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AIR REGULATION**

June 20, 2010

Federal Express Number:
7936-8046-6689

Jonathan K. Holtom, PE CPM
Program Administrator—Title V Section
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400
(850)921-9531

**RE: Response to June 7, 2010 Request of Additional Information
Osprey and Auburndale Peaker Energy Center
Auburndale, Polk County, Florida
Facility ID: 1050221**

On June 7th, 2010 Calpine Operating Services Company, Inc. (Calpine) received a Request for Additional Information (RAI) in regards to the application for a Title V Air Operation Permit for the combined Auburndale Peaker Energy Center and Osprey Energy Center (the Facility). A copy of the June 10th RAI is provided in Attachment A.

Response to FDEP Request-1

The Facility, which is a minor (i.e., area) source of hazardous air pollutants (HAPs), includes one 1,680 brake horsepower (bhp) emergency generator compression ignition (CI) diesel engine. This engine was manufactured prior to April 1, 2006 and therefore is not subject to New Source Performance Standard (NSPS) Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The Facility does not include any stationary spark ignition (SI) internal combustion (IC) engines and therefore does not have an engine subject to NSPS Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

On March 3, 2010, following submittal of the Facility's Title V permit application, EPA promulgated a final rule amending 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. This regulation is applicable to stationary reciprocating internal combustion engines (RICEs) located at major or area HAP sources.

In accordance with 40 CFR §63.6603, existing stationary CI RICEs of all sizes located at an area source of HAP emissions must comply with the applicable requirements of Table 2b and Table 2d. Table 2b does not contain any requirements that are applicable to the emergency generator CI diesel engine. Table 2d contains management and work practice requirements (e.g., change engine oil and filter every 500 hours of operation or annually, whichever comes first, minimize startup operations, etc.) that will be applicable to the emergency generator CI diesel engine.

As required by 40 CFR §63.6625(e), existing stationary emergency RICEs not subject to any numerical emission standards must operate and maintain the stationary RICE according to the engine manufacturer's emission-related written instructions or must develop a maintenance plan. Engine operating time spent at idle during startup and engine startup duration must be minimized per 40 CFR §63.6625(h). An option to extend the specified oil change requirements in Table 2d utilizing an oil analysis program is provided in 40 CFR §63.6625(i).

In accordance with 40 CFR §63.6595, existing stationary CI RICEs located at an area source of HAP emissions are required to comply with the applicable provisions of Subpart ZZZZ no later than May 3, 2013. Existing stationary emergency CI RICEs are not required to provide notifications pursuant to 40 CFR §63.6645(a)(5).



Calpine will comply with the above Subpart ZZZZ requirements for the Facility's emergency generator diesel engine no later than May 3, 2013.

Response to FDEP Request-2

Calpine is seeking to make the following minor modifications to the Facility's PSD and Title V permits:

- Update of the O2 Monitor Certification Requirements;
- Clarification of start-up and shut-down definitions; and
- Valid Hourly Emission Rate Determination.

No increase in the permitted emission limits is being requested. Attachment B provides modified Pages 2 and 5 of the Permit Application submitted April 22, 2010.

Note: Permit citations reference the Title V permit.

Update of the O2 Monitor Certification Requirements

As confirmed through email correspondence with Florida Department of Environmental Protection (the Department) (see Attachment C) and by multiple U.S. Environmental Protection Agency determinations, a CEMS subject to both Part 60 and Part 75 requirements can satisfy both regulations by complying with Part 75 procedures. Due to the O2 analyzer being subject to the Acid Rain / Clean Air Interstate Rule programs and subsequently to 40 CFR Part 75, Calpine requests the analyzer be held to the standards of Part 75.

In addition Part 75 requires Semi-annual (i.e. once every two operating quarters) or annual (i.e. once every four operating quarters) RATA testing based on the results of the previous RATA. Therefore, the word "annual" has been struck.

- EU006—Simple Cycle Unit—Auburndale Peaker Energy Center, LLC

Revise Section 3, Subsection B.12(a) and (b) to read (additions have been underlined):

"a. The NO_x and O₂ monitor shall be certified pursuant to 40 CFR Part 75 and shall be operated and maintained in accordance with the applicable requirements of 40 CFR Part 75 Subpart B and C. ~~Annual~~ RATA tests required for the NO_x monitor shall be performed using EPA Method 20 or 7E in Appendix A of 40 CFR 60. RATA tests required for the O₂ monitor shall be performed using EPA Method 3B, of Appendix A of 40 CFR 60. The permittee shall conduct ~~an annual~~ RATA test at 100% output in accordance with the applicable CEMS requirements. The span for the O₂ monitor shall not be greater than 21%.

b. The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4. ~~The O₂ monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 3.~~ Quality assurance procedures shall conform to ... The span for the CO monitor shall not be greater than 100 ppmvd ~~corrected to 15% oxygen.~~ ~~The RATA tests required for the oxygen monitor shall be performed using EPA Method 3B, of Appendix A of 40 CFR 60.~~ The span for the O₂ monitor shall not be greater than 21%."

- EU007 through EU010—Combustion Turbine—Osprey Energy Center

Revise Section 3, Subsection C.14(h) and (i) to read (additions have been underlined):

"h. NO_x and O₂ CEMS: The NO_x and O₂ monitor shall be certified pursuant to 40 CFR Part 75 and shall be operated and maintained in accordance with the applicable requirements of 40 CFR Part 75 Subpart B and C. Recordkeeping and reporting shall be conducted pursuant to 40 CFR Part 75, Subparts F and G. ~~Annual~~ RATA tests required for the NO_x monitor shall be performed using EPA Method 20 or 7E in Appendix A of 40 CFR 60. RATA tests required for the O₂ monitor shall be performed using EPA Method 3B, of Appendix A of 40 CFR 60. The span for the NO_x monitor shall be based on the emission standards. The span for the O₂ monitor shall not be greater than 21%. The use of missing data ... established in 40 CFR 60.332.



i. ~~CO and O₂ CEMS~~: The permittee shall install, operate and maintain a CO CEMS certified pursuant to Performance Specification 4 in Appendix B of 40 CFR 60. ~~The oxygen monitor shall be certified per Performance Specification 3 in Appendix B of 40 CFR 60.~~ Quality assurance procedures shall conform ... The span for the CO monitor shall be based on the emission standards. ~~The RATA tests required for the oxygen monitor shall be performed using EPA Method 3B, of Appendix A of 40 CFR 60. The span for the O₂ monitor shall not be greater than 21%.~~

Clarification of start-up and shut-down definitions

As confirmed through email correspondence (see Attachment D), the Department confirmed that the start-up, shut-down, and malfunction exclusions apply daily and not on a rolling 24-hour period. If the exclusions were applied on a rolling 24-hour period, a unit could not startup at 6:00 am on Day 1 and then restart the unit at 4:00 am on Day 2. Use of a rolling exclusion was never the intent of the permit application and would cause significant dispatch issues for the State. In addition, the Department has previously confirmed that the Facility may exclude startup, shutdown, and malfunction data on a minute basis.

Additional conversations with the Department (Attachment E) have clarified the definition of cold startup to allow for operation less than 60% load in the 48-hour “no-operation” window. The “cold start” 4-hour excursion at Osprey Energy Center allows for the facility to come up to temperature and run properly. In the event the facility starts under cold start conditions and trips prior to reaching 60% load, the facility has not been properly heated to allow for a next day start-up under the “hot” start allocation of 2-hours.

Further discussions with the Department (Attachment F) have provided guidance that the excess emission hour exclusion may be calculated on a minute basis.

- EU006—Simple Cycle Unit—Auburndale Peaker Energy Center, LLC
Revise Section 3, Subsection B.12(d) to read (modifications have been underlined):

“The CO, NO_x, and O₂ data ... Periods of data excluded for startup and shutdown shall not exceed two hours (120 minutes) in any operating day. Periods of malfunctions shall not exceed two hours (120 minutes) in any operating day. All periods of data excluded for all start-up, shutdown or malfunction episode shall be consecutive for each episode. Periods of data excluded for all startup, shutdown or malfunction episodes shall not exceed four hours (240 minutes) in any operating day. An operating day is defined as a day (midnight to midnight) that contains operation. The owner or operator shall minimize...”

- EU007 through EU010—Combustion Turbine—Osprey Energy Center
Revise Section 3, Subsection C.12 to read (modifications have been underlined):

“Excess Emissions. Excess emissions resulting from startup, shutdown, or malfunctions shall be permitted provided that best operational practices are adhered to and the duration of excess emission shall be minimized. Excess emission occurrences shall in no case exceed 2 hours (120 minutes) in any operating day permitted except during both “cold start-up” to, and shutdowns from, combined cycle plant operation. During cold start-up to combined cycle operation, up to 4 hours (240 minutes) of excess emissions are allowed. During shutdowns from combined cycle operation, up to three hours (180 minutes) of excess emissions are allowed. Cold start up is defined as startup to combined cycle operation following breaker open of the combustion turbine with no operation above 60% load in the interim for a minimum of 48-hours (2880 minutes). An operating day is defined as a day (midnight to midnight) that contains operation.”

Valid Hourly Emission Rate Determination

- EU006—Simple Cycle Unit—Auburndale Peaker Energy Center, LLC
Revise Section 3, Subsection B.12(e) to read (modifications have been underlined):



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“The 24-hour block averages are calculated as follows: starting at midnight of each operating data, a 24-hour block average shall be calculated from 24-valid hourly average emission rate values. A valid hourly emission rate shall be calculated for each hour in which at least two measurements are obtained at least 15-minutes apart. The owner shall use all valid measurements or data points collected over the hour to calculate the hourly averages. All data points...”

This request has been made to assist in CEMS standardization between OEC and APEC. When operation of APEC was moved from the APP control room to the OEC control room the APEC CEMS was also integrated into the OEC CEMS. The requested language is pulled directly from the OEC Title V CEMS requirement currently located in Section 3, Subsection C.14 (j).

Thank you for taking the time to review these requested modifications and additional information. Please contact Heidi M. Whidden at (713) 570-4829 or hwhidden@calpine.com if you have further questions, concerns, or require additional information.

Sincerely,
Calpine Operating Services Company, Inc.

Jason M. Goodwin, P.E.
Director - Environmental, Health & Safety
East Region Operations

CC: Bobby Bull; Florida DEP—Tallahassee (email)
Heidi Whidden; Calpine (email)
Steve Smith; Calpine (email)
Andrew Martin; Calpine (email)
File

Attachment A

June 7, 2010 Request for Additional Information



Florida Department of Environmental Protection

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

Charlie Crist
Governor

Jeff Labadie
Deputy Governor

Michael A. Smith
Secretary

June 7, 2010

Electronically Sent – Received Receipt Requested.

Mr. Jason Goodwin, Director – Environmental, Health and Safety (jgoodwin@calpine.com)
Calpine Corporation
717 Texas Avenue, Suite 1000
Houston, Texas 77002

Re: Permit No. 1050334-008-AV
Initial Title V Air Operation Permit
Request for Additional Information

Dear Mr. Goodwin:

The Florida Department of Environmental Protection has reviewed your application for an initial Title V Air Operation Permit for the combined Auburndale Peaker Energy Center and the Osprey Energy Center facility. However, we must deem your application *incomplete*, because we need further information relative to the following items:

- Please specify if any of the facility's generators or other emissions units are subject to 40 CFR 60 Subpart IIII, Standards of performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE), 40 CFR 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (we note that all engines are subject to Subpart ZZZZ), or 40 CFR 60 Subpart JJJJ, Standards of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines. If applicable,
 1. Please specify how the facility is complying with the applicable subpart(s).
 2. Please provide the following information for each emission unit subject to the referenced subparts: in-service date, cylinder displacement, and rule applicability.
- The requested changes to the current Title V air operation permit (Attachment H of the application dealing with excess emissions and CEMS certification) will require an air construction permit to implement.

When we receive this information, we will continue processing your application. If you have any questions, please contact Project Engineer Tom Cascio at 850-921-9526. 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. Permit applicants are advised that Rule 62-4.055(1), F.A.C., requires applicants to respond to requests for information within 90 days, unless the applicant has requested in writing, and has been granted, additional time within 90 days.

Attachment B

Modified Pages 2 and 5 of the Permit Application Submitted April 22, 2010

APPLICATION INFORMATION

Purpose of Application

This application for air permit is being submitted to obtain: (Check one)

Air Construction Permit

- ☐ Air construction permit.
- ☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- ☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

- ☐ Initial Title V air operation permit.
- ☐ Title V air operation permit revision.
- ☐ Title V air operation permit renewal.
- ☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- ☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

- ☐ Air construction permit and Title V permit revision, incorporating the proposed project.
- ☒ Air construction permit and Title V permit, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

- ☒ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

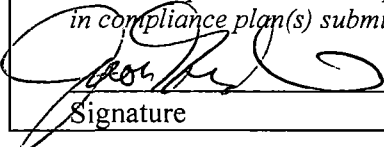
Operation of the Osprey Energy Center (OEC) and the Auburndale Peaker Energy Center (APEC) are currently authorized by Florida Department of Environmental Protection (FDEP) Title V Air Operation Permit No. 1050221-014-AV issued with an effective date of January 1, 2008, and an expiration date of December 31, 2012. This permit authorizes operation of the Auburndale Energy Complex (AEC) which also includes the Auburndale Power Partners (APP) combined cycle combustion turbine electrical generation facility.

As part of its agreement to separate the Auburndale Energy Complex (AEC) into two facilities for Title V permitting purposes, FDEP requested the submittal of a Title V air operation permit application for each AEC operator. This application form and supplemental facility and emission unit information constitutes the Title V permit application for the OEC and APEC facility.

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name: Jason Goodwin, Director—Environmental, Health and Safety
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input checked="" type="checkbox"/> The designated representative at an Acid Rain source or CAIR source.
3. Application Responsible Official Mailing Address... Organization/Firm: Calpine Corporation (c/o EHS Department) Street Address: 717 Texas Avenue, Suite 1000 City: Houston State: Texas Zip Code: 77002
4. Application Responsible Official Telephone Numbers... Telephone: (713) 570 - 4795 ext. Fax: () - Please e-mail
5. Application Responsible Official E-mail Address:
6. Application Responsible Official Certification: <i>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.</i>  Signature 6/29/10 Date

Attachment C

**Email Correspondence between Errin Pichard, FDEP, and
Heidi Whidden, Calpine Operating Services Company, Inc.**

From: Pichard, Erin
To: Heidi Whidden
cc: Braden, Rick
Subject: RE: Santa Rosa Energy Center
Date: Tuesday, March 17, 2009 11:59:12 AM

Heidi-

If a CEMS is subject to both Part 60 and Part 75 QA/QC requirements, it can satisfy both by complying with Part 75 procedures, which are generally more stringent than those in Part 60. EPA has issued a number of determinations to that effect.

The inclusion of the reference to 62-297.520 is unnecessarily misleading. We are not sure why that subsection is in the rule, as we adopt federal regulations by reference elsewhere in the department's rules. This subsection will almost certainly be deleted when 62-297 is revised.

Please let me know if you have other questions.
Erin

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

From: Heidi Whidden [mailto:HWWhidden@calpine.com]
Sent: Tuesday, March 17, 2009 11:36 AM
To: Pichard, Erin
Subject: Santa Rosa Energy Center

Erin,

Calpine is conducting a Part 75 vs. Part 60 review as it pertains to daily calibrations. We believe our Auburnvale Energy Complex permit is clear as to which regulations FDEP wants us to use. However, we are requesting confirmation of our determination for the Santa Rosa Energy Center (SREC), ID 1130163. SREC is subject to Part 60 Subpart GG and Part 75. SREC has NOx and O2 CEMS monitors. SREC's Title V permit states the following:

A.33. Continuous Monitoring System Reports. The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of Rule 62- 297.520, F.A.C., 40 CFR 60.13, including certification of

each device in accordance with 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60.7(a)(5) or 40 CFR Part 75. Quality assurance procedures must conform to all applicable sections of 40 CFR 60, Appendix F or 40 CFR 75. The monitoring plan, consisting of data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location shall be provided to the DEP Emissions Monitoring Section Administrator and EPA for review no later than 45 days prior to the first scheduled certification test pursuant to 40 CFR 75.62. [1130168-001-AC, Specific Condition 44.]

Calpine believes the use of "or" prior to the reference to Part 75 in both the first and second sentence allows SREC to follow Part 75 QA/QC requirements in lieu of Part 60. This follows because Subpart GG specifically states that analyzers following Part 75 QA/QC requirements may be used to meet Part 60 limits. However, Rule 62-287.520 directly references Part 60 Appendix B and its associated Performance standards without referencing the Subpart.

Please provide the Department's determination as it relates to Santa Rosa's use of Part 75 for QA/QC purposes in lieu of Part 60. If you would like to call to discuss, I may be contacted at (713) 570-4829.

Thank you for your continued assistance.

Heidi M. Whidden
Manager--EHS
(713) 570-4829 (Office)
(813) 727-1299 (Cell)

Attachment D

**Email Correspondence between Bruce Thomas, FDEP, and
Heidi Whidden, Calpine Operating Services Company, Inc.**

From: Jeffrey Harmon
To: Heidi Whidden
Subject: FW: Santa Rosa Energy Center Start-up Calibration
Date: Wednesday, May 05, 2009 2:53:07 PM

Jeff Harmon - Plant Engineer
Santa Rosa Energy Center Hog Bayou Energy Center
3001 Sterling Way 1009 Paper Mill Road
Pace, FL 32571 Mobile, AL 36610
Office: (250) 395-2135 (250) 287-9331
Fax: (250) 395-2150 (250) 330-4293

From: Heidi Whidden
Sent: Tuesday, May 26, 2009 2:36 PM
To: Mary Anne Willhouse; Jeffrey Harmon; Dana McNally; Cade Hay
Subject: FW: Santa Rosa Energy Center Start-up Calibration

Here is the full conversation and final determination for the files. Thanks!

From: Thomas, Bruce X. [mailto:Bruce.X.Thomas@dep.state.fl.us]
Sent: Tuesday, May 26, 2009 3:34 PM
To: Heidi Whidden
Subject: RE: Santa Rosa Energy Center Start-up Calibration

That is correct.

From: Heidi Whidden [mailto:Heidi.Whidden@calpine.com]
Sent: Tuesday, May 26, 2009 3:32 PM
To: Thomas, Bruce X.
Cc: Jeffrey Harmon; Mary Anne Willhouse
Subject: RE: Santa Rosa Energy Center Start-up Calibration

Bruce,

To follow-up on our verbal conversation a few minutes ago....The set 24-hour period is midnight to midnight.

Thank you for your assistance!
Heidi

From: Thomas, Bruce X. [mailto:Bruce.X.Thomas@dep.state.fl.us]
Sent: Tuesday, May 26, 2009 3:27 PM
To: Heidi Whidden
Subject: RE: Santa Rosa Energy Center Start-up Calrification

Heidi,

I left you a message on your cell phone answering machine weeks ago. You are correct that the excursion limitations are based on a set 24 hour period. Sorry about the confusion. Bruce

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link](#) to the DEP Customer Survey. Thank you in advance for completing the survey.

From: Heidi Whidden [mailto:Heidi.Whidden@calpine.com]
Sent: Tuesday, May 26, 2009 3:20 PM
To: Thomas, Bruce X.
Subject: FW: Santa Rosa Energy Center Start-up Cabrification

Bruce,

Has the Department has a chance to review this email?

Thanks!
Heidi

From: Heidi Whidden
Sent: Thursday, May 07, 2009 3:43 PM
To: Thomas, Bruce X.
Cc: Heidi Whidden; Mary Anne Willhouse; Jeffrey Harmon; Dana McNally
Subject: Santa Rosa Energy Center Start-up Cabrification

Bruce,

The Santa Rosa Energy Center located in Pace, Florida is permitted as Facility 11030168. The Santa Rosa Energy Center is required to continuously monitor NOx with an onsite CEMS. No other pollutants are

directly analyzed and monitored with the CEMS. NO_x is limited to 9 ppmvd at 15% O₂ on a 24-hour block average. Emissions excluded from the 24-hour NO_x block average include up to 2-hours of non-cold start-up emissions (i.e start-up under hot and warm conditions) and up to 4-hours of cold start-up emissions.

The CEMS has been programmed to track start-up exclusions from midnight to midnight. At midnight the start-up tracker is reset to zero and counting resumes. Under this tracking strategy a unit could start-up at 6 a.m. on Day 1 and then start-up at 4 a.m. on Day 2 (each receiving their own start-up allowance). Initial permitting activities surrounding start-up revolved around the concept that the start-up excursion limitations were based on a set, not on a rolling, 24-hour period. In addition, the facility believes it is an appropriate application due to the NO_x limit being based on a block average.

A recent review of the start-up limitations in the permit for Santa Rosa Energy Center identified the word 'any' in the following permit requirement.

A.15 Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two hours in any 24-hour period except during either "cold start-up" to, or shutdowns from, cogeneration plant operation. During cold start-up to combined cycle operation, up to four hours of excess emissions are allowed. During shutdowns from combined-cycle operation, up to three hours of excess emissions are allowed. Cold start-up is defined as a startup to combined-cycle operation following a complete shutdown lasting at least 48 hours.

The permit language could appear to indicate that the start-up limitations are based on 24-hour rolling period. Under this tracking strategy a unit could start-up at 6 a.m. on Day 1 but not able to start-up at 4 a.m. on Day 2. Operation would have to cease till 6 a.m. on Day 2.

Santa Rosa requests that the Department provide clarification on this issue.

Thank you for your assistance,

Heidi M. Whidden

Manager--EHS

(713) 570-4829 (Office)

(813) 727-1299 (Cell)

Attachment E

**Email Correspondence between Bruce Thomas, FDEP, and
Heidi Whidden, Calpine Operating Services Company, Inc.**

From: Thomas, Bruce X. [mailto:Bruce.X.Thomas@dep.state.fl.us]
Sent: Monday, April 21, 2008 10:20 AM
To: Heidi Whidden
Subject: RE: Osprey Energy Center Question

Heidi,

You are interpreting it correctly. Do you expect four hours of excess emissions tomorrow?

Bruce Thomas, P.E.
Division of Air Resource Management
(850)-921-7744 or Bruce.X.Thomas@dep.state.fl.us

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

From: Heidi Whidden [mailto:HWhidden@calpine.com]
Sent: Monday, April 21, 2008 10:09 AM
To: Thomas, Bruce X.
Subject: Osprey Energy Center Question
Importance: High

Bruce,

Last week and through the weekend, the Osprey Energy Center conducted their annual outage. Today they ran the unit for 45 minutes with gas flowing and no load to insure there were no gas leaks. Tomorrow they will be available for full operation. The following is an excerpt from the Osprey Permit 1050221-014-AV:

C.12 Excess Emissions. Excess emissions resulting from startup, shutdown, or mal provided that best operational practices are adhered to and the duration of excess emis:

Page Break:

Excess emissions occurrences shall in no case exceed two hours in any 24-hour period start-up to, and shutdowns from, combined cycle plant operation. During cold start-up operation, up to four hours of excess emissions are allowed. During shutdowns from cold start-up to three hours of excess emissions are allowed. Cold start-up is defined as a startup operation following a complete shutdown lasting at least 48 hours. Operation below 30 otherwise be limited to 2 hours in any 24-hour period. [Rule 62-210.700(3), F.A.C. and

Calpine's understanding is that if:

1. A unit was fully shut down greater than 48-hours prior, and
2. The unit had not been brought up to stable load (defined as 60% load in permitting process) within the 48-hours prior,

Then the unit would be considered in cold start-up mode and provided the 4-hour allowance for the 24-hour period.

We request the agency provide their concurrence or provide further guidance.

Thank you for your continued assistance,
Heidi M. Whidden
713-570-4829

Attachment F

**Email Correspondence between Errin Pichard, FDEP, and
Andrew Martin, Calpine Operating Services Company, Inc.**

Andrew Martin

From: Pichard, Errin [Errin.Pichard@dep.state.fl.us]
Sent: Thursday, January 17, 2008 2:42 PM
To: Andrew Martin
Cc: DeAngelo, Gregory
Subject: RE: Question regarding 2-hours of CEMS data

Andrew-

Since your CEMS collects and records data in one-minute averages, I would interpret "two hours" in this case to mean 120 minutes of data. In other words, if startup begins at 10:48 pm, it can last until 12:48 am.

I have copied Greg DeAngelo, our former Compliance guru in case he wants to weigh in.

Please let me know if you have further questions.

Errin Pichard, Administrator
Emissions Monitoring Section
Florida Department of Environmental Protection
850-921-9580

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sife is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

From: Andrew Martin [mailto:martina@calpine.com]
Sent: Thursday, January 17, 2008 2:34 PM
To: Pichard, Errin
Subject: Question regarding 2-hours of CEMS data

Errin:

As a follow up to our recent telephone conversation:
Is 2-hour of permitted startup exclusion the same as 120-minutes startup exclusion?

Regards,

Andrew Martin
Plant Engineer
Osprey Energy Center
(863) 551-4662
amartin@calpine.com