

**Appendix G Rule 25-6.065 Interconnection
and Net Metering of Customer-
Owned Renewable Generation**

25-6.065 Interconnection and Net Metering of Customer-Owned Renewable Generation.

(1) Application and Scope. The purpose of this rule is to promote the development of small customer-owned renewable generation, particularly solar and wind energy systems; diversify the types of fuel used to generate electricity in Florida; lessen Florida's dependence on fossil fuels for the production of electricity; minimize the volatility of fuel costs; encourage investment in the state; improve environmental conditions; and, at the same time, minimize costs of power supply to investor-owned utilities and their customers. This rule applies to all investor-owned utilities, except as otherwise stated in subsection (10).

(2) Definitions. As used in this rule, the term.

(a) "Customer-owned renewable generation" means an electric generating system located on a customer's premises that is primarily intended to offset part or all of the customer's electricity requirements with renewable energy. The term "customer-owned renewable generation" does not preclude the customer of record from contracting for the purchase, lease, operation, or maintenance of an on-site renewable generation system with a third-party under terms and conditions that do not include the retail purchase of electricity from the third party.

(b) "Gross power rating" means the total manufacturer's AC nameplate generating capacity of an on-site customer-owned renewable generation system that will be interconnected to and operate in parallel with the investor-owned utility's distribution facilities. For inverter-based systems, the AC nameplate generating capacity shall be calculated by multiplying the total installed DC nameplate generating capacity by .85 in order to account for losses during the conversion from DC to AC.

(c) "Net metering" means a metering and billing methodology whereby customer-owned renewable generation is allowed to offset the customer's electricity consumption on-site.

(d) "Renewable energy," as defined in Section 377.803, F.S., means electrical, mechanical, or thermal energy produced from a method that uses one or more of the following fuels or energy sources: hydrogen, biomass, solar energy, geothermal energy, wind energy, ocean energy, waste heat, or hydroelectric power.

(3) Standard Interconnection Agreements. Each investor-owned utility shall, within 30 days of the effective date of this rule, file for Commission approval a Standard Interconnection Agreement for expedited interconnection of customer-owned renewable generation, up to 2 MW, that complies with the following standards:

(a) IEEE 1547 (2003) Standard for Interconnecting Distributed Resources with Electric Power Systems;

(b) IEEE 1547.1 (2005) Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems; and

(c) UL 1741 (2005) Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources.

(d) A copy of IEEE 1547 (2003), ISBN number 0-7381-3720-0, and IEEE 1547.1 (2005), ISBN number 0-7381-4737-0, may be obtained from the Institute of Electric and Electronic Engineers, Inc. (IEEE), 3 Park Avenue, New York, NY, 10016-5997. A copy of UL 1741 (2005) may be obtained from COMM 2000, 1414 Brook Drive, Downers Grove, IL 60515.

(4) Customer Qualifications and Fees.

(a) To qualify for expedited interconnection under this rule, customer-owned renewable generation must have a gross power rating that:

1. Does not exceed 90% of the customer's utility distribution service rating; and

2. Falls within one of the following ranges:

Tier 1 - 10 kW or less;

Tier 2 – greater than 10 kW and less than or equal to 100 kW; or

Tier 3 – greater than 100 kW and less than or equal to 2 MW.

(b) Customer-owned renewable generation shall be considered certified for interconnected operation if it has been submitted by a manufacturer to a nationally recognized testing and certification laboratory, and has been tested and listed by the laboratory for continuous interactive operation with an electric distribution system in compliance with the applicable codes and standards listed in subsection (3).

(c) Customer-owned renewable generation shall include a utility-interactive inverter, or other device certified pursuant to paragraph (4)(b) that performs the function of automatically isolating the customer-owned generation equipment from the electric grid in the event the electric grid loses power.

(d) For Tiers 1 and 2, provided the customer-owned renewable generation equipment complies with paragraphs (4)(a) and (b), the investor-owned utility shall not require further design review, testing, or additional equipment other than that provided for in

subsection (6). For Tier 3, if an interconnection study is necessary, further design review, testing and additional equipment as identified in the study may be required.

(e) Tier 1 customers who request interconnection of customer-owned renewable generation shall not be charged fees in addition to those charged to other retail customers without self-generation, including application fees.

(f) Along with the Standard Interconnection Agreement filed pursuant to subsection (3), each investor-owned utility may propose for Commission approval a standard application fee for Tiers 2 and 3, including itemized cost support for each cost contained within the fee.

(g) Each investor-owned utility may also propose for Commission approval an Interconnection Study Charge for Tier 3.

(h) Each investor-owned utility shall show that their fees and charges are cost-based and reasonable. No fees or charges shall be assessed for interconnecting customer-owned renewable generation without prior Commission approval.

(5) Contents of Standard Interconnection Agreement. Each investor-owned utility's customer-owned renewable generation Standard Interconnection Agreement shall, at a minimum, contain the following:

(a) A requirement that customer-owned renewable generation must be inspected and approved by local code officials prior to its operation in parallel with the investor-owned utility to ensure compliance with applicable local codes.

(b) Provisions that permit the investor-owned utility to inspect customer-owned renewable generation and its component equipment, and the documents necessary to ensure compliance with subsections (2) through (4). The customer shall notify the investor-owned utility at least 10 days prior to initially placing customer equipment and protective apparatus in service, and the investor-owned utility shall have the right to have personnel present on the in-service date. If the customer-owned renewable generation system is subsequently modified in order to increase its gross power rating, the customer must notify the investor-owned utility by submitting a new application specifying the modifications at least 30 days prior to making the modifications.

(c) A provision that the customer is responsible for protecting the renewable generating equipment, inverters, protective devices, and other system components from damage from the normal and abnormal conditions and operations that occur on the investor-owned utility system in delivering and restoring power; and is responsible for ensuring that customer-owned renewable generation equipment is inspected, maintained, and tested in accordance with the manufacturer's instructions to ensure that it is operating correctly and safely.

(d) A provision that the customer shall hold harmless and indemnify the investor-owned utility for all loss to third parties resulting from the operation of the customer-owned renewable generation, except when the loss occurs due to the negligent actions of the investor-owned utility. A provision that the investor-owned utility shall hold harmless and indemnify the customer for all loss to third parties resulting from the operation of the investor-owned utility's system, except when the loss occurs due to the negligent actions of the customer.

(e) A requirement for general liability insurance for personal and property damage, or sufficient guarantee and proof of self-insurance, in the amount of no more than \$1 million for Tier 2, and no more than \$2 million for Tier 3. The investor-owned utility shall not require liability insurance for Tier 1. The investor-owned utility may include in the Interconnection Agreement a recommendation that Tier 1 customers carry an appropriate level of liability insurance.

(f) Identification of any fees or charges approved pursuant to subsection (4).

(6) Manual Disconnect Switch.

(a) Each investor-owned utility's customer-owned renewable generation Standard Interconnection Agreement may require customers to install, at the customer's expense, a manual disconnect switch of the visible load break type to provide a separation point between the AC power output of the customer-owned renewable generation and any customer wiring connected to the investor-owned utility's system. Inverter-based Tier 1 customer-owned renewable generation systems shall be exempt from this requirement, unless the manual disconnect switch is installed at the investor-owned utility's expense. The manual disconnect switch shall be mounted separate from, but adjacent to, the meter socket and shall be readily accessible to the investor-owned utility and capable of being locked in the open position with a single investor-owned utility padlock.

(b) The investor-owned utility may open the switch pursuant to the conditions set forth in paragraph (6)(c), isolating the customer-owned renewable generation, without prior notice to the customer. To the extent practicable, however, prior notice shall be given. If prior notice is not given, the utility shall at the time of disconnection leave a door hanger notifying the customer that their customer-owned renewable generation has been disconnected, including an explanation of the condition necessitating such action. The investor-owned utility shall reconnect the customer-owned renewable generation as soon as the condition necessitating disconnection is remedied.

(c) Any of the following conditions shall be cause for the investor-owned utility to disconnect customer-owned renewable generation from its system:

1. Emergencies or maintenance requirements on the investor-owned utility's electric system;
2. Hazardous conditions existing on the investor-owned utility system due to the operation of the customer's generating or protective equipment as determined by the investor-owned utility;
3. Adverse electrical effects, such as power quality problems, on the electrical equipment of the investor-owned utility's other electric consumers caused by the customer-owned renewable generation as determined by the investor-owned utility;
4. Failure of the customer to maintain the required insurance coverage.

(7) Administrative Requirements.

(a) Each investor-owned utility shall maintain on its website a downloadable application for interconnection of customer-owned renewable generation, detailing the information necessary to execute the Standard Interconnection Agreement. Upon request the investor-owned utility shall provide a hard copy of the application within 5 business days.

(b) Within 10 business days of receipt of the customer's application, the investor-owned utility shall provide written notice that it has received all documents required by the Standard Interconnection Agreement or indicate how the application is deficient. Within 10 business days of receipt of a completed application, the utility shall provide written notice verifying receipt of the completed application. The written notice shall also include dates for any physical inspection of the customer-owned renewable generation necessary for the investor-owned utility to confirm compliance with subsections (2) through (6), and confirmation of whether a Tier 3 interconnection study will be necessary.

(c) The Standard Interconnection Agreement shall be executed by the investor-owned utility within 30 calendar days of receipt of a completed application. If the investor-owned utility determines that an interconnection study is necessary for a Tier 3 customer, the investor-owned utility shall execute the Standard Interconnection Agreement within 90 days of a completed application.

(d) The customer must execute the Standard Interconnection Agreement and return it to the investor-owned utility at least 30 calendar days prior to beginning parallel operations and within one year after the utility executes the Agreement. All physical inspections must be completed by the utility within 30 calendar days of receipt of the customer's executed Standard Interconnection Agreement. If the inspection is delayed at the customer's request, the customer shall contact the utility to reschedule an inspection. The investor-owned utility shall reschedule the inspection within 10 business days of the customer's request.

(8) Net Metering.

(a) Each investor-owned utility shall enable each customer-owned renewable generation facility interconnected to the investor-owned utility's electrical grid pursuant to this rule to net meter.

(b) Each investor-owned utility shall install, at no additional cost to the customer, metering equipment at the point of delivery capable of measuring the difference between the electricity supplied to the customer from the investor-owned utility and the electricity generated by the customer and delivered to the investor-owned utility's electric grid.

(c) Meter readings shall be taken monthly on the same cycle as required under the otherwise applicable rate schedule.

(d) The investor-owned utility shall charge for electricity used by the customer in excess of the generation supplied by customer-owned renewable generation in accordance with normal billing practices.

(e) During any billing cycle, excess customer-owned renewable generation delivered to the investor-owned utility's electric grid shall be credited to the customer's energy consumption for the next month's billing cycle.

(f) Energy credits produced pursuant to paragraph (8)(e) shall accumulate and be used to offset the customer's energy usage in subsequent months for a period of not more than twelve months. At the end of each calendar year, the investor-owned utility shall pay the customer for any unused energy credits at an average annual rate based on the investor-owned utility's COG-1, as-available energy tariff.

(g) When a customer leaves the system, that customer's unused credits for excess kWh generated shall be paid to the customer at an average annual rate based on the investor-owned utility's COG-1, as-available energy tariff.

(h) Regardless of whether excess energy is delivered to the investor-owned utility's electric grid, the customer shall continue to pay the applicable customer charge and applicable demand charge for the maximum measured demand during the billing period. The investor-owned utility shall charge for electricity used by the customer in excess of the generation supplied by customer-owned renewable generation at the investor-owned utility's otherwise applicable rate schedule. The customer may at their sole discretion choose to take service under the investor-owned utility's standby or supplemental service rate, if available.

(9) Renewable Energy Certificates. Customers shall retain any Renewable Energy Certificates associated with the electricity

produced by their customer-owned renewable generation equipment. Any additional meters necessary for measuring the total renewable electricity generated for the purposes of receiving Renewable Energy Certificates shall be installed at the customer's expense, unless otherwise determined during negotiations for the sale of the customer's Renewable Energy Certificates to the investor-owned utility.

(10) Reporting Requirements. Each electric utility, as defined in Section 366.02(2), F.S., shall file with the Commission as part of its tariff a copy of its Standard Interconnection Agreement form for customer-owned renewable generation. In addition, each electric utility shall report the following, by April 1 of each year.

- (a) Total number of customer-owned renewable generation interconnections as of the end of the previous calendar year;
- (b) Total kW capacity of customer-owned renewable generation interconnected as of the end of the previous calendar year;
- (c) Total kWh received by interconnected customers from the electric utility, by month and by year for the previous calendar year;
- (d) Total kWh of customer-owned renewable generation delivered to the electric utility, by month and by year for the previous calendar year; and
- (e) Total energy payments made to interconnected customers for customer-owned renewable generation delivered to the electric utility for the previous calendar year, along with the total payments made since the implementation of this rule.
- (f) For each individual customer-owned renewable generation interconnection:
 - 1. Renewable technology utilized;
 - 2. Gross power rating;
 - 3. Geographic location by county; and
 - 4. Date interconnected.

(11) Dispute Resolution. Parties may seek resolution of disputes arising out of the interpretation of this rule pursuant to Rule 25-22.032, F.A.C, Customer Complaints, or Rule 25-22.036, F.A.C., Initiation of Formal Proceedings.

Specific Authority 350.127(2), 366.05(1), 366.92 FS. Law Implemented 366.02(2), 366.04(2)(c), (5), (6), 366.041, 366.05(1), 366.81, 366.82(1), (2), 366.91(1), (2), 366.92 FS. History—New 2-11-02, Amended 4-7-08.

**Appendix H Florida Power & Light Company
– Interconnection Agreement
for Customer-Owned
Renewable Generation – Tier3 –
Greater than 100kw and Less
than or Equal to 2 MW
(Effective October 1, 2008)**

**Interconnection Agreement for Customer-Owned Renewable Generation
Tier 3 – Greater than 100 kW and Less than or Equal to 2 MW**

This Agreement, is made and entered into this 10th day of September, 2010, by and between County of Manatee BCC ("Customer"), with an address of 3331 Lena Road, Utilities Dept., SEWWTP Bradenton, FL 34211 and FLORIDA POWER & LIGHT COMPANY ("FPL"), a Florida corporation with an address of P.O. Box 14000, 700 Universe Boulevard, Juno Beach, FL 33408-0429.

WITNESSETH:

WHEREAS, the Customer has requested to interconnect its Customer-owned renewable generation, greater than 100 kW and less than or equal to 2 MW, to FPL's electrical service grid at the Customer's presently metered location.

NOW, THEREFORE, for and in consideration of the mutual covenants and agreements herein set forth, the Parties hereto covenant and agree as follows:

1. Definitions

For the purposes of this interconnection agreement only, the following terms shall be defined as follows:

- 1.1. **Point of Interconnection/Change of Ownership** – The point at which the Customer's wiring is connected to the lugs in the metering cabinet where FPL's meter is located.
- 1.2. **Interconnection Facilities and Distribution Upgrades** – All facilities and equipment on FPL's side of the Point of Interconnection/Change of Ownership, including any modifications, additions or upgrades that are necessary to physically and electrically interconnect the Customer-owned renewable generation to FPL's electric system.
- 1.3. **Prudent Utility Practice** – Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Prudent Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.
- 1.4. **Established Industry Criteria** – Criteria established by Institute of Electrical and Electronics Engineers (IEEE), the Florida Reliability Coordinating Council (FRCC), North American Electric Reliability Council (NERC) and the Federal Energy Commission (FERC).
- 1.5. **Acceptable Level of Impact to FPL's Electric System** – The proposed interconnection does not have a negative impact on the reliability of the FPL's electric system or to its Customers.
- 1.6. Other capitalized terms shall have the meanings set forth in Florida Public Service Commission Rule 25-6.065 F.A.C. - Interconnection and Net Metering of Customer-Owned Renewable Generation.

2. Customer Qualification and Fees

- 2.1. Customer-owned renewable generation shall have a Gross power rating that:
 - a) does not exceed 90% of the Customer's utility distribution service rating; and
 - b) is greater than 100 kW and less than or equal to 2 MW.

Gross power rating for the Customer-owned renewable generation is 1,600 kW.

- 2.2. In order to commence the process for interconnection, Customer shall provide FPL a completed application.
- 2.3. The Customer shall be required to pay an application fee of \$1,000.00 for this Tier 3 Customer-owned renewable generation interconnection request. This application fee shall cover the cost for processing the Customer's application and the cost of the Fast Track Screens which perform an initial review and screens of the proposed interconnection's impact on the FPL's electric system, as such process is described in Section 8, hereto.

(Continued on Sheet No. 9.066)

(Continued from Sheet No. 9.065)

- 2.4. In the event the Customer-owned renewable generation does not pass the Fast Track Screens and the Customer elects to proceed with an Interconnection Study, as described in Section 8, hereto, the Customer shall be required to pay an Interconnection Study fee of \$2,000.00. To the extent the actual costs of the Interconnection Study total less than \$2,000, the difference between the Interconnection Study fee and the actual costs will be refunded to the Customer within thirty (30) calendar days with no interest.
3. **General Responsibilities of the Parties**
- 3.1 Customer-owned renewable generation shall be considered certified for interconnected operation if it has been submitted by a manufacturer to a nationally recognized testing and certification laboratory, and has been tested and listed by the laboratory for continuous interactive operation with an electric distribution system in compliance with the applicable codes and standards of IEEE 1547, IEEE 1547.1, and UL 1741. The Customer shall provide a written report that the Customer-owned renewable generation complies with the foregoing standards. The manufacturer's specification sheets will satisfy this requirement for a written report.
- 3.2 Customer-owned renewable generation shall include a utility-interactive inverter, or other device certified pursuant to Section 3.1 above, that performs the function of automatically isolating the Customer-owned generation equipment from the electric grid in the event the electric grid loses power.
- 3.3. The Customer shall provide FPL with a one-line diagram depicting the Customer-owned renewable generation and metering equipment, to be set forth in Attachment 1 to the Interconnection Agreement and made a part hereof.
- 3.4. The Customer shall be responsible for protecting its Customer-owned renewable generation equipment, inverters, protective devices, and other system components from damage from the normal and abnormal conditions and operations that occur on FPL system in delivering and restoring power; and shall be responsible for ensuring that Customer-owned renewable generation equipment is inspected, maintained, and tested in accordance with the manufacturer's instructions to ensure that it is operating correctly and safely.
- 3.5. The Customer agrees to provide Local Building Code Official inspection and certification of installation. The certification shall reflect that the local code official has inspected and certified that the installation was permitted, and has been approved and has met all electrical and mechanical qualifications.
- 3.6. The Customer shall notify FPL at least ten (10) calendar days prior to initially placing Customer's equipment and protective apparatus in service and FPL shall have the right to have personnel present on the in-service date.
- 3.7. Within ten (10) business days of receipt of the Customer's application, FPL shall provide written notice that it has received all documents required for interconnection or indicate how the application is deficient. Within ten (10) business days of receipt of a completed application, FPL shall provide written notice verifying receipt of the completed application. The written notice shall also include dates for any physical inspection (as set forth in Section 4.3, hereto) and inspection of documents (as set forth in Section 4.4, hereto) necessary to ensure compliance with this Interconnection Agreement necessary for FPL to confirm compliance with Florida Public Service Commission Rule 25-6.065 F.A.C. - Interconnection and Net Metering of Customer-owned renewable generation.
- 3.8. The Interconnection Agreement shall be executed by FPL within thirty (30) calendar days of receipt of a completed application. If FPL determines that an Interconnection Study is necessary for a Customer, FPL shall execute the Interconnection Agreement within ninety (90) calendar days of a completed application.

(Continued on Sheet No. 9.067)

(Continued from Sheet No. 9.066)

4. **Inspection and On-Going Compliance**

- 4.1. All initial physical inspections and inspection of Customer's documents must be completed by FPL within thirty (30) calendar days of receipt of the Customer's executed Interconnection Agreement. If the inspection is delayed at the Customer's request, the Customer shall contact FPL to reschedule an inspection. FPL shall reschedule the inspection within ten (10) business days of the Customer's request. Physical inspections and inspection of documents must be completed and approved by FPL prior to commencement of service of the Customer-owned renewable generation system.
- 4.2. Any inspection or observation by FPL shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by FPL of the safety, durability, suitability, or reliability of the Customer-owned Renewable Generation or any associated control, protective, and safety devices owned or controlled by the Customer or the quality of power produced by the Customer-owned Renewable Generation.
- 4.3. FPL shall have the right to inspect Customer-owned renewable generation and its component equipment to ensure compliance with this Interconnection Agreement. FPL's system inspections shall include, but shall not be limited to:
- a) any installed manual disconnect switch, as applicable;
 - b) FPL's metering equipment;
 - c) Any additional metering equipment installed by Customer; and
 - d) Customer utility-interactive inverter, protective device or other similar devices for compliance to applicable code and standards, as described in this Interconnection Agreement.
- 4.4. FPL shall also have the right to review Customer documents to ensure compliance with this Interconnection Agreement. FPL shall have the right to, at a minimum review:
- a) technical design parameters of the system and the manufacture's installation;
 - b) operation and maintenance instructions to ensure compliance with IEEE and UL standards;
 - c) local inspection and certifications; and
 - d) other documents associated with specific installations.
- 4.5. FPL will provide Customer with as much notice as reasonably practicable, either in writing, e-mail, facsimile or by phone as to when FPL will conduct inspection and/or document review. Upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, FPL shall have access to the Customer's premises for the purpose of accessing the manual disconnect switch, performing an inspection or disconnection, or, if necessary, to meet FPL's legal obligation to provide service to its Customers.

5. **Manual Disconnect Switch**

- 5.1. FPL shall require the Customer to install, at the Customer's expense, a manual disconnect switch of the visible load break type to provide a separation point between the AC power output of the Customer-owned renewable generation and any Customer wiring connected to FPL's system. The manual disconnect switch shall be mounted separate from, but adjacent to, FPL meter socket. The Customer shall ensure that such manual disconnect switch shall remain readily accessible to FPL and be capable of being locked in the open position with a single FPL utility padlock.

6. **Disconnection / Reconnection**

- 6.1. FPL may open the manual disconnect switch pursuant to the conditions set forth in Section 6.3 below, isolating the Customer-owned renewable generation, without prior notice to the Customer. To the extent practicable, however, prior notice shall be given. If prior notice is not given, FPL shall at the time of disconnection leave a door hanger notifying the Customer that its Customer-owned renewable generation has been disconnected, including an explanation of the condition necessitating such action. FPL will reconnect the Customer-owned renewable generation as soon as practicable after the condition(s) necessitating disconnection has been remedied.

(Continued on Sheet No. 9.068)

(Continued from Sheet No. 9.067)

- 6.2. Upon notice by FPL, the Customer shall be solely responsible to disconnect the Customer-owned renewable generation and Customer's other equipment if conditions on the FPL distribution system could adversely affect the Customer-owned renewable generation. FPL will not be responsible for damage to the Customer-owned renewable generation system due to adverse effects on the distribution system. Reconnection will be the Customer's responsibility and will not require an additional application.
- 6.3. FPL has the right to disconnect the Customer-owned renewable generation at any time. This may result for the following reasons:
- a) Emergencies or maintenance requirements on FPL's system;
 - b) Hazardous conditions existing on FPL's system due to the operation of the Customer's generating or protective equipment as determined by FPL;
 - c) Adverse electrical effects, such as power quality problems, on the electrical equipment of FPL's other electric consumers caused by the Customer-owned renewable generation as determined by FPL; and
 - d) Failure of the Customer to maintain the required insurance coverage as stated in Section 13.1 below.
7. **Modifications/Additions to Customer-owned Renewable Generation**
- 7.1. If the Customer-owned renewable generation is subsequently modified in order to increase its Gross power rating, the Customer must notify FPL by submitting a new application specifying the modification at least thirty (30) calendar days prior to making the modification.
- 7.2. If the Customer adds another Customer-owned renewable generation system which: i.) utilizes the same utility inter-active inverter, or other device certified pursuant to Section 3.1 above, for both systems; or ii.) utilizes a separate utility inter-active inverter, or other device certified pursuant to Section 3.1 above, for each system the Customer shall provide thirty (30) calendar days notice prior to installation.
- 7.3. The Interconnection Agreement which applies in instances described in Sections 7.1 and 7.2 above shall be determined by the combined gross power rating of the generation system(s) which is connected to the FPL meter. In all instances described in this Section 7, the Customer shall submit a new application to FPL and shall enter into a new Interconnection Agreement. In no event shall the maximum output of the Customer-owned generation system(s), which is connected to the FPL meter exceed 2 MW.
8. **Interconnection Study Process**
- 8.1. **Fast Track Screens**
- 8.1.1. Fast Track Screens, described in Attachment 3 hereto, provide for an initial review of Customer's request for interconnection which evaluates whether the Customer's request exceeds an acceptable level of impact to the FPL electric system, consistent with prudent utility practice.
- 8.1.2. In order to pass the Fast Track Screens, Customer's interconnection shall not exceed established industry criteria, as set forth in the Interconnection Study Process and shall not require construction of Interconnection Facilities and Distribution Upgrades on FPL's electric system.
- 8.1.3. If the Customer's interconnection request passes the Fast Track Screens, the Customer's request shall be approved and Customer will be provided an executable Interconnection Agreement.
- 8.2. In those instances in which the Customer-owned renewable generation does not pass the Fast Track Screens the Customer may elect to proceed with an Interconnection Study. In general, the purpose of the Interconnection Study will be to better determine what material adverse impacts the Customer-owned renewable generation has on the FPL system and what facilities will be required to resolve such impacts.

(Continued on Sheet No. 9.069)

(Continued from Sheet No. 9.068)

8.3. Interconnection Study

- 8.3.1. The Interconnection Study Process shall be used by a Customer proposing to interconnect its certified Customer-owned renewable generation, in those instances in which such system did not pass the Fast Track Screens.
- 8.3.2. Upon Customer execution of the Interconnection Agreement; the Customer shall be obligated to pay for any and all costs for Interconnection Facilities and Distribution Upgrades identified in the Interconnection Study in order to interconnect the proposed Customer-owned renewable generation.
- 8.3.3. The Interconnection Study fee shall be \$2000.00 and will be invoiced to the Customer once it is determined that an Interconnection Study will be required. This determination will be made within ten (10) business days after a completed application is received. To the extent the actual costs of the Interconnection Study total less than \$2,000, the difference between the Interconnection Study fee and the actual costs will be refunded to the Customer within thirty (30) calendar days with no interest.

9. Cost Responsibility for Interconnection Facilities and Distribution Upgrades

- 9.1. The Customer shall pay FPL for the actual cost of any and all FPL Interconnection Facilities and Distribution Upgrades, itemized in Attachment 2, required to implement this Interconnection Agreement. FPL shall provide a best estimate cost, including overheads, for the purchase and construction of FPL's Interconnection Facilities and Distribution Upgrades required and shall provide a detailed itemization of such costs.
- 9.2. The Customer shall be responsible for all reasonable expenses, including overheads, associated with: i.) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities and other equipment; and ii.) operating, maintaining, repairing, and replacing FPL's Interconnection Facilities and Distribution Upgrades.
- 9.3. FPL shall design, procure, construct, install and own the Interconnection Facilities and Distribution Upgrades, described in Attachment 2, required for FPL to implement this Interconnection Agreement. If FPL and the Customer agree, the Customer may construct Interconnection Facilities and Distribution Upgrades that are located on land owned by the Customer. The actual cost of Interconnection Facilities and Distribution Upgrades, including overheads, shall be directly assigned to and paid by the Customer.

10. Indemnity

- 10.1. Customer shall indemnify, hold harmless and defend FPL from and against any and all judgments, losses, damages, claims relating to injury to or death of any person or damage to property (including the Customer-owned renewable generation system), fines and penalties, costs and expenses arising out of or resulting from the operation of the Customer-owned renewable generation system, except in those instances where such loss is due to the negligent action or inactions of FPL.
- 10.2. FPL shall indemnify, hold harmless and defend Customer from and against any and all judgments, losses, damages, claims relating to injury to or death of any person or damage to property (including FPL's transmission system), fines and penalties, costs and expenses arising out of or resulting from the operation of FPL's system, except in those instances where such loss is due to the negligent action or inactions of the Customer.

11. Limitation of Liability

- 11.1. Liability under this Interconnection Agreement for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Interconnection Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall the indemnifying Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Interconnection Agreement.

(Continued on Sheet No. 9.070)

(Continued from Sheet No. 9.069)

12. **Assignment**

- 12.1. The Interconnection Agreement shall not be assignable by either party without thirty (30) calendar days notice to the other party and written consent of the other Party, which consent shall not be unreasonably withheld or delayed.
- 12.2. An assignee to this Interconnection Agreement shall be required to assume in writing the Customer's rights, responsibilities, and obligations under this Interconnection Agreement; or execute a new Interconnection Agreement.

13. **Insurance**

- 13.1. The Customer agrees to provide and maintain general liability insurance for personal and property damage, or sufficient guarantee and proof of self-insurance, in the amount of not less than \$2 million during the entire period of this Interconnection Agreement. Initial proof of insurance shall be in the form of a copy of the policy attached to this Interconnection Agreement evidencing the Homeowner's or other insurance policy in effect at the time of interconnection.

14. **Renewable Energy Certificates**

- 14.1 The Customer shall retain any Renewable Energy Certificates associated with the electricity produced by their Customer-owned renewable generation equipment; any additional meters necessary for measuring the total renewable electricity generated for the purposes of receiving Renewable Energy Certificates shall be installed at the Customer's expense, unless otherwise determined during negotiations for the sale of the Customer's Renewable Energy Certificates to FPL.

15. **Billing, Payment, and Financial Security**

- 15.1. FPL shall bill the Customer for the design, engineering, construction, and procurement costs of FPL's Interconnection Facilities and Distribution Upgrades contemplated by this Interconnection Agreement on a monthly basis, or as otherwise agreed by the Parties. The Customer shall pay each bill within thirty (30) calendar days of receipt, or as otherwise agreed to by the Parties.
- 15.2. Within three months of completing the construction and installation of FPL's Interconnection Facilities and Distribution Upgrades, described in Attachment 2, required to implement this Interconnection Agreement, FPL shall provide the Customer with a final accounting report of any difference between i.) the Customer's cost responsibility for the actual cost of such Interconnection Facilities and Distribution Upgrades, and ii.) the Customer's previous aggregate payments to FPL for such Interconnection Facilities and Distribution Upgrades. If the Customer's cost responsibility exceeds its previous aggregate payments, FPL shall invoice the Customer for the amount due, without interest, and the Customer shall make payment to FPL within thirty (30) calendar days. If the Customer's previous aggregate payments exceed its cost responsibility under this Interconnection Agreement, FPL shall refund to the Customer an amount equal to the difference, without interest, within thirty (30) calendar days of the final accounting report.
- 15.3. At least twenty (20) calendar days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of FPL's Interconnection Facilities and Distribution Upgrades, the Customer shall provide FPL, at the Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to FPL and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring and installing the applicable portion of FPL's Interconnection Facilities and Distribution Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to FPL under this Interconnection Agreement during its term.
- 15.4. In accordance with Section 9.2 above, the Customer shall be billed by FPL for operation, maintaining, repairing, and replacing FPL's Interconnection Facilities and Distribution Upgrades. The Customer shall be billed upon completion of such work by FPL; Customer shall make payment to FPL within twenty (20) calendar days of the receipt of FPL's bill.

(Continued on Sheet No. 9.071)

(Continued from Sheet No. 9.070)

16. **Lease Agreements**

- 16.1. The Customer shall provide FPL a copy of the lease agreement, as applicable, for any and all leased interconnection equipment.
- 16.2. The Customer shall not enter into any lease agreement that results in the retail purchase of electricity; or the retail sale of electricity from the Customer-owned renewable generation. Notwithstanding this restriction, in the event it is determined by the Florida Public Service Commission that the Customer has entered such an agreement, the Customer shall be in breach of this Interconnection Agreement and may also become subject to the jurisdiction and regulations of the Florida Public Service Commission as a public utility.

17. **Dispute Resolution**

- 17.1. Disputes between the Parties shall be handled in accordance with subsection 11 of Florida Public Service Commission Rule 25-6.065 F.A.C. - Interconnection and Net Metering of Customer-Owned Renewable Generation.

18. **Effective Date**

- 18.1. The Customer must execute this Interconnection Agreement and return it to FPL at least thirty (30) calendar days prior to beginning parallel operations and the Customer must begin parallel operation within one year after FPL executes the Interconnection Agreement.

19. **Termination**

- 19.1. Upon termination of this Interconnection Agreement, FPL shall open and padlock the manual disconnect switch, if applicable, and remove the Net Metering and associated FPL equipment. At the Customer's expense, the Customer agrees to permanently disconnect the Customer-owned renewable generation and associated equipment from FPL's electric service grid. The Customer shall notify FPL in writing within ten (10) calendar days that the disconnect procedure has been completed.

20. **Amendments to Florida Public Service Commission Rules**

- 20.1. FPL and Customer recognize that the Florida Public Service Commission rules may be amended from time to time. In the event that Florida Public Service Commission rules are modified, FPL and Customer agree to supersede and replace this Interconnection Agreement with a new Interconnection Agreement which complies with the amended Florida Public Service Commission rules.

21. **Notices**

- 21.1. This Interconnection Agreement, any written notice, demand, or request required or authorized in connection with this Interconnection Agreement shall be deemed properly given if delivered in person, delivered by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

CUSTOMER:

County of Manatee BCC

Utilities Dept.

3331 Lena Road, #SEWWTP

Bradenton, FL 34211

(Continued on Sheet No. 9.072)

(Continued from Sheet No. 9.071)

FPL:

22. **Entire Agreement**

22.1. This Interconnection Agreement supersedes all previous agreements or representations, either written or oral, heretofore in effect between FPL and the Customer, made in respect to matters herein contained, and when duly executed, this Interconnection Agreement constitutes the entire agreement between Parties hereto.

IN WITNESS WHEREOF, the Parties hereto have caused this Interconnection Agreement to be duly executed in triplicate the day and year first above written.

FLORIDA POWER & LIGHT COMPANY

(Signature)

(Print or Type Name)

Title: _____

CUSTOMER

(Signature)

Daniel T. Gray

(Print or Type Name)

Director
Title: Manatee County Utilities Department

Witness: _____
(Print or Type Name)

ATTACHMENT 1 – INTERCONNECTION AGREEMENT FOR CUSTOMER-OWNED RENEWABLE GENERATION TIER 3
ONE-LINE DIAGRAM DEPICTING THE CUSTOMER-OWNED RENEWABLE GENERATION AND METERING
EQUIPMENT

ATTACHMENT 2 - INTERCONNECTION AGREEMENT FOR CUSTOMER-OWNED RENEWABLE GENERATION TIER 3

**FPL'S BEST ESTIMATE OF CUSTOMER'S RESPONSIBILITIES FOR INTERCONNECTION FACILITIES AND
DISTRIBUTION UPGRADES TO BE PAID TO FPL**

ATTACHMENT 3 - INTERCONNECTION AGREEMENT FOR CUSTOMER-OWNED RENEWABLE GENERATION TIER 3

FAST TRACK SCREENS

1. **Applicability**

The Fast Track Screens process is available to a Customer proposing to interconnect its Customer-owned renewable generation Tier 3 system with FPL's system and if the Customer's proposed Customer-owned renewable generation system meets the codes, standards, and certifications requirements of the Interconnection Agreement.

2. **Initial Review**

Within ten (10) business days after FPL receives a completed application FPL shall perform an initial review using the screens set forth below; shall notify the Customer of the results; and shall include with such notification copies of the analysis and data underlying FPL's determinations under the screens.

2.1 **Screens**

- 2.1.1 For interconnection of a proposed Customer-owned renewable generation system to a radial distribution circuit, the aggregated generation, including the proposed Customer-owned renewable generation, on the circuit shall not exceed 15 % of the line section annual peak load as most recently measured at the substation. A line section is that portion of FPL's electric system connected to a Customer bounded by automatic sectionalizing devices or the end of the distribution line.
- 2.1.2 For interconnection of a proposed Customer-owned renewable generation system to the load side of spot network protectors, the Customer-owned renewable generation system must utilize an equipment package in compliance with the terms of the Interconnection Agreement.
- 2.1.3 The proposed Customer-owned renewable generation system, in aggregation with other generation on the distribution circuit, shall not contribute more than 10 % to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed Point of Interconnection/Change of Ownership.
- 2.1.4 The proposed Customer-owned renewable generation system, in aggregate with other generation on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Customer equipment on the system to exceed 87.5% of the short circuit interrupting capability; nor shall the interconnection be proposed for a circuit that already exceeds 87.5% of the short circuit interrupting capability.
- 2.1.5 Using the table below, determine the type of interconnection to a primary distribution line. This screen includes a review of the type of electrical service provided to the Customer, including line configuration and the transformer connection to limit the potential for creating over-voltages on FPL's electric power system due to a loss of ground during the operating time of any anti-islanding function.

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Result/Criteria
Three-phase, three wire	3-phase or single phase, phase-to-phase	Pass screen
Three-phase, four wire	Effectively-grounded 3 phase or Single-phase, line-to-neutral	Pass screen

- 2.1.1 If the proposed Customer-owned renewable generation system is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed Customer-owned renewable generation system, shall not exceed 90% of the Customer's utility distribution service rating.
 - 2.1.2 If the proposed Customer-owned renewable generation system is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20 % of the nameplate rating of the service transformer.
 - 2.1.3 The proposed Customer-owned renewable generation system, in aggregate with other generation interconnected to the transmission side of a substation transformer feeding the circuit where the Customer-owned renewable generation system proposes to interconnect shall not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (e.g., three or four transmission busses from the Point of Interconnection/Change of Ownership).
 - 2.1.4 No construction of facilities by FPL on its own system shall be required to accommodate the Customer-owned renewable generation system.
- 2.2 If the proposed interconnection passes the Fast Track Screens, the interconnection request shall be approved and FPL will provide the Customer an executable Interconnection Agreement within ten (10) business days after such determination.

**Appendix I Generator Information
Requested by FPL for
Interconnection Study**

For FPL to perform the interconnection study we need the following items as noted before:

1. A detailed Relay and Meter One Line showing the CT and PT locations;
2. FPL will need to install relaying to back-up the existing generation protection. Please let us know which breaker FPL will be allowed to trip, generator breaker or tie breaker with FPL;
3. Provided the documentation that show the generator controller protection functions 27, 59, and 81; not provided with the ASCO documentation; and
4. Please provide the following information on the major components so that the fault current contribution may be determined:

Generation

Rated KVA

Power Factor

Sub-transient Reactance ($x''d$) (Per Unit)

Typical Assumptions: 1 – 7500 kva – PF = 0.8 $x''d = .16$, $x_2 = .16$, $x_0 = .16$

Transformer

Voltage (KV)

Rated KVA

Impedance (Z%)

Connection method (i.e. Y-Grd primary and delta secondary)

Typical Assumptions:

Voltage = 23 kv / 13800 kv

Rating = 10000 kva

Z = 6.5%

Connection = Y-Grd primary and Delta secondary

(Include grounding impedance if applicable)

I will be happy to set up a meeting this week to discuss further.

Thanks

Genese Galvan

Transmission Business Manager

Transmission Services

305.569.4159 (office)

305.345.4719 (cell)

**Appendix J Title V Air Construction Permit
for LFG Fired Electric Generation
Engines (3) at the Manatee
County Lena Road Landfill**



Florida Department of Environmental Protection

Southwest District
13051 N. Telecom Parkway
Temple Terrace, Florida 33637-0926

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

NOTICE OF PERMIT AMENDMENT

Mr. Daniel T. Gray, Director,
Utilities Department
Manatee County Government
P.O. Box 25010
Bradenton, FL 34206

Re: Extension of Construction Permit Expiration Date
DEP Project File No.: 0810055-006-AC
(LFG Fired Electric Generation Engines (3) at the Manatee County Lena Road Landfill)

Dear Mr. Gray:

On July 27, 2010, the Department received your letter requesting an extension of the expiration date of Air Construction Permit 0810055-006-AC. This permit was issued on August 10, 2007 for three (3) landfill gas (LFG) fired reciprocating engine electric generators at the Lena Road Landfill located at 3333 Lena Road in Bradenton, Manatee County. This extension is necessary because, due to delays caused by economic conditions, the project has not yet begun construction. However, recent changes in Public Service Commission rules regarding renewable energy project make the project economically feasible and Manatee County now plans to begin construction. As requested, the expiration date of the above referenced construction permit is hereby extended 18 months as follows:

FROM: 07/31/2010 (*as amended by the Department on November 12, 2008*)

TO: 01/31/2012

A person whose substantial interests are affected by the proposed permit amendment may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

All petitions filed under these rules shall contain:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;

- (b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
- (c) A statement of when and how the petitioner received notice of the agency decision;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action;
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this permit amendment. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

This permit amendment is final and effective on the date filed with the Clerk of the Department unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S. or unless a request for an extension of time in which to file a petition is filed within the time specified for filing a petition. Upon timely filing of a petition or a request for an extension of time to file the petition, this permit amendment will not be effective until further Order of the Department.

Any party to the Order (Permit Amendment) has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal under Rule 9.110 of the Florida rules of Appellate Procedure, with the clerk of the Department of Environmental Protection in the Office of General Counsel, Douglas Building, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days after this Order is filed with the Clerk of the Department.

This letter must be attached to and becomes a part of permit 0810055-006-AC. If you have any questions, please contact David Zell, the permit engineering specialist, by email at david.zell@dep.state.fl.us, or by phone at (813) 632-7600 extension 118 .

Executed in Hillsborough County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Mara Grace Nasca
Mara Grace Nasca
District Air Program Administrator
Southwest District

MGN/drz/pp

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Permit Amendment was sent by electronic mail before the close of business on 08-05-2010 to the person(s) listed:

Mr. Daniel T. Gray, Director, Manatee County Utilities Department.
(dan.gray@mymanatee.org)

Mr. Mike Gore, Manatee County Solid Waste Division Manager
(mike.gore@mymanatee.org)

Mr. Joseph L. Miller, P.E., PBS&J
(JLMiller@pbsj.com)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Jatiana Apikell
(Clerk)

08-05-2010
(Date)

PERMITTEE:

Manatee County Government
Utility Operations Department
4410 66th Street West
Bradenton, FL 34210

Permit No: 0810055-006-AC

County: Manatee

Effective Date:

Expiration Date: 01/31/2009

Project: Lena Road Landfill LFG Fired
Reciprocating Engine Generators (3)

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-204, 62-210, 62-212, 62-213, 62-296, 62-297, and 62-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the Florida Department of Environmental Protection and as specifically described below.

This permit authorizes the construction and initial operation of three (3) landfill gas (LFG) fired reciprocating engine generators at the Manatee County Lena Road Landfill, as described below.

The three units will be identical Jenbacher Model J616GS-E21 generators rated at 1.9 MW each. They are each powered by a lean burning 4-stroke spark ignition reciprocating engine rated at 2,677 bhp that will be fired exclusively with landfill gas (LFG) from the Lena Road Landfill. The generator engines will burn a varying volume of LFG depending on the heating value of the LFG. The maximum heat input rating of the engines is 16.938 MMBtu/hour for each engine (for a total maximum heat input rating of 50.8 MMBtu/hour for all three engines combined). The average heating value of the LFG is expected to be 350 Btu/scft. The LFG is delivered to the engines from the landfill after passing through a LFG treatment system skid where the LFG is compressed and conditioned prior to being piped to the engines. The maximum delivery volume of LFG from the conditioning skid is 1,962 cfm. (Based on the average LFG heating value above, this corresponds to an average available LFG heat content of 41.2 MMBtu/hour).

Federal Emission Guideline/NSPS/NESHAP Applicability Notes:

- The Manatee County Lena Road Landfill is subject to Rule 62-204.800(9)(c), F.A.C. Emission Guidelines for Municipal Solid Waste Landfills (40 CFR 60 Subpart C_c), which references the provisions of NSPS 40 CFR 60 Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills), adopted and incorporated by reference in Rule 62-204.800(8)(b), F.A.C.; and to NESHAP 40 CFR 63 Subpart AAAA (National Emission Standards for Hazardous Air Pollutants from Municipal Solids Waste Landfills), adopted and incorporated by reference in Rule 62-204.800(11)(b), F.A.C.
- The Subpart WWW LFG control system requirements do not apply to these generator engines because the LFG is first sent to a LFG treatment system (the Landfill Gas Compression and Conditioning System skid) prior to piping to the engines for use. This satisfies one of the Subpart WWW LFG control options (40 CFR 60.752(b)(2)(iii)C.). There are no additional Subpart WWW requirements for the LFG treatment system or the subsequent use of the treated gas that would apply to the engines.

PERMITTEE:
Manatee County Government, Utility Operations Dept.

Permit No.: 0810055-006-AC
Project: Lena Road Landfill LFG Fired
Reciprocating Engine Generators (3)

Specific Conditions:

- This facility is minor for HAPs, therefore the RICE (Reciprocating Internal Combustion Engine) NESHAP does not apply to the engines.

Facility Information Summary:

Location: Manatee County Lena Road Landfill, 3333 Lena Road, Bradenton, Manatee County

UTM: 17-355.02 E 3049.21 N **Latitude:** 27° 34'00" **Longitude:** 82° 29'00"

Facility ID No: 0810055

Emission Unit (EU) ID No(s):

- 008 - Landfill Gas Fired Reciprocating Engine Generator No. 1 (westernmost unit)
- 009 - Landfill Gas Fired Reciprocating Engine Generator No. 2 (middle unit)
- 010 - Landfill Gas Fired Reciprocating Engine Generator No. 3 (easternmost unit)

Note: Please reference Permit No. and Emission Unit (EU) ID No. in all correspondence, test report submittals, applications, etc.

Permitting History/Affected Permits

The Manatee County Lena Road Landfill is permitted on Title V air operation permit 0810055-004-AV.

Attachments to This Permit:

General Conditions (version dated 11/1/05)

SPECIFIC CONDITIONS:

1. General Conditions - A part of this permit is the attached 15 General Conditions.
[Rule 62-4.160, F.A.C.]
2. Other Requirements - All applicable rules of the Department and design discharge limitations specified in the application must be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction.
[Rule 62-210.300, F.A.C.]

Operation and Emission Limitations

3. Permitted Operating Hours - The hours of operation of these reciprocating engine generators are not restricted, (i.e., each is permitted for 8,760 hours/year).
[Rule 62-210.200 (Potential to Emit), F.A.C.; as requested by permittee in construction permit application dated 04/29/07]

PERMITTEE:

Manatee County Government, Utility Operations Dept.

Permit No.: 0810055-006-AC

Project: Lena Road Landfill LFG Fired Reciprocating Engine Generators (3)

Specific Conditions:

4. Permitted Fuel - The fuel for each of the three reciprocating engine generators shall be limited to landfill gas (LFG) from the Manatee County Lena Road Landfill. All of the LFG used by the engines must be processed through the onsite LFG treatment system prior to use.

[Rules 62-210.200 (potential to Emit), and 62-204.800(8)(b), F.A.C.; as requested by permittee in construction permit application dated 04/29/07; 40 CFR 60.752(b)(iii) (C) (NSPS Subpart WWW)]

5. Federal NSPS and NESHAP Requirements - In order to meet the LFG control requirements of Rule 62-204.800(9)(c), F.A.C. (Emission Guidelines for Municipal Solid Waste Incinerators), and the referenced requirements of NSPS 40 CFR 60 Subpart WWW* (Standards of Performance for Municipal Solid Waste Incinerators); and the requirements of NESHAPS 40 CFR 63 Subpart AAAA* (National Emission Standards for Hazardous Air Pollutants from Municipal Solids Waste Landfills), which apply to the municipal solid waste landfill located at this facility, the LFG fired in the reciprocating engine generators shall be processed through a LFG treatment system which meets the following requirements.

- a. All of the LFG to be used in the engines shall be processed through the LFG treatment system prior to routing to the engines for use (40 CFR 60.752(b)(2)(iii)C.).
- b. The LFG treatment system shall be in operation and operating properly at all times when collected LFG is routed to the treatment system. This applies at all times except during periods of start-up, shut down, or malfunction, provided that the duration of start-up, shutdown or malfunction shall not exceed 1 hour for the LFG treatment systems (40 CFR 60.755).
- c. All emissions from any atmospheric vent from the LFG treatment system shall be subject to the LFG control requirements of 40 CFR 60.752(b)(2)(iii)(A) (*open flare*) or (B) (*control device*)* (40 CFR 60.752(b)(2)(iii)C.).

(Note: The information submitted as part of the construction permit application did not indicate any atmospheric vents from the LFG treatment system. If there are any atmospheric vents from the LFG treatment system, this information, as well as a description of how the above requirement will be complied with, shall be submitted as part of the required Title V operation permit revision application.)

[Rules 62-210.650 (Circumvention), 62-204.800(8)(b), 62-204.800(9)(c), and 62-204.800(11)(b), F.A.C.; 40 CFR 60.752(b)(iii), 40 CFR 60.755, 40 CFR 63.1955(a)(1)]

(* Permitting Note: See Appendix 40 CFR 60 Subpart WWW and 40 CFR 63 Subpart AAAA in the current Title V air operation permit for this facility - Manatee County Lena Road Landfill Permit No. 0810055-004-AV, or subsequent revision/renewal Title V permit.)

6. General Particulate Emission Limiting Standards: General Visible Emissions Standard - No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity).

[Rule 62-296.320(4)(b)1., F.A.C.]

PERMITTEE:
Manatee County Government, Utility Operations Dept.

Permit No.: 0810055-006-AC
Project: Lena Road Landfill LFG Fired
Reciprocating Engine Generators (3)

Specific Conditions:

7. General Pollutant Emission Limiting Standards: Objectionable Odor Prohibited - No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. An objectionable odor is any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) & 62-210.200 (definitions), F.A.C.]

8. Carbon Monoxide (CO) Emissions Limitations - In order to insure that this project is not a PSD major modification triggering PSD requirements*, and to limit facility potential to emit (PTE) to below PSD major source levels, CO emissions from each of the generator engines shall not exceed the following emission rates:

- a. 2.9 grams/bhp-hour;
- b. 17.1 pounds per hour*.

(PTE Note: At operation for 8,760 hours per year for each of the generators, this corresponds to a total CO PTE of 224.8TPY from the three generator engines, which is below the PSD major modification level of 250 TPY.)*

[Rules 62-210.200 (definitions of Potential to Emit and Major Stationary (PSD) Source), and 62-212.400(2) (PSD - Applicability), F.A.C.; construction permit application dated 04/29/07]

Compliance Testing Requirements

9. Carbon Monoxide Emissions Testing - In order to document compliance with the emission limitations of Specific Condition No. 8., one (1) of the generator engines shall be tested for carbon monoxide emissions within sixty (60) days of initial operation of any of the generators. Subsequent compliance testing frequency shall be established in the operation permit based upon the results of the initial compliance test. For future testing, the engine tested shall be rotated among the three engines such that each engine is tested once prior to any engine being tested for the second time. If the engine tested fails a compliance test (i.e., does not meet the emission limitations of Specific Condition No. 8.), then the other two engines shall each be tested for CO emissions within 60 days of the failed compliance test. A copy of each test report shall be submitted to the Air Compliance Section of the Southwest District Office of the Department within 45 days after the test is completed.

[Rules 62-4.070(3), 62-297.310(7)(a), and 62-297.310(8)(b), F.A.C.]

10. Compliance Test Method - Compliance with carbon monoxide (CO) emission limitation of Specific Condition No. 8. shall be determined using EPA Methods 1-4 and 10. Tested emission rates shall be expressed in the units of both of the emission limitations contained in Specific Condition Nos. 8.a. and 8.b. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Chapter 62-297, F.A.C. and 40 CFR 60, Appendix A.

[Rules 62-297.310(4) and 62-297.401, F.A.C.]

PERMITTEE:
Manatee County Government, Utility Operations Dept.

Permit No.: 0810055-006-AC
Project: Lena Road Landfill LFG Fired
Reciprocating Engine Generators (3)

Specific Conditions:

11. Test Date Notification - The permittee shall notify the Air Compliance Section of the Southwest District Office of the Department at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted.

12. Operating Rate During Testing - Compliance testing should be accomplished when the emission sources are operating within 90-100% of their permitted capacity. Permitted capacity is defined as the maximum design heat input rate of 16.938 MMBtu/hour. If it is impracticable to test at this rate, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the tested rate until a new test is conducted (Note: this operating rate limitation would apply to all three generator engines, not just the tested unit). Once the units are so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Each compliance test report shall include a statement of the average engine heat input rate during the test period, along with an explanation of how this rate was determined. Testing at conditions which are not representative of normal operating conditions may invalidate the test.
[Rule 62-297.310((2), F.A.C.)]

13. Special Testing Requirement - If the Department has reason to believe that any applicable emission standard (such as the CO emission limitation or visible emissions (VE) limitation) is being violated, then the Department may require the permittee to conduct compliance tests, which identify the nature and quantity of pollutant emissions and to provide a report on the results of the tests.
[Rule 62-297.310(7)(b), F.A.C.]

Compliance Documentation Recordkeeping Requirements

14. Generator Engine and LFG Treatment System Operation Records - In order to document compliance with the requirements of Specific Condition No. 5., the permittee shall maintain the following daily records:

- a. date of the record;
- b. engine operating hours for each of the generators including start time, stop time and total operating hours for the day (hours/day); and
- c. status of the operation of the LFG treatment system including:
 - (1) hours of operation of the LFG treatment system (start time and stop time);
 - (2) confirmation that all LFG used in each of the engines was first processed through the LFG treatment system; and
 - (3) any periods of time that the LFG gas treatment system was not in operation or not operating properly.

(continued)

PERMITTEE:
Manatee County Government, Utility Operations Dept.

Permit No.: 0810055-006-AC
Project: Lena Road Landfill LFG Fired
Reciprocating Engine Generators (3)

Specific Conditions:

14. (continued)

Daily records shall be completed within three (3) business day. These records shall be recorded on site in a permanent form suitable for inspection by the Department upon request, and shall be retained for at least a five (5) year period.

[Rules 62-4.070(3) and 62-213.440(1)(b)2.b., F.A.C.]

Reporting Requirements

15. Annual Operating Report (AOR) - The permittee shall submit to the Air Compliance Section of the Department's Southwest District Office of the Department each calendar year on or before March 1, a completed DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility" (AOR) for the preceding calendar year. The report may be submitted electronically in accordance with the instructions received with the AOR package sent by the Department, or a hardcopy may be sent to the Air Compliance section of the Southwest District Office of the Department.

[Rule 62-210.370(3)(a)(2), F.A.C.]

Commencement of Construction and Operation Notification Requirements

16. NSPS Notification Requirements - This modification of a facility subject to the requirements of 40 CFR 60 Subpart WWW is subject to the following notification requirements in accordance with the provisions of 40 CFR 60 Subpart A (General Provisions for 40 CFR 60).

- a. The permittee shall submit a written notification to the Air Compliance Section of the Department's Southwest District Office of the date construction of the LFG treatment system and generator units is commenced (whichever is first), postmarked no later than 30 days after such date, pursuant to 40 CFR 60.7(a)(1).
- b. The permittee shall submit a written notification to the Air Compliance Section of the Department's Southwest District Office of the actual date of introducing landfill gas (LFG) to the LFG treatment system, and initial startup of each of the generator units, postmarked within 15 days after such date(s), pursuant to 40 CFR 60.7(a)(3).

[Rules 62-204.800(8) and 62-204.800(9), F.A.C.; 40 CFR 60.7]

PERMITTEE:
Manatee County Government, Utility Operations Dept.

Permit No.: 0810055-006-AC
Project: Lena Road Landfill LFG Fired
Reciprocating Engine Generators (3)

Specific Conditions:

Title V Air Operation Permit Revision

17. Submittal of Application for Title V Operation Permit Revision - An application to revise the Title V operation permit for this facility to include the provisions of this construction permit shall be submitted to the Air Permitting Section of the Department's Southwest District Office at least 90 days prior to the expiration date of this permit, but no later than 180 days after any one of the generator engines commences operation. To properly apply for an operation permit revision, the applicant shall submit the following:

- a. the appropriate application form (DEP Form No. 62-210.900(1) *Application for Air Permit - Long Form*), including a certification that construction was completed and noting any deviations from the construction permit application (*for forms see FDEP Division of Air Resource Management website at: <http://www.dep.state.fl.us/air/>*);
- b. copies of the Generator Engine and LFG Treatment System Operation Records (*see Specific Condition No. 14.*) for the most recent month;
- c. a copy of the CO emissions test report (*see Specific Condition No. 9.*), if not previously submitted.

[Rules 62-4.070(3), 62-4.220, 62-213.420(1)(a)4., and 62-297.310(7)(a)1., F.A.C.]

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

Mara Grace Nasca
District Air Program Administrator
Southwest District

ATTACHMENT - GENERAL CONDITIONS

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, Florida Statutes (F.S.). The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. Not applicable to Air Permits.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - a. Have access to and copy any records that must be kept under conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - c. Sample or monitor any substances or parameters at any location reasonable necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of noncompliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

ATTACHMENT - GENERAL CONDITIONS

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and 62-730.300 F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- Determination of Best Available Control Technology (BACT)
- Determination of Prevention of Significant Deterioration (PSD)
- Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- c. Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used;
 - 6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

16. Not applicable to Air Permits.

17. Not applicable to Air Permits.

NOTICE OF PERMIT AMENDMENT

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Daniel T. Gray, Director
Manatee County Government, Utility Operations Department
4410 66th Street West
Bradenton, FL 34210

DEP File No. 0810055-006-AC
Manatee County

RE: Amendment of Air Construction Permit 0810055-006-AC to Extend Expiration Date
Manatee County Lena Road Landfill (Facility ID 0810055)

Dear Mr. Gray:

On October 31, 2008, the Department received your letter requesting an amendment to air Construction Permit 0810055-006-AC. This permit was issued on August 10, 2007 for three (3) landfill gas fired reciprocating engine generators at the Lena Road Landfill located at 3333 Lena Road in Bradenton, Manatee County. The amendment request was to extend the construction permit expiration an additional 18 months to July 31, 2010 to allow additional time for the development phase of the project in order to finalize the generation facility design and size. As requested the following amendment is hereby made to Construction Permit 0810055-006-AC:

Page 1 of 17 - Expiration Date:

Change from: 01/31/2009

Change to: 07/31/2010

A person whose substantial interests are affected by the proposed permit amendment may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

All petitions filed under these rules shall contain:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
- (c) A statement of how and when petitioner received notice of the agency action or proposed action;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's action; and
- (f) A statement of specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this permit amendment. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

This permit amendment is final and effective on the date filed with the Clerk of the Department unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S. or unless a request for an extension of time in which to file a petition is filed within the time specified for filing a petition. Upon timely filing of a petition or a request for an extension of time to file the petition, this permit amendment will not be effective until further Order of the Department.

Any party to the Order (Permit Amendment) has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal under Rule 9.110 of the Florida rules of Appellate Procedure, with the clerk of the Department of Environmental Protection in the Office of General Counsel, Douglas Building, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days after this Order is filed with the Clerk of the Department.

This letter must be attached to and becomes a part of permit 0810055-006-AC. If you have any questions, please call Cindy Zhang-Torres, P.E., or David Zell, Engineering Specialist, at (813) 632-7600 extension 118.

Executed in Hillsborough County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Mara Grace Nasca
District Air Program Administrator
Southwest District

MGN/DRZ/pp

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Permit Amendment was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on _____ to the person(s) listed:

Mr. Daniel T. Gray, Director *
Manatee County Government, Utility Operations Department
4410 66th Street West
Bradenton, FL 34210

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(Clerk)

(Date)

NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Mr. Daniel T. Gray, Director
Manatee County Government, Utility Operations Department
4410 66th Street West
Bradenton, FL 34210

DEP File No. 0810055-006-AC
Manatee County

Dear Mr. Gray:

Enclosed is Final Permit Number 0810055-006-AC. This permit authorizes the Manatee County Government, Utility Operations Department to construct three (3) landfill gas fired reciprocating engine generators at the Lena Road Landfill located at 3333 Lena Road in Bradenton, Manatee County, Florida. This permit is issued pursuant to Section(s) 403.087, Florida Statutes.

Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Hillsborough County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Mara Grace Nasca
District Air Program Administrator
Southwest District

MGN/DRZ/pp

Enclosures

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit(s) (including the Final Permit(s)) was mailed by U.S. Mail before the close of business on _____ to the person(s) listed:

Mr. Daniel T. Gray, Director
Manatee County Government, Utility Operations Department
4410 66th Street West
Bradenton, FL 34210

Mr. James B. Dyer, P.E.
IC Thomasson Associates, Inc.
2950 Kraft Drive
Nashville, TN 37204

Mr. Gary Shaffer
Environmental Manager, Air Resources Management
Manatee County Environmental Management Department
202 Sixth Avenue East
Bradenton, Florida 34208

Clerk Stamp

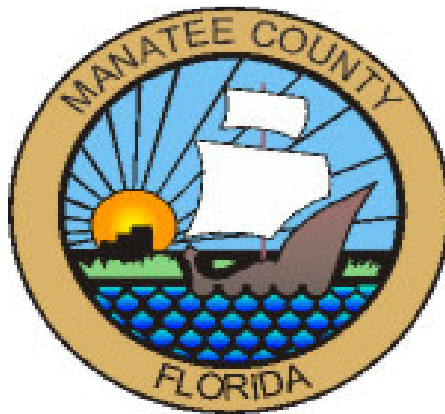
FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(Clerk)

(Date)

EXHIBIT B

DESIGN CRITERIA FOR LENA ROAD GAS ELECTRIC GENERATORS



Prepared for:

**Manatee County
Project Number 6008202
Utilities Department
3331 Lena Road
Bradenton, Florida 34211**

Prepared by:



**482 South Keller Road
Orlando, Florida 32810**

March 18, 2011

Lena Road Gas Electric Generators

TABLE OF CONTENTS

SECTION 1: DESIGN REQUIREMENTS

APPLICABLE CODES AND GOVERNMENT PERMITTING AGENCIES
WIND LOAD REQUIREMENTS
GENERATOR SOUND INSULATION
PERMIT REQUIREMENTS

SECTION 2: DESIGN CRITERIA

GENERAL REQUIREMENTS SUBGROUP
GENERAL REQUIREMENTS

FACILITY CONSTRUCTION SUBGROUP
EXISTING CONDITIONS

FACILITY SERVICES SUBGROUP
ELECTRICAL

Medium-voltage Cables
Low-voltage Electrical Power Conductors and Cables
Grounding and Bonding for Electrical Systems
Underground Ducts and Raceways for Electrical Systems
Identification for Electrical Systems
Medium-voltage Transformers
Low-voltage Switchgear
Engine Generators

SECTION 3: TEN YEAR OPERATION AND CORRECTIVE AND PREVENTIVE MAINTENANCE PLAN (PLAN)

SECTION 4: RECORDS

Lena Road Gas Electric Generators

SECTION 1: DESIGN REQUIREMENTS

APPLICABLE CODES AND GOVERNMENT PERMITTING AGENCIES

- Florida Building Code 2007 (or latest edition)
- NFPA 101 Life Safety Code
- Florida Fire Prevention Code
- Florida Building Code Plumbing
- Florida Building Code Mechanical
- Florida Building Code Fuel Gas
- National Electrical Code NFPA 70
- Manatee County Building and Zoning Codes
- Manatee County Health Department
- Southwest Florida Water Management District
- Florida Department of Environmental Protection
- U.S. Environmental Protection Agency
- Public Service Commission Rule 25-6.065 Interconnection and Net Metering of Customer-Owned Renewable Generation (See Background Information)
- Florida Power & Light – Interconnection Agreement for Customer-Owned Renewable Generation – Tire 3 – Greater than 100 KW and Less than or Equal to 2 MW (Effective October 1, 2008 (See Background Information).
- IEEE 1547
- IEEE 1547.1
- UL 1741

WIND LOAD REQUIREMENTS

Project is located in Manatee County, Florida

Basic Wind Speed – 130 mph

Exposure ‘B’

Category iii – Importance Factor $I=1.15$

Fully enclosed structure meeting all impact, component and cladding requirements

All building design loads shall meet referenced code requirements.

GENERATOR SOUND INSULATION

Sound level measured at a distance of 25 feet from exhaust discharge after installation is complete shall be 55 dBA or less.

Lena Road Gas Electric Generators

PERMIT REQUIREMENTS

1. Manatee County Building Permit - Apply for the building permit and pay all related fees.
2. Title V Air Construction Permit – Manatee County has a permit to construct three landfill gas generators. A copy of the permit is included in Appendix J of the Background Information. The Proposer is responsible to modify this construction permit as needed.
3. Title V Air Operation Permit - The Proposer shall be responsible for all testing of the engines and supply these test results to Manatee County, who will modify the Title V Air Operation Permit to include the operation of the generators.
4. Title V Air Permit Annual Operating Report and Fee - Manatee County will be responsible for preparing and submitting the annual air operating report, and paying the annual fee. The Proposer shall keep records of the engine operation and make these records available to Manatee County.
5. Southwest Florida Water Management District Resource Permit - Manatee County will be responsible for the Southwest Florida Water Management District Resource Permit if required for this project.
6. Manatee County Land Development Permits – Manatee County will be responsible for these permits and other site development permits if required for this project.
7. Florida Power & Light (FPL) – Interconnection Agreement for Customer-Owned Renewable Generation – Tire 3 –Greater than 100 KW and Less than or Equal to 2 MW (Effective October 1, 2008 (See Background Information). The Proposer will be responsible for providing the information requested by FPL for approval of the Net Metering Project per this agreement. This includes a one-line diagram and the information on the generators, switch gear and other equipment as listed in Appendix I of the Background Information.

Lena Road Gas Electric Generators

SECTION 2: DESIGN CRITERIA

GENERAL REQUIREMENTS SUBGROUP

GENERAL REQUIREMENTS

SUMMARY

The Proposer shall provide all services for the 10 year life cycle duration of the project fulfilling all requirements as agreed upon and contracted with Manatee County. The Project is defined as designing, constructing and operating for 10 years two generator sets using landfill gas from the Manatee County Lena Road Landfill (Landfill) to generate electricity. One generator will produce electricity for the Southeast Water Reclamation Facility (aka Southeast Regional Wastewater Treatment Plant (WWTP)). The second generator will supply electricity for the Biosolids Dryer Facility.

Services to include but not be limited to:

All contract documents required for permitting, design and Manatee County review/comment/approval to include but not limited to:

- Basis of Design
- Drawings
- Specifications
- Shop drawings for review/comment/and or approval
- Permits
- Product submittals for review/comment/and or approval
- Material and finish samples for review/comment/and or approval
- Factory Test reports on the engine-generators
- Closeout documents and certifications
- Operation and Maintenance Manuals

All construction services needed to provide a complete and functioning project including, but not limited to, supplying and installation of the generator sets, electrical conduits and wiring from the generators to the electric rooms, transformers, switch gear and the landfill gas pipes and treatment systems necessary to supply, compress and treat the gas prior to burning it in the engines. Construction services shall also include all control systems to coordinate the supply of gas and electricity.

All required operation and maintenance (O&M) for the generators and landfill gas treatment systems for 10 years.

Project Control – The selected firm will be responsible for developing and maintaining a strong line of communication with Manatee County and Florida Power & Light.

Performance and Payment Bond – 100 % of the Construction Cost.

Lena Road Gas Electric Generators

FACILITY CONSTRUCTION SUBGROUP

EXISTING CONDITIONS

All referenced figures can be found in Appendix A of the Background Information.

- Figure 1 – Project Location
- Figure 2 – Aerial Photograph. This aerial photograph shows the Landfill, WWTP and Biosolids Drier.
- Figure 3 – Site Plan. This figure shows the proposed locations for the generator sets and landfill gas treatment facilities, and location of the electric rooms for the WWTP and Biosolids Drier Facility. Also shown is the existing landfill gas flare station and pipe that supplies landfill gas to the Biosolids Drier Facility.
- Figure 4 – Stage I and III Landfill Gas Collection System. The location of the existing landfill gas wells and flare station are shown.

Appendix B of the Background Information includes record drawings for the WWTP that shows underground piping in the area.

Appendix C of the Background Information includes the Manatee County Biosolids Dryer Project Record Drawings. These drawings show the location of the underground landfill gas pipeline from the flare station to the Biosolids Dryer Facility.

The Proposer's attention is called to the disclaimer on the record drawings. Manatee County makes no representation to the Proposer as to the accuracy of the provided record drawings, and the Proposer is responsible to field verify all necessary items prior to submitting his proposal.

ELECTRICAL

1. Medium-voltage Cables

- Electrical components, devices and accessories shall be listed and labeled as defined in NFPA 70, Article 100, and marked for intended use.
- Comply with IEEE C2 and NFPA 70.
- Comply with UL-1072, AEIC CS8, ICEA S-93-639 and ICEA S-97-682.
- Install cables according to IEEE 576, and perform each electrical test and visual and mechanical inspection stated in NETA ATS, Section 7.3.2. Certify compliance with test parameters.

2. Low-voltage Electrical Power Conductors and Cables

- Electrical components, devices and accessories shall be listed and labeled as defined in NFPA 70, Article 100, and marked for intended use.
- Comply with IEEE C2 and NFPA 70.
- Copper conductors shall comply with NEMA WC 70.

Lena Road Gas Electric Generators

- Conductor installation shall comply with NEMA WC 70 for Types THHN-THWN.
 - Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specifications, and certify compliance with test parameters.
3. Grounding and Bonding for Electrical Systems
- Comply with UL 467 for grounding and bonding material and equipment.
 - Test completed grounding systems at each location where a maximum ground-resistance level is specified, at service disconnect enclosures grounding terminal, and at ground test wells. Make tests at ground rods before any conductors are connected.
4. Underground Ducts and Raceways for Electrical Systems
- Comply with ANSI C2, NFPA 70 and SCTE 77.
 - Concrete manholes shall comply with ASTM 891.
5. Identification for Electrical Systems
- Comply with ANSI A13.1, NFPA 70, 29 CFR 1910.144 and 29 CFR 1910.145.
 - Comply with ANSI Z535.4 for safety signs and labels.
6. Medium-voltage Transformers
- Electrical components, devices and accessories shall be listed and labeled as defined in NFPA 70, Article 100, and marked for intended use.
 - Comply with IEEE C2 and NFPA 70.
 - Comply with ANSI C57.12.28, IEEE C57.12.10, IEEE C57.12.70 and IEEE C57.12.80.
 - Pad-mounted, liquid-filled transformers shall comply with ANSI C57.12.13, IEEE C57.12.00, IEEE C57.12.22, and have a stainless steel base and cabinet.
7. Low-voltage Switchgear
- Electrical components, devices and accessories shall be listed and labeled as defined in NFPA 70, Article 100, and marked for intended use.
 - Comply with NFPA 70.
 - Comply with IEEE C37.20.1 and IEEE C57.13.
 - Relays shall comply with IEEE C37.90.
 - Surge arresters shall comply with IEEE C62.11 and NEMA LA1.
 - Circuit breakers shall comply with C37.13.
 - Install per applicable portions of NECA 400.
 - Perform visual and mechanical inspections and electrical tests stated in NETA ATS, and certify compliance with test parameters.

Lena Road Gas Electric Generators

8. Engine Generators

WWTP Generator Design

The FPL Net Metering Program limits the generator size to approximately 1.62 MW based on the existing service capacity for the WWTP. The largest transformer in the WWTP vault is a 2.0 MVA transformer. Net Metering Program limits the capacity to 90%, or 1.8 MVA. A power factor (PF) of 0.9 reduces the generator size to 1.62 MW. Each Proposer shall consider the PF for the proposed generator and determine the number of kilowatt hours that can be generated by the specific proposed equipment. FPL requires that the PF be in accordance with IEEE 1547, IEEE 1547.1 and UL 1741.

The landfill gas generator should be the primary source of electricity for the WWTP. If the generator shuts down, the WWTP load should be switched automatically to the existing emergency generators. The load should be switched back automatically to the landfill gas generator when the generator returns to operation. The WWTP will remain connected to the FPL grid in case both the landfill gas generator and the emergency generators are off line.

Biosolids Dyer Facility Generator Design

The Net Metering Program limits the generator size to approximately 607 KW based on the existing service capacity for the Biosolids Drier Facility. The largest transformer in the vault is a 750 KVA transformer. Net Metering Program limits the capacity to 90%, or 675 KVA. A power factor (PF) of 0.9 reduces the generator size to 607 KW. Each Proposer shall consider the PF for the generator and determine the number of kilowatt hours that can be generated by the specific proposed equipment. FPL requires that the PF be in accordance with IEEE 1547, IEEE 1547.1 and UL 1741. The landfill gas generator will be the primary source of electricity for the Biosolids Dryer Facility. The Facility has no emergency generator like the WWTP.

The generator sets shall be packaged engine-generators for continuous power supply designed especially for using landfill gas.

The engine-generators shall comply with the following standards:

- ASME B15.1
- NFPA 37
- NFPA 70
- NFPA 99
- NFPA 110
- UL 2200
- Engine exhaust emissions shall comply with all Federal, state and local government requirements
- IEEE 115

Lena Road Gas Electric Generators

- IEEE 1547
- IEEE 1547.1
- UL 1741

9. Landfill Gas Treatment and Compression

The Proposer shall be responsible to compress, clean and treat the landfill gas as required by the engine manufacturer prior to burning the landfill gas in the engine. The landfill gas test report is provided in E and F of the Background Information. Additional sampling and testing may be needed to determine the level of treatment required. Condensate from the treatment system may be discharged to the existing sanitary sewer system at the WWTP. Record drawings with locations for manholes are included with this Design Criteria in Appendix B and C.

The gas compressor shall be capable of maintaining adequate vacuum on the landfill gas collection system in the event that the blower at the flare station is inoperable. The design must include a by-pass pipe around the County blower to maintain gas flow to the generator and gas flow of a minimum of 450 SCFM to the Biosolids Drier Facility in the event that the County blower shuts down. The transfer shall be automatic.

The Biosolids Dryer Facility uses approximately 450 SCFM of landfill gas. The Proposer in his design will need to consider the effects of landfill gas use in the generators on the use of landfill gas in the Biosolids Dryer Facility operation. The Proposer is responsible to design his system such that landfill gas will always be available to the Biosolids Drier Facility

SECTION 3: TEN YEAR OPERATION AND CORRECTIVE AND PREVENTIVE MAINTENANCE PLAN (PLAN)

All operation and corrective and preventive maintenance shall be included in the contract for a period of ten years from the date of final Manatee County acceptance of the completed construction phase of the project. The Plan shall include the electrical generators, transformers, control systems, gas treatment equipment, landfill gas compressors and all other equipment supplied under this contract. The Plan shall be as recommended by the manufacturers of the engines and other equipment. At a minimum, the Plan shall include for the engines: all routine oil and other fluid changes, top end, in-frame and complete overhauls, all corrective repairs needed including parts, oil sampling analysis, all labor including travel and expenses.

All maintenance requiring generator shutdown shall be coordinated with Manatee County. In order to avoid peak demand charges for electrical service from FPL when the WWTP generator is shutdown, Manatee County plans to exercise and operate their emergency diesel generators.

Operation and maintenance of the landfill gas wells and flare station is not included in this scope of work.

Lena Road Gas Electric Generators

SECTION 4: RECORDS

At a minimum, the following records shall be kept:

- Corrective and preventive maintenance work
- Landfill gas consumed per engine
- KWH generated per engine
- Operating time per engine