

# 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

June 14, 2007

# SENT BY ELECTRONIC MAIL - RECEIVED RECEIPT REQUESTED

edward.garcia@keysenergy.com

Edward Garcia Environmental/Safety Officer Stock Island Power Plant Keys Energy Services 1001 James Street P.O. Box 6100 Key West, Florida 33041-6100

Re: Request for Additional Information

Project Number 0870003-008-AV, Title V Air Operation Permit Revision Inclusion of GE LM 6000 PC SPRINT Simple Cycle Combustion Turbine

Dear Mr. Garcia:

The Department has received your application for a Title V air operation permit revision by electronic submission using Electronic Permit Submittal and Processing System (EPSAP) on April 27, 2007. After review, it has been determined that 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 below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revisions to the electronic submission.

#### 1. Permit Certifications.

- a. In the air construction permit (087003-007-AC) upon which this Title V air operation permit revision application (0870003-008-AV) is based, the designated authorized representative was Mr. Daniel Cassel, Director of Generation for Keys Energy Services. Mr. Cassel was the responsible official (R.O.) for the last Title V renewal application (0870003-006-AV). The R.O. for this permit application is Mr. Edward Garcia, Environmental/Safety Officer of Keys Energy Services. Is Mr. Cassel still employed by Keys Energy Services, and if so why was this change made?
- b. In the referenced electronic application it was indicated that this permit application was for a Title V permit 'renewal' (paragraph (3)) not a 'revision' (paragraph (5)). Please resubmit this portion of the application indicating the application is a 'revision' not 'renewal' along with the appropriate certification(s). Also, submit to the Department the required hardcopy Signature Document for the professional engineer (P.E.) certification to accompany each electronic submission when using the Department's EPSAP system. A printout of the applicable certification page that was submitted with this application is enclosed for your information.

Request for Additional Information Project Number 0870003-008-AV, Title V Air Operation Permit Revision Page 2 of 3

- 2. Applicable Regulations NSPS 40 CFR 60, Subpart KKKK. Please indicate to the Department the applicability of 40 CFR 60, Subpart KKKK Standards of Performance for Stationary Combustion Turbines, to Emission Unit (EU) ID Number (No.) -011, GE LM 6000 PC SPRINT Simple Cycle Combustion Turbine, cited in the application. In the air construction permit (0870003-007-AC), a reference was made to a preliminary determination on the applicability, see condition A.2.(c).
- 3. New Applicable Regulations new NESHAP ("MACT") 40 CFR 63, Subpart YYYY. With the addition of these two emissions units, is the facility a major source of hazardous air pollutants (HAPs)?
- 4. New Applicable Regulations Compliance Assurance Monitoring (CAM), 40 CFR 64. The new simple cycle combustion turbine is regulated under the NSPS 40 CFR 60, Subpart GG. The EPA promulgated and the State of Florida adopted the CAM federal regulation in Rule 62-204.800, F.A.C. CAM may apply to pollutants for which federal standards were promulgated pre-1990 (see the CAM federal regulation, for the complete applicability). CAM does not apply to post-1990 federal standards for certain pollutants. Does the CAM regulation apply to this newly constructed simple cycle combustion turbine?

{Note: An exemption from CAM is available for emissions units demonstrating continuous compliance with a continuous emissions monitor system (CEMs) under 40 CFR 64.2(b)(vi). If CAM is applicable, you may elect to use the NOx CEMs to demonstrate continuous compliance and be exempted from CAM. A condition to this effect would need to be added to the Title V permit.}

- 5. Supplemental Attachments, Emissions Units Applicable Regulations, Acid Rain Program. It is not clear in the application whether the provisions of the Title IV Acid Rain Program apply to EU ID No. -011. In the Supplemental Information portion of the application it is indicated that the Acid Rain Program does not apply. However, in the List of Applicable Regulations for EU ID No. -011 acid rain requirements for CEMs are listed.
- 6. Supplemental Attachments, Emissions Units Applicable Regulations. The Lists of Applicable Regulations in the application contain electronic forms listing emissions units besides EU IDs -011 and -012. If this is not extraneous data, please give descriptions of these additional units and how they relate to this application.
- 7. Supplemental Attachments, Facility List of Insignificant Emissions Units and/or Activities. As one of the attachments a list was provided that appears to apply to the entire facility. The current Title V permit in effect, Permit Number 0870003-006-AV, contains an Appendix I-1 (copy enclosed) which lists insignificant emissions units and activities at the entire facility. As part of this request to revise the Title V permit to include the new CT and oil tank what has changed to the Appendix I-1?
- 8. Operational Hours. In the final construction permit (0870003-007-AC) issued on September 8, 2005 the GE LM 6000 PC SPRINT Combustion Turbine (EU ID No. -011) cannot exceed 2,500 hours of operation based on a 12-month rolling total without the installation of a Selective Catalytic Reduction (SCR) system to control NO<sub>x</sub> emissions.

Request for Additional Information Project Number 0870003-008-AV, Title V Air Operation Permit Revision Page 3 of 3

- a. With a unit startup date of July 1, 2006 as indicated in the application, what have been the operational hours to date?
- b. In addition, after nearly a year of operational experience, have the number of operational hours by the unit in future years been adjusted from what was provided by the applicant to the Department in the Supplemental Response to the Request for Additional Information dated February 16, 2005?
- c. Will the hours of operation of EU ID No. -011 be kept at or below the 2,500 hour limit thereby not requiring the installation of a SCR system when the facility's Title V air operation permit (0870003-006-AV) comes up for renewal on July 5, 2009?
- 9. The application indicates for each EU (ID No. -011 and -012) the test type, frequency, emission limit, and/or record keeping requirement for each permitted pollutant, if any.
  - a. The application cites a June 23, 2006 test, submitted on July 25, 2006. What dates were the initial compliance tests completed and what were the results of the tests for each pollutant, if required?
  - b. Additionally, the application indicates that for EU ID No. -011, CO, NOx, and VE emission tests are required at a frequency base date of September 30, 2006. Were these test completed and what were their results?

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 construction 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. now requires applicants to respond to requests for information within 90 days or provide a written request for an additional period of time to submit the information.

If you should have any questions, please contact Mr. David Read at 850/414-7268 or me at 850/921-9532.

Sincerely,

Scott M. Sheplak, P.E.

Air Permitting South Section Bureau of Air Regulation Mail Station #5505

Stm. Sysae

2600 Blair Stone Road Tallahassee, FL 32399

Scott.Sheplak@dep.state.fl.us

Enclosures

copy to: A. J. Satyal, DEP SD, <u>ajaya.satyal@dep.state.fl.us</u>
Ivan Clark, P.E., R.W. Beck, Inc., iclark@rwbeck.com

Certifications Page 1 of 1

### PROFESSIONAL ENGINEER CERTIFICATION:

I hereby certify, except as particularly noted herein\*, that:

- (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
- (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.
- (3) If the purpose of this application is to obtain a Title V air operation permit (check here M, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.
- (4) If the purpose of this application is to obtain an air construction permit (check here , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.
- (5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here ), if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.
- \* Explain any exception to the certification statement.

Professional Engineer Name: IVAN CLARK

Professional Engineer Registration Number: 49777 Date Professional Engineer Submitted: 4/26/2007

#### RESPONSIBLE OFFICIAL CERTIFICATION:

By entering my PIN below, I certify that I 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.

Responsible Official Name: EDWARD GARCIA Date Responsible Official Submitted: 4/27/2007

## Appendix I-1, List of Insignificant Emissions Units and Activities

Keys Energy Services Stock Island Plant Page 1 of 2 **FINAL Permit No.** 0870003-006-AV

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

## **Brief Description of Emissions Units and Activities**

- 1. Internal combustion engines in boats, aircraft and vehicles used for transportation of passengers or freight.
- 2. Cold storage refrigeration equipment, except for any such equipment located at a Title V source using an ozone-depleting substance regulated under 40 CFR Part 82.
- 3. Vacuum pumps in laboratory operations.
- 4. Equipment used for steam cleaning.
- 5. Belt or drum sanders having a total sanding surface of five square feet or less and other equipment used exclusively on wood or plastics or their products having a density of 20 pounds per cubic foot or more.
- 6. Equipment used exclusively for space heating, other than boilers.
- 7. Laboratory equipment used exclusively for chemical or physical analyses.
- 8. Brazing, soldering or welding equipment.
- 9. One or more emergency generators located within a single facility provided:
  - a. None of the emergency generators is subject to the Federal Acid Rain Program; and
  - b. Total fuel consumption by all such emergency generators within the facility is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.

## Appendix I-1, List of Insignificant Emissions Units and Activities

Keys Energy Services Stock Island Plant Page 2 of 2 **FINAL Permit No.** 0870003-006-AV

- 10. One or more heating units and general purpose internal combustion engines located within a single facility provided:
  - a. None of the heating units or general purpose internal combustion engines is subject to the Federal Acid Rain Program; and
  - b. Total fuel consumption by all such heating units and general purpose internal combustion engines within the facility is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
- 11. Fire and safety equipment.
- 12. Surface coating operations within a single facility if the total quantity of coatings containing greater than 5.0 percent VOCs, by volume, used is 6.0 gallons per day or less, averaged monthly, provided:
  - a. Such operations are not subject to a volatile organic compound Reasonably Available Control Technology (RACT) requirement of Chapter 62-296, F.A.C.; and
  - b. The amount of coatings used shall include any solvents and thinners used in the process including those used for cleanup.
- 13. Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume.
- 14. Degreasing units using heavier-than-air vapors exclusively, except any such unit using or emitting any substance classified as a hazardous air pollutant.

Note: No exemption shall be granted to any emissions unit or activity if:

- 1. Such unit or activity would be subject to any unit-specific applicable requirement;
- 2. Such unit or activity, in combination with other units and activities proposed for exemption, would cause the facility to exceed any major source threshold(s) as defined in Rule 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s); or
- 3. Such unit or activity would emit or have the potential to emit:
  - a. 500 pounds per year or more of lead and lead compounds expressed as lead;
  - b. 1,000 pounds per year or more of any hazardous air pollutant;
  - c. 2,500 pounds per year or more of total hazardous air pollutants; or
  - d. 5.0 tons per year or more of any other regulated pollutant.

[Rule 62-213.430(6), F.A.C]

## Friday, Barbara

From:

Harvey, Mary

Sent:

Thursday, June 14, 2007 12:53 PM

To:

'edward.garcia@keysenergy.com'; Satyal, Ajaya; 'Ivan Clark, P.E., R.W. Beck, Inc.,'

Cc:

Adams, Patty; Sheplak, Scott; Gibson, Victoria

Subject:

Letter - Edward Garcia - Keys Energy Services

Attachments: letter - Edward Garcia - ID #0870003-008-AV.pdf

#### 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: <a href="http://www.adobe.com/products/acrobat/readstep.html">http://www.adobe.com/products/acrobat/readstep.html</a>.

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.

Thank you,

DEP, Bureau of Air Regulation

# Friday, Barbara

From: Harvey, Mary

**Sent:** Tuesday, June 19, 2007 10:59 AM

To: Adams, Patty

Subject: FW: Letter - Edward Garcia - Keys Energy Services

**From:** Garcia, Edward [mailto:Edward.Garcia@KeysEnergy.com]

**Sent:** Monday, June 18, 2007 4:44 PM

**To:** Harvey, Mary

Subject: RE: Letter - Edward Garcia - Keys Energy Services

Thanks, Eddie Garcia Environmental/Safety Officer Phone 305-295-1134 Fax 305-295-1070

I've stopped **943** spam messages. You can too! One month FREE spam protection at <a href="https://www.cloudmark.com">www.cloudmark.com</a>



----Original Message----

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

**Sent:** Thursday, June 14, 2007 12:53 PM

To: Garcia, Edward; Satyal, Ajaya; Ivan Clark, P.E., R.W. Beck, Inc.,

**Cc:** Adams, Patty; Sheplak, Scott; Gibson, Victoria **Subject:** Letter - Edward Garcia - Keys Energy Services

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Thank you,

DEP, Bureau of Air Regulation

# Friday, Barbara

From: Adams, Patty

**Sent:** Friday, June 22, 2007 3:56 PM

To: Friday, Barbara

Subject: FW: Letter - Edward Garcia - Keys Energy Services

From: Harvey, Mary

**Sent:** Thursday, June 14, 2007 1:21 PM **To:** Adams, Patty; Sheplak, Scott

Subject: FW: Letter - Edward Garcia - Keys Energy Services

From: Satyal, Ajaya

Sent: Thursday, June 14, 2007 1:14 PM

To: Harvey, Mary

Subject: RE: Letter - Edward Garcia - Keys Energy Services

Varifying receipt of the attachment.

## AJ Satyal

----Original Message----From: Harvey, Mary

**Sent:** Thursday, June 14, 2007 12:53 PM

To: 'edward.garcia@keysenergy.com'; Satyal, Ajaya; 'Ivan Clark, P.E., R.W. Beck, Inc.,'

**Cc:** Adams, Patty; Sheplak, Scott; Gibson, Victoria **Subject:** Letter - Edward Garcia - Keys Energy Services

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