Cc: Heidi Whidden

Subject: RE: Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-FL-185)

Received. Thank you!

From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]

Sent: Thursday, August 09, 2007 3:25 PM

To: Jason Goodwin; Heidi Whidden; Mr. Tomas Davis, ECT; Mr. Mike Halpine,; Zhang-Torres; Ms. Kathleen

Forney; Mr. Jim Little, EPA Region 4; Mr. Dee Morse, National Park Service

Cc: Thomas, Bruce X.; Adams, Patty; Gibson, Victoria

Subject: Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-FL-185)

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).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

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.

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. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

From:

Thomas, Bruce X.

To:

Harvey, Mary

Sent:

Thursday, August 09, 2007 3:29 PM

Subject:

Read: FW: Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-

FL-185)

Your message

To:

Halpin, Mike

Cc:

Thomas, Bruce X.

Subject:

FW: Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-FL-185)

Sent:

8/9/2007 3:28 PM

was read on 8/9/2007 3:29 PM.

From:

Halpin, Mike

To:

Harvey, Mary

Sent:

Thursday, August 09, 2007 3:39 PM

Subject:

Read: Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-

FL-185)

Your message

To:

Halpin, Mike

Cc:

Thomas, Bruce X.

Subject:

FW: Letter - Calpine Corporation - Jason Goodwin - Project #1050221-012-AC (PSD-FL-185)

Sent:

8/9/2007 3:28 PM

was read on 8/9/2007 3:38 PM.