

Jeb Bush  
Governor

# Department of Environmental Protection

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Colleen M. Castille  
Secretary

May 10, 2005

Mr. Timothy Bates  
Director Energy Supply - Production  
Lakeland Electric  
501 East Lemon Street  
Lakeland, Florida 33801-5079

Re: Addition of New Fly Ash Loading System and New Fly Ash Silo  
C.D. McIntosh, Jr. Power Plant, Facility ID #: 1050004

Dear Mr. Bates:

We have received your notification that you plan to install a new fly ash loading spout and possibly an additional fly ash silo. The additional fly ash silo would be used to recycle byproduct fly ash or for flue gas desulfurization byproduct stabilization. Along with your notification, we have also received a certification from your Professional Engineer detailing the lack of detrimental environmental effects resulting from the installation of this new equipment. The certification states that the potential emissions from the new silo will be approximately 0.03 tons per year and that the new fly ash loading spout will result in a decrease in emissions because it will be more efficient than the existing loading spout.

Based on the information provided, the Department agrees that the installation of the new fly ash loading spout and the new fly ash silo qualify under the generic emissions unit exemption criteria for an exemption from the requirement to obtain an air construction permit pursuant to Rule 62-210.300(3)(b), F.A.C. As such, Lakeland Electric is authorized to install and operate the equipment specified in your notification dated March 31, 2005. These units will also qualify as insignificant emissions units, pursuant to Rule 62-213.430(6), F.A.C., and will be included in the Title V air operation permit the next time it is opened for revision or renewal.

Should you have any questions regarding this matter, please contact Jonathan Holtom, P.E., at (850) 921-9531, or write to me at the above letter head address.

Sincerely,

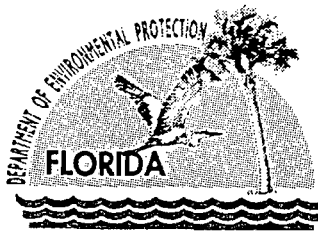
Trina L. Vielhauer, Chief  
Bureau of Air Regulation

TLV/jh

cc: Ms. Farzie Shelton, City of Lakeland – Department of Electric Utilities  
Mr. Kennard F. Koskey, P.E., Golder Associates  
Mr. Buck Oven, P.E., DEP - SCO  
Mr. Jason Waters, DEP-SWD (with copy of Lakeland's March 31 notification)

*"More Protection, Less Process"*

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Jeb Bush  
Governor

# Department of Environmental Protection

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David B. Struhs  
Secretary

Certified Mail – Return Receipt Requested

September 5, 2003

Mr. Timothy C. Bates  
Director of Energy Supply  
Lakeland Electric  
501 East Lemon Street  
Lakeland, Florida 33801-5079

Re: Title V Air Operation Permit Renewal Application  
**C. D. McIntosh, Jr. Power Plant**  
Facility ID: **1050004**

Dear Mr. Bates:

Thank you for your response of August 26, 2003 to our request for additional information of June 11, 2003, for a Title V Air Operation Permit Renewal for the referenced facility. The Department has reviewed your response and has determined the application to still be incomplete, for the following reasons:

1. Regarding SO<sub>2</sub> Emissions from McIntosh Unit 3 (EU 006)

While the Department agrees with the interpretation of the Rules cited in the response to our previous request for additional information, the fact remains that the Title V permit does not specify the use of the SO<sub>2</sub> continuous emissions monitor as a “continuous compliance determination method”. The CEM in use on this unit is only required for monitoring purposes. If you wish to be exempt from the CAM requirements for SO<sub>2</sub> emissions, please provide a statement, certified by the Responsible Official, that Lakeland Electric wishes to have the SO<sub>2</sub> CEM listed in the permit as the continuous compliance determination method.

If you do not wish to use the SO<sub>2</sub> CEM as the continuous compliance determination method, please provide an acceptable CAM plan for the FGD following the format of the examples contained in Appendix A of EPA’s Technical Guidance Document. The use of the Acid Rain CEM is a presumptively acceptable method of satisfying the CAM requirements, but must be written into the permit in a CAM plan, with justifiable indicator ranges specified.

*“More Protection, Less Process”*

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2. Regarding PM<sub>10</sub> Emissions from McIntosh Unit 3 (EU 006)

The opacity vs. PM<sub>10</sub> emission test data supplied with the response does not support the chosen indicator ranges. The test results indicate that there is not a linear correlation between PM<sub>10</sub> emissions and opacity readings on the COMS. In fact, the test data indicates the possibility of permit exceedances as low as 6% opacity. The purpose of CAM is to allow time for the taking of corrective actions before the permit limit is exceeded. Based on the information submitted, using the COMS as the method of monitoring opacity, will require that an excursion be defined as any opacity reading greater than 6%.

Through the review of CAM plans submitted recently by other Title V sources, it appears that the EPS total power (watts, secondary voltage x secondary current), rather than just secondary voltage, is a more reliable surrogate indicator of PM<sub>10</sub> emissions than opacity. An even better choice would be to monitor both ESP power and opacity. Please reevaluate the available data from the ESP to determine a trend between total ESP power and tested PM<sub>10</sub> emissions.

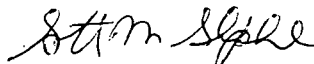
After choosing acceptable indicator ranges (maximum and minimum, if appropriate), please submit a complete CAM plan in the format of the examples contained in Appendix A of EPA's Technical Guidance Document. If it still desired to have different indicator ranges specified for the different fuel types, please provide information to justify each of the indicator ranges and a methodology for indicating on the CAM data when there was a change of fuel types.

3. General Comment

The response to the Department's request for additional information was submitted with a certification by the Designated Representative. If Mr. Bates is also the Responsible Official, he may certify the accuracy of the submission, but it should be through the use of the Responsible Official's certification statement, rather than the Designated Representative's certification statement.

When the Department has received all of the requested information, we will resume processing your application for permit revision. Until then, if you have any questions or require further assistance, please contact Edward J. Svec at 850/921-8985.

Sincerely,



Scott M. Sheplak, P.E.  
Administrator  
Title V Section

Cc: Kennard Kosky, P.E., Golder Associates Inc.  
Eric Peterson, P.E., DEP SW District  
Farzie Shelton, Lakeland Electric

9/5/03 cc: Ed Svec  
Reading file

7742 7222 5000 02E0 7002

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:  
 Mr. Timothy C. Bates  
 Director of Energy Supply  
 Lakeland Electric  
 501 East Lemon Street  
 Lakeland, Florida 33801-5079

2. Article Number  
 (Transfer from service label) 7001 1140 0002 1577 9267

PS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1540

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  
 X Bonnie Brennan  Agent  Addressee

B. Received by (Printed Name) Bonnie Brennan C. Date of Delivery 9-8-05

D. Is delivery address different from item 1?  Yes  No  
 If YES, enter delivery address below:

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

**U.S. Postal Service  
 CERTIFIED MAIL RECEIPT  
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7001 1140 0002 1577 9267

Mr. Timothy C. Bates, Director of Energy Supply

|   |           |
|---|-----------|
| Postage   | \$        |
| Certified Fee                                     |           |
| Return Receipt Fee<br>(Endorsement Required)      |           |
| Restricted Delivery Fee<br>(Endorsement Required) |           |
| <b>Total Postage &amp; Fees</b>                   | <b>\$</b> |

Postmark  
Here

**Sent To**  
 Mr. Timothy C. Bates, Director of Energy Supply  
 Street, Apt. No.;  
 or PO Box No. 501 East Lemon Street  
 City, State, ZIP+4 Lakeland, Florida 33801-5079

PS Form 3800, January 2001

See Reverse for Instructions



copy Jim H

**Farzie Shelton, chE; REM**

Manager of Environmental Affairs

August 26, 2003

**RECEIVED**

**AUG 29 2003**

**BUREAU OF AIR REGULATION**

Mr. Scott M. Sheplak, P.E.; Administrator  
Department of Environmental Protection  
Division of Air Resources Management  
Title V Section  
Twin Towers Office Building  
2600 Blair Stone Road, Mail Station #5505  
Tallahassee, Florida 32399-2400

**Re: C. D. McIntosh Power Plant - Facility Identification Number 1050004  
Title V Permit Renewal Permit Application**

Dear Mr. Sheplak:

We are in receipt of your letter dated June 11, 2003 addressed to Mr. Bates (Lakeland Electric's RO) in reference to the CAM for SO<sub>2</sub> and PM for Unit 3 located at the above facility. We are sorry to have taken some time to response to your letter as we were waiting for the result of annual stack testing on this unit so that we could utilize additional test data. Accordingly, we requested Mr. Ken Kosky P.E of Golder Associates to address your questions. Therefore, enclosed please find our response to your comments and questions sealed by Mr. Kosky. Additionally, we are enclosing our Responsible Official's certification with this letter.

If you should have any questions, please do not hesitate to contact me.

Sincerely,

Farzie Shelton

Enc.

Cc: Ken Kosky P.E. -- Golder Associates

**City of Lakeland • Department of Electric Utilities**

501 East Lemon Street • Lakeland, FL 33801-5050 • (863) 834-6603 • Fax (863) 834-8187 • Message System 834-6592

farzie.shelton@lakelandgov.net

**Owner/Designated Representative or Alternate Designated Representative**

1. Name and Title of Owner/Designated Representative or Alternate Designated Representative:

**Timothy Bates, Director of Energy Supply**

2. Owner/ Designated Representative or Alternate Designated Representative Mailing Address:

Organization/Firm: **Lakeland Electric**

Street Address: **501 East Lemon Street**

City: **Lakeland**

State: **FL**

Zip Code: **33801-5079**

3. Owner/ Designated Representative or Alternate Designated Representative Telephone Numbers:

Telephone: **(863) 834-6559**

Fax: **(863) 834-6362**

4. Owner/Designated Representative or Alternate Designated Representative:

*I, the undersigned, am the designated representative (check here [X], if so) or the alternate designated representative (check here [ ], if so) of the Title V, Acid Rain source(s) addressed in this application, whichever is applicable.*

*I am authorized to make this submission on behalf of the owner and operator of the affected source(s) or affected units for which the submission is made. I certify that I have personally examined, and am familiar with, the statement and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete.*

Timothy C Bates

Signature

8/26/03

Date

**Golder Associates Inc.**

6241 NW 23rd Street, Suite 500  
Gainesville, FL 32653-1500  
Telephone (352) 336-5600  
Fax (352) 336-6603



August 25, 2003

0237637

Lakeland Electric  
City of Lakeland  
501 East Lemon Street  
Lakeland, Florida 33801

Attention: Ms. Farzie Shelton, Manager of Environmental Affairs

RE: FDEP REQUEST FOR ADDITIONAL INFORMATION  
TITLE V AIR OPERATION PERMIT RENEWAL APPLICATION  
C.D. MCINTOSH, JR. POWER PLANT, FACILITY ID: 1050004

Dear Farzie:

Attached you will find response to FDEP's request for additional information for the C.D. McIntosh, Jr. Power Plant, Title V Air Operations Permit renewal application, dated June 11, 2003.

The attached material includes clarification of the exempt status of Unit 3 for SO<sub>2</sub> CAM requirements, as well as updated PM CAM indicator ranges based on additional test data. In addition, a discussion of the ESP TR set secondary voltage relationship to ESP performance and PM emissions is provided as requested by FDEP.

Please call if you have any questions.

Sincerely,

GOLDER ASSOCIATES INC.

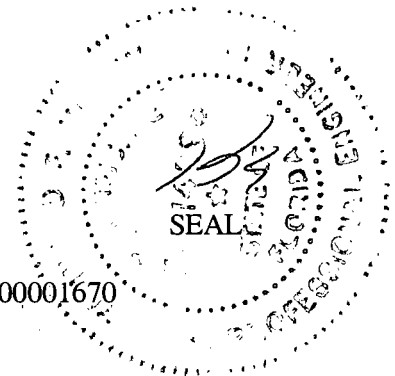
A handwritten signature in black ink, appearing to read 'Kennard F. Kosky'.

Kennard F. Kosky, P.E.

Principal

Professional Engineer Registration Number 14996

Golder Associates Board of Professional Engineers Certificate of Authorization #00001670



KFK/jkw

Y:\Projects\2002\0237637 Lakeland\44.1\082503\082503.doc

**RESPONSES TO COMMENTS FROM FDEP  
REGARDING THE TITLE V AIR OPERATION PERMIT RENEW APPLICATION  
FOR THE C.D. MCINTOSH, JR. POWER PLANT**

**Comment:** Because the SO<sub>2</sub> emissions standard for Unit 3 is not an Acid Rain Emission limit, Unit 3 is not automatically exempt from CAM pursuant to 40 CFR 64.2(b)(iii) just because the unit is using an Acid Rain SO<sub>2</sub> CEM. However, the use of the Acid Rain SO<sub>2</sub> CEM could qualify the unit for an exemption from the CAM requirements. Pursuant to 40 CFR 64.2(b)(vi), if Lakeland Electric chooses to use this CEM as a continuous compliance determination method, rather than just a monitoring method as required by 40 CFR 60.47a, Unit 3 could be exempt from the CAM requirements for emission of SO<sub>2</sub>.

Please provide either, a statement that Lakeland Electric wishes to have a SO<sub>2</sub> CEM listed in the permit as the continuous compliance determination method, or and acceptable CAM plan for the FGD. The use of the Acid Rain CEM is a presumptively acceptable method of satisfying the CAM requirements, but must be written into the permit in a CAM plan.

**Response:** McIntosh Unit 3 is exempt from the requirements of 40 CFR Part 64 by Section 64.2(b)(1)(vi) for sulfur dioxide (SO<sub>2</sub>) since a continuous emission monitoring system is used to determine compliance on a continuous basis consistent with the averaging time for that standard. This section, which provides exemptions, states:

“Emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in § 64.1. The exemption provided in this paragraph (b)(1)(vi) shall not apply if the applicable compliance method includes an assumed control device emission reduction factor that could be affected by the actual operation and maintenance of the control device (such as a surface coating line controlled by an incinerator for which continuous compliance is determined by calculating emissions on the basis of coating records and an assumed control device efficiency factor based on an initial performance test; in this example, this part would apply to the control device and capture system, but not to the remaining elements of the coating line, such as raw material usage).”

The SO<sub>2</sub> emissions from Unit 3 are based on both a percent reduction and emission limit expressed in lb/MMBtu (see Condition E.9. of current Title V permit). The percent reduction is based on a 30-day rolling average. A percent reduction is also an appropriate “emission limitation or standard” based on the definition in Section 64.1, which states:

“*Emission limitation or standard* means any applicable requirement that constitutes an emission limitation, emission standard, standard of performance or means of emission limitation as defined under the Act. An emission limitation or standard may be expressed in terms of the pollutant, expressed either as a specific quantity, rate or concentration of emissions (e.g., pounds of SO<sub>2</sub> per hour, pounds of SO<sub>2</sub> per million British thermal units of fuel input, kilograms of VOC per liter of applied coating solids, or parts per million by volume of SO<sub>2</sub>) or as the relationship of uncontrolled to controlled emissions (e.g., percentage capture and destruction efficiency of VOC or percentage reduction of SO<sub>2</sub>). An emission limitation or standard may also be expressed either as a work practice, process or control device parameter, or other



form of specific design, equipment, operational, or operation and maintenance requirement. For purposes of this part, an emission limitation or standard shall not include general operation requirements that an owner or operator may be required to meet, such as requirements to obtain a permit, to operate and maintain sources in accordance with good air pollution control practices, to develop and maintain a malfunction abatement plan, to keep records, submit reports, or conduct monitoring.”

This unit is required to have CEMS pursuant to 40 CFR Part 60 Subpart D and the air construction/PSD permit. Information is obtained on a continuous basis consistent with the averaging time of the standard. This meets the requirement for a continuous compliance determination method as defined in Section 64.1:

“*Continuous compliance determination method* means a method, specified by the applicable standard or an applicable permit condition, which:

- (1) Is used to determine compliance with an emission limitation or standard on a continuous basis, consistent with the averaging period established for the emission limitation or standard; and (2) Provides data either in units of the standard or correlated directly with the compliance limit.”

As a result, a CAM Plan is not required for SO<sub>2</sub> emissions based on the underlying applicable standards.

**Comment:** Unit 3 is subject to CAM for PM emissions controlled by an ESP. Lakeland Electric proposed the use of the COMs for monitoring opacity as an indicator that the ESP is functioning properly. Various levels of opacity were also presented in the application as indicator ranges for the different types of fuel being fired. The selected opacity indicator ranges appear to be high based on the one test submitted with the application. Since there is not a consistent or well-defined correlation between PM emissions and opacity, please provide additional test data to support your choice of indicator ranges. Also, to avoid recordkeeping problems while switching between types of fuels, explore the feasibility of choosing a single maximum opacity reading for all types of fuels. Also, please provide data showing the correlation between tested PM emissions levels and ESP voltage for the different fuel types that are allowed to be fired. Consider identifying a minimum ESP voltage as an indicator of performance instead of, or in addition to, opacity.

**Response:** Unit 3 is subject to CAM for PM emissions controlled by an ESP. Lakeland Electric proposed as CAM, the use of COMS for monitoring opacity as an indicator that Unit No. 3 ESP is functioning properly. The proposed indicator ranges were based on COM readings taken simultaneously to the 2002 annual compliance test. PM emissions were plotted versus the average of the COM opacity readings for three 1-hour stack test runs. A linear regression analysis was then performed to develop a relationship between opacity and PM (lb/MMBtu) emissions. The resulting correlation was applied to estimate opacity readings equivalent to each fuel specific PM emission limitation. To account for error in the correlation, 10 percent was added to each indicator range.

At the request of the Department, the correlation has been updated with additional data. Test data from the last three years (2003, 2002, and 2001) compliance tests has been correlated with the associated average COM data. The three 1-hour PM test

runs of each compliance test were averaged and plotted versus the average opacity readings during the same time period. In addition, zero opacity was assumed to occur with zero PM emissions. The resulting graph and correlation equation are presented in Figure 1. The compliance test and COM data used to develop the correlation as well as the details of the linear regression analysis are presented in Table 1 and 2, respectively.

Based on the new correlation and the permit limits for PM for each mode of firing, the corresponding estimated opacity for each limit is as follows:

| Mode of Firing             | PM Permit Limit (lb/MMBtu) | New Correlation Corresponding Opacity (%) |
|----------------------------|----------------------------|---|
| Coal                       | 0.044                      | 12.4                                      |
| Coal/Petroleum Coke        | 0.044                      | 12.4                                      |
| Coal/Refuse                | 0.050                      | 14.4                                      |
| Coal/Petroleum Coke/Refuse | 0.050                      | 14.4                                      |
| Oil                        | 0.070                      | *   |
| Oil/Refuse                 | 0.075                      | *   |

\* Oil and oil/refuse modes of firing only occur during Unit No. 3 start-up. Therefore these periods are excluded pursuant to Rule 62-210.700.

To reduce the recordkeeping burden and increase the ease of CAM plan implementation, Lakeland Electric proposes to set two CAM plan indicator ranges, which are as follows:

| Mode of Firing             | CAM Indicator Range Opacity (%) |
|----------------------------|---------------------------------|
| Coal                       | 13.5                            |
| Coal/Petroleum Coke        | 13.5                            |
| Coal/Refuse                | 15.5                            |
| Coal/Petroleum Coke/Refuse | 15.5                            |

Therefore an excursion will be defined as a VE (3-hour block averaging time) greater than 13-percent opacity for coal and coal/petroleum coke firing. For coal/refuse and coal/petroleum coke/refuse firing an excursion will be defined as a VE (3-hour block averaging time) greater than 15-percent opacity. To account for error in the correlation, 10 percent was added to each indicator range. The indicator range was then rounded to the nearest 0.5-percent opacity. An excursion will trigger an evaluation of operation of the power boiler and ESP. Corrective action will be taken as necessary. Any excursion will trigger recordkeeping and reporting requirements. It should be noted that this indicator range is less than the permitted allowable opacity of 20 percent (6-minute average).

Prior to developing a correlation between opacity and PM emissions, data was analyzed to determine if a relationship exists between ESP TR set secondary voltage and PM emissions. Secondary voltage has not historically been logged and therefore limited data exists. However, data exists from the year 2002 compliance test and was utilized to explore a correlation with PM emissions. The results of this investigation indicates that a linear relationship exists, see Figure 2. However, the relationship

suggests that as TR set secondary voltage increases, the PM emissions (lb/MMBtu) also increase. This relationship does not agree with the theory of ESP performance. The ESP electric field plays an important role in the precipitation process in that it provides the basis for generation of corona required for charging and the necessary conditions for establishing a force to separate particulate from the gas stream. An electric field is formed from application of high voltage to the ESP discharge electrodes; the strength of this electric field is a critical factor in ESP performance.

Although the strength of the electric field is typically an indication of the effectiveness of an ESP, the examined data suggest otherwise and therefore is not considered appropriate as a monitoring parameter for CAM for Unit No. 3.

Table 1. Lakeland Electric McIntosh Unit 3 CAM Data

| Run Number | Test Date | Start Time | Average Opacity (%) | Test Mass Emissions (lb/mmbtu) | Average of Three Runs |                           |
|------------|-----------|------------|---------------------|--------------------------------|-----------------------|---------------------------|
|            |           |            |                     |                                | Opacity (%)           | Mass Emissions (lb/mmbtu) |
|            |           |            |                     |                                | 0                     | 0                         |
| 1          | 6/9/03    | 13:26      | 6.7                 | 0.042                          |                       |                           |
| 2          | 6/9/03    | 15:09      | 6                   | 0.043                          | 6.0333                | 0.0380                    |
| 3          | 6/9/03    | 16:50      | 5.4                 | 0.029                          |                       |                           |
| 1          | 6/11/02   | 7:00       | 11.6                | 0.017                          |                       |                           |
| 2          | 6/11/02   | 10:06      | 13.1                | 0.046                          | 13.4333               | 0.0410                    |
| 3          | 6/11/02   | 11:30      | 15.6                | 0.06                           |                       |                           |
| 1          | 6/7/01    | 7:54       | 5.14                | 0.036                          |                       |                           |
| 2          | 6/7/01    | 10:00      | 5.48                | 0.01                           | 5.6858                | 0.0227                    |
| 3          | 6/7/01    | 11:48      | 6.44                | 0.022                          |                       |                           |

Table 2. Linear Regression Output

| <i>Regression Statistics</i> |             |
|------------------------------|-------------|
| Multiple R                   | 0.870167724 |
| R Square                     | 0.757191868 |
| Adjusted R Square            | 0.635787802 |
| Standard Error               | 0.011315959 |
| Observations                 | 4           |

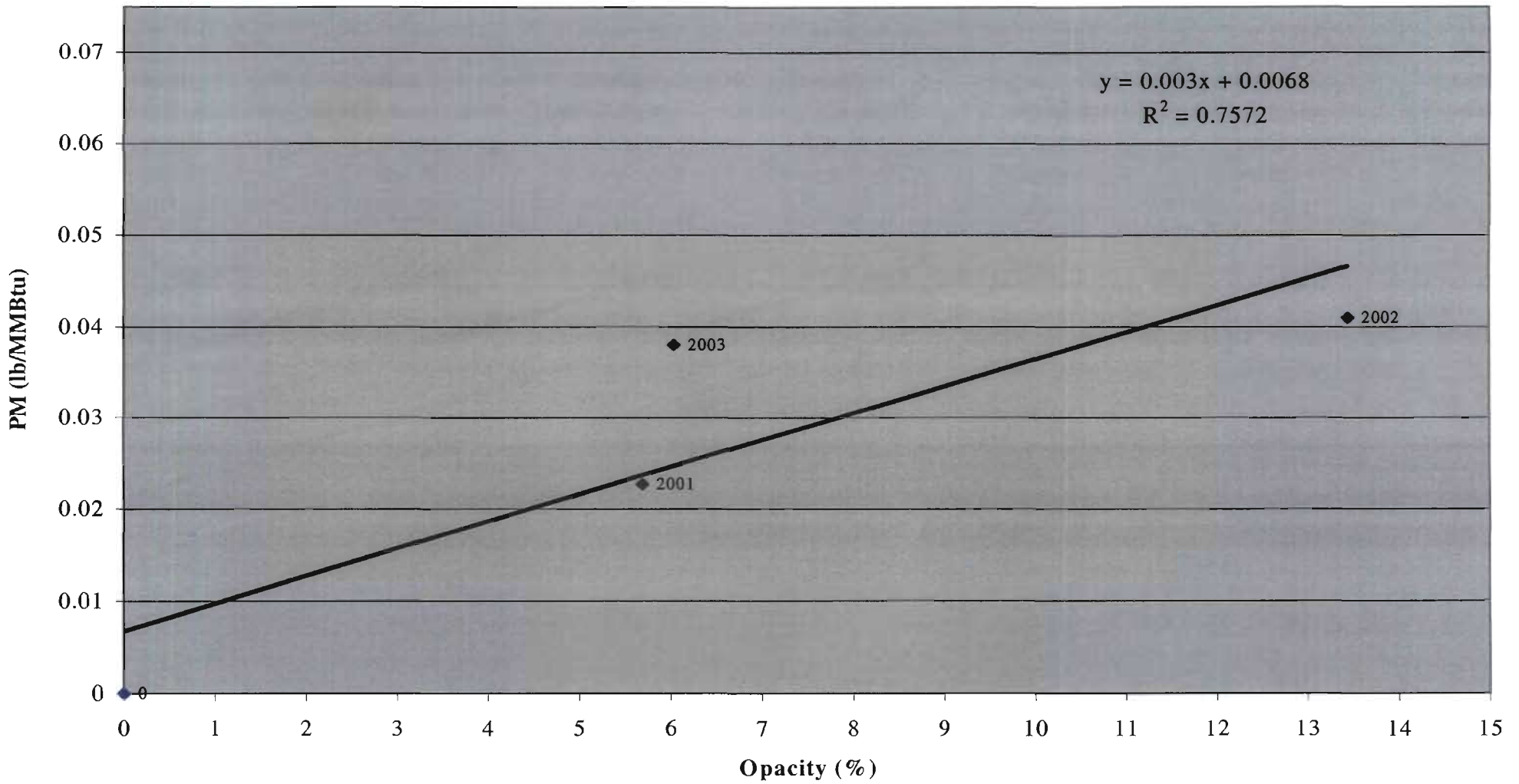
  

| <i>ANOVA</i> |           |             |           |             |                       |
|--------------|-----------|-------------|-----------|-------------|-----------------------|
|              | <i>df</i> | <i>SS</i>   | <i>MS</i> | <i>F</i>    | <i>Significance F</i> |
| Regression   | 1         | 0.000798648 | 0.0007986 | 6.236956419 | 0.129832276           |
| Residual     | 2         | 0.000256102 | 0.0001281 |             |                       |
| Total        | 3         | 0.00105475  |           |             |                       |

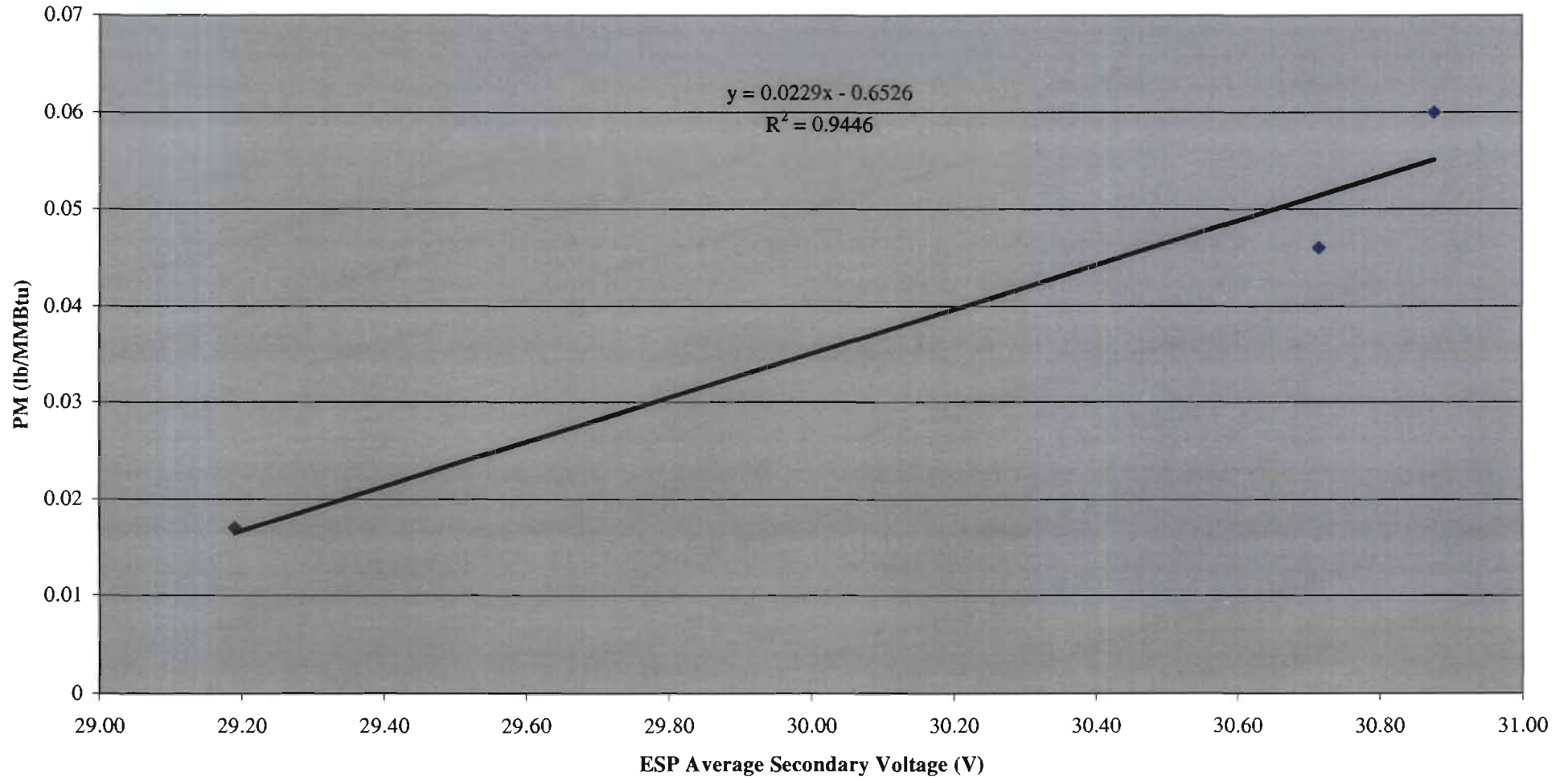
  

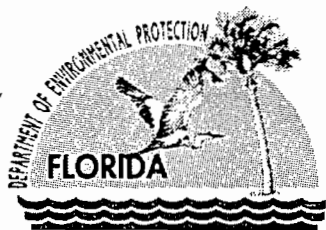
|              | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> | <i>Lower 95%</i> | <i>Upper 95%</i> | <i>Lower 95.0%</i> | <i>Upper 95.0%</i> |
|--------------|---------------------|-----------------------|---------------|----------------|------------------|------------------|--------------------|--------------------|
| Intercept    | 0.006790458         | 0.009361545           | 0.7253566     | 0.543624151    | -0.033489047     | 0.047069964      | -0.033489047       | 0.047069964        |
| X Variable 1 | 0.002962129         | 0.00118609            | 2.4973899     | 0.129832276    | -0.002141208     | 0.008065466      | -0.002141208       | 0.008065466        |

**Figure 1. ESP Opacity/PM Correlation Based on 2003, 2002, and 2001 Compliance Test Results**



**Figure 2. ESP Average Secondary Voltage/PM Correlation Based on 2002 Compliance Test Results**





Jeb Bush  
Governor

# Department of Environmental Protection

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David B. Struhs  
Secretary

Certified Mail – Return Receipt Requested

June 11, 2003

Mr. Timothy C. Bates  
Director of Energy Supply  
Lakeland Electric  
501 East Lemon Street  
Lakeland, Florida 33801-5079

Re: Title V Air Operation Permit Renewal Application  
**C. D. McIntosh, Jr. Power Plant**  
Facility ID: **1050004**

Dear Mr. Bates:

Thank you for your submission of April 30, 2003, for a Title V Air Operation Permit Renewal for the referenced facility. The Department has reviewed your request and has determined the application to be incomplete, for the following reasons:

1. Because the SO<sub>2</sub> emissions standard for Unit 3 is not an Acid Rain emissions limit, Unit 3 is not automatically exempt from CAM pursuant to 40 CFR 64.2(b)(iii) just because the unit is using an Acid Rain SO<sub>2</sub> CEM. However, the use of the Acid Rain SO<sub>2</sub> CEM could qualify the unit for an exemption from the CAM requirements. Pursuant to 40 CFR 64.2(b)(vi), if Lakeland Electric chooses to use this CEM as a continuous compliance determination method, rather than just a monitoring method as required by 40 CFR 60.47a, Unit 3 could be exempt from the CAM requirements for emissions of SO<sub>2</sub>.

Please provide either, a statement that Lakeland Electric wishes to have the SO<sub>2</sub> CEM listed in the permit as the continuous compliance determination method, or an acceptable CAM plan for the FGD. The use of the Acid Rain CEM is a presumptively acceptable method of satisfying the CAM requirements, but must be written into the permit in a CAM plan.

*"More Protection, Less Process"*

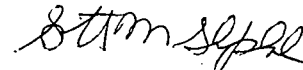
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2. Unit 3 is subject to CAM for PM emissions controlled by an ESP. Lakeland Electric proposed the use of the COMS for monitoring opacity as an indicator that the ESP is functioning properly. Various levels of opacity were also presented in the application as indicator ranges for the different types of fuel being fired. The selected opacity indicator ranges appear to be high based on the one test submitted with the application. Since there is not a consistent or well defined correlation between PM emissions and opacity, please provide additional test data to support your choice of indicator ranges. Also, to avoid recordkeeping problems while switching between different types of fuels, explore the feasibility of choosing a single maximum opacity reading for all types of fuels. Also, please provide data showing the correlation between tested PM emissions levels and ESP voltage for the different fuel types that are allowed to be fired. Consider identifying a minimum ESP voltage as an indicator of performance instead of, or in addition to, opacity.

When the Department has received all of the requested information, we will resume processing your application for permit revision. Until then, if you have any questions or require further assistance, please contact Edward J. Svec at 850/921-8985.

Sincerely,



Scott M. Sheplak, P.E.  
Administrator  
Title V Section

Cc: Kennard Kosky, P.E., Golder Associates Inc.  
Eric Peterson, P.E., DEP SW District  
Farzie Shelton, Lakeland Electric

6/11/03 cc: Ed Svec  
Reading Sale

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:  
 Mr. Timothy C. Bates  
 Director of Energy Supply  
 Lakeland Electric  
 501 East Lemon Street  
 Lakeland, Florida 33801-5079

2. Article Number  
 (Transfer from service label) 7000 2870 0000 7028 1143

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  
 X Bonnie Bren  Agent  Addressee

B. Received by (Printed Name) Bonnie Bren C. Date of Delivery 6-13-01

D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

**U.S. Postal Service  
 CERTIFIED MAIL RECEIPT  
 (Domestic Mail Only; No Insurance Coverage Provided)**

7000 2870 0000 7028 1143

**OFFICIAL USE**  
Mr. Timothy C. Bates

|   |           |
|---|-----------|
| Postage   | \$        |
| Certified Fee                                     |           |
| Return Receipt Fee<br>(Endorsement Required)      |           |
| Restricted Delivery Fee<br>(Endorsement Required) |           |
| <b>Total Postage &amp; Fees</b>                   | <b>\$</b> |

Postmark  
 Here

**Sent To**  
Mr. Timothy C. Bates  
**Street, Apt. No.; or PO Box No.**  
501 East Lemon Street  
**City, State, ZIP+4**  
Lakeland, Florida 33801-5079



Farzie Shelton, chE; REM  
Manager of Environmental Affairs

RECEIVED

AUG 09 2002

BUREAU OF AIR REGULATION

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

August 6, 2002

Mr. C. H. Fancy, P.E.  
Chief Bureau of Air Regulation  
Department of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road, Mail Station #5505  
Tallahassee, Florida 32399-2400

Re: **Notice of Responsible Officials – Lakeland Electric**  
**Title V facilities C. D. McIntosh Power Plant 1050004-011-AV**  
**Charles Larsen Memorial Power plant 1050003-009-AV**  
**And Winston Peaking Station 1050352-001-AC**

Dear Mr. Fancy:

In compliance with Rule 62-210.200 and 62-213 F.A.C., notice is hereby given that The Lakeland Electric (Lakeland) has, by agreement, appointed Mr. Timothy C. Bates as the Primary Responsible Official and Mr. Bill Furman as the Additional Responsible Official for Lakeland for its above referenced Title V facilities. Lakeland is the owner/operator of these Title V facilities. Mr. Bates and Mr. Furman have the necessary authority to carry out the duties and responsibilities of the Title V Program under the Clean Air Act Amendments of 1990 on behalf of Lakeland Electric.

This notice is made in accordance with the Clean Air Act, as amended and applicable regulations promulgated thereto by the United States Environmental Protection Agency and the Florida Department of Environmental Protection. Therefore, enclosed you will find certifications signed by Mr. Bates and Mr. Furman declaring their appointment.

If you should have any questions, please do not hesitate to contact me.

Sincerely,

Farzie Shelton

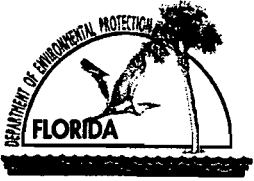
Enc.

Cc: Mr. Gerald Kissel, P.E.  
Mr. Scott Sheplak, P.E.  
Mr. Tim Bates  
Mr. Bill Furman

City of Lakeland • Department of Electric Utilities

501 East Lemon Street • Lakeland, FL 33801-5050 • (863) 834-6603 • Fax (863) 834-8187 • Message System 834-6592

[farzie.shelton@lakelandgov.net](mailto:farzie.shelton@lakelandgov.net)



# Department of Environmental Protection

## Division of Air Resource Management

### RESPONSIBLE OFFICIAL NOTIFICATION FORM

**Note: A responsible official is not necessarily a designated representative under the Acid Rain Program. To become a designated representative, submit a certificate of representation to the U.S. Environmental Protection Agency (EPA) in accordance with 40 CFR Part 72.24.**

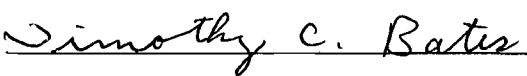
**Identification of Facility**

|  |                        |
|--|------------------------|
| 1. Facility Owner/Company Name:<br><b>Lakeland Electric</b>  |                        |
| 2. Site Name: <b>McIntosh power Plant</b>  | 3. County: <b>Polk</b> |
| 4. Title V Air Operation Permit/Project No. <i>(leave blank for initial Title V applications)</i> :<br><b>1050004-011-AV</b> |                        |


**Notification Type** *(Check one or more)*

|   |   |
|---|---|
| <input type="checkbox"/> <b>INITIAL:</b>                  | Notification of responsible officials for an initial Title V application. |
| <input type="checkbox"/> <b>RENEWAL:</b>                  | Notification of responsible officials for a renewal Title V application.  |
| <input checked="" type="checkbox"/> <b>CHANGE:</b>        | Notification of change in responsible official(s).                        |
| Effective date of change in responsible official(s) _____ |   |

**Primary Responsible Official**

|   |  |
|---|--|
| 1. Name and Position Title of Responsible Official:<br><b>Timothy C. Bates</b>  |  |
| 2. Responsible Official Mailing Address:<br>Organization/Firm: <b>Lakeland Electric</b><br>Street Address: <b>501 East Lemon Street</b><br>City: <b>Lakeland</b> State: <b>Florida</b> Zip Code: <b>33801</b>   |  |
| 3. Responsible Official Telephone Numbers:<br>Telephone: <b>(863 )834 -6559</b> Fax: <b>(683 ) 634 - 6362</b>   |  |
| 4. Responsible Official Qualification <i>(Check one or more of the following options, as applicable)</i> :<br><input 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.<br><input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively.<br><input checked="" type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.<br><input checked="" type="checkbox"/> The designated representative at an Acid Rain source. |  |
| 5. Responsible Official Statement:<br><br><i>I, the undersigned, am a responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this notification. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this notification are true, accurate and complete. Further, I certify that I have authority over the decisions of all other responsible officials, if any, for purposes of Title V permitting.</i><br><br><div style="display: flex; justify-content: space-between;"> <div style="width: 45%; text-align: center;"> <br/>           _____<br/>           Signature         </div> <div style="width: 45%; text-align: center;"> <b>7-25-02</b><br/>           _____<br/>           Date         </div> </div>   |  |

**Additional Responsible Official**

|  |  |
|--|--|
| 1. Name and Position Title of Responsible Official:<br><b>Bill Furman</b> , Energy Supply Production Manager   |  |
| 2. Responsible Official Mailing Address:<br>Organization/Firm: <b>Lakeland Electric</b><br>Street Address: <b>501 East Lemon Street</b><br>City: <b>Lakeland</b> State: <b>Florida</b> Zip Code: <b>33801</b>  |  |
| 3. Responsible Official Telephone Numbers:<br>Telephone: <b>(863 ) 834 - 6611</b> Fax: <b>(863 ) 834 - 5670</b>  |  |
| 4. Responsible Official Qualification ( <i>Check one or more of the following options, as applicable</i> ):<br><input 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.<br><input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively.<br><input checked="" type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.<br><input checked="" type="checkbox"/> The designated representative at an Acid Rain source. |  |

**Additional Responsible Official**

|  |  |
|--|--|
| 1. Name and Position Title of Responsible Official:  |  |
| 2. Responsible Official Mailing Address:<br>Organization/Firm:<br>Street Address:<br>City: State: Florida Zip Code:  |  |
| 3. Responsible Official Telephone Numbers:<br>Telephone: ( ) - Fax: ( ) -  |  |
| 4. Responsible Official Qualification ( <i>Check one or more of the following options, as applicable</i> ):<br><input 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.<br><input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively.<br><input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.<br><input type="checkbox"/> The designated representative at an Acid Rain source. |  |