#### **Enron North America Corp.**

P.O. Box 1188 Houston, TX 77251-1188



December 14, 2000

Mr. Al Linero, P.E. Administrator, New Source Review Section Bureau of Air Regulation, Division of Air Resource Management Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, FL 32399-2400

RECEIVED

DEC 15 2000

**BUREAU OF AIR REGULATION** 

Re:

Request for Additional Information

DEP File No. 0112515-001-AC (PSD-FL-304)

Pompano Beach Energy Center

Dear Mr. Linero:

On behalf of Pompano Beach Energy Center, LLC (PBEC), we have reviewed your letter requesting additional information, dated November 21, 2000. There were nine separate items in your letter to be addressed in order for the Department to continue the processing of our application. The items are addressed below in the order in which they were stated in the Department's letter.

1. Please refer to the attached letter containing the comments of the Broward County Department of Planning and Environmental Protection. We will set up a meeting with them and include your representatives so we can agree on the baseline concentrations in the area. Also they will be able to explain their requirements for the Pollution Prevention Plan mentioned in the attached letter. We believe that it is necessary to comply with the local rule and that it should be done in the course of this permitting action. Please copy DPEP on the response as you did on the original application.

Response - The referenced letter from the Broward County Department of Planning and Environmental Protection (DPEP) is included as Attachment 1. The letter essentially references three items to be addressed that are required by the Broward County Code. First, the revised application (attached) now references the applicability of Broward County Code, Article IV, in the List of Applicable Regulations (Section II, Subsection A). Secondly, the application now meets the provisions of Broward County Code, Sec. 27-175 and 27-176(c)(2)b. Specifically, the application includes a demonstration that the emission of criteria pollutants will not reduce by more than one-half (1/2) the margin between the existing ambient concentrations and the applicable National Ambient Air Quality Standard (NAAQS). The revised application now presents the results of this analysis in Section 6.6. The last comment to be addressed was in reference to Broward County Code, Sec. 27-178, which requires the applicant to submit to DPEP, Air Quality

Mr. A. Linero December 14, 2000 Page 2

Division, a Pollution Prevention Plan. During the meeting held with the DPEP on November 30, 2000, it became apparent that the plan requested for this project would be the first to be submitted in fulfillment of this requirement. A follow-up meeting was conducted with William Hahne of the DPEP for further discussion regarding the intent of the requirements and the content of the plan. This plan, in *DRAFT* form is included as Appendix G in the attached revised application. It's understood, by all parties, that this remains a work in progress and that there is a commitment on behalf of the applicant to continue to address the DPEP's concerns and comments.

2. Significant Impact and/or Increment Consumption analyses are required for sulfur dioxide ( $SO_2$ ), nitrogen dioxide ( $NO_2$ ), and particulate matter ( $PM_{10}$ ) for the nearby Class I Everglades National Park. The Department is working with your consultant to prepare the particulate inventory. This will allow you to conduct the increment analysis for  $PM_{10}$  as well as the regional haze analysis.

Response – The required Class I area impact analysis has been completed and is included in the attached revised application (Section 7.3). The modeling was conducted in accordance with the protocol submitted to John Notar of the National Park Service (NPS) on October 17, 2000. Although final approval still has not been received from the NPS, the protocol provides the details of the proposed approach to assess the Class I area impacts and incorporates guidance previously received from the NPS. Once final comments are received from the NPS, the Class I analysis will be updated, if necessary. The preparation of a more refined particulate inventory isn't deemed necessary at this time.

3. Please review the cost calculation for the carbon monoxide oxidation catalyst. The cost appears high compared to similar projects. Please ask your consultant to contact us on this matter so we can provide specific guidance.

Response – Discussions were held regarding this issue with Messrs. Linero and Koerner on November 28, 2000. There were several assumptions used in the economic analysis that were discussed, such as the estimate of required labor (shifts/day), the use of interest costs during construction, and the inclusion of estimated lost revenue due to extended startups. Although PBEC feels that the addition of a catalyst bed would fundamentally alter the operation of the simple cycle turbines and that the inclusion of lost revenue due to extended startups was a legitimate cost, it was agreed that the application would be revised to reflect the Department's position on this issue and their other comments. However, the application text would also be modified to state that there were legitimate costs that were being excluded from the analysis. The BACT analysis in Section 5.0 of the revised application, has been updated to reflect these changes.

4. According to recent tests conducted at TECO Polk Power Station, a simple cycle GE 7FA unit achieved between 1 and 3 ppmvd CO at loads between 50 and 100 percent while burning fuel oil. These are very low emissions. We understand that GE will not actually guarantee these low values, but it is worth mentioning this fact in your analysis of CO control costs. We do not believe it is cost-effective to control CO by

oxidation catalyst, but want to have the most accurate possible information in the record.

Response – PBEC hasn't been able to obtain and review the referenced data, but does appreciate the Department's comment that actual CO values, determined during a unit's initial compliance test, have been found to be well below levels that the vendor was willing to guarantee. PBEC would add that the test values were likely recorded during the unit's "new and clean" conditions, at steady state operation. In cases where some simple cycle projects have committed to install CO CEMS (e.g. minor source projects that are required to demonstrate compliance with a 250 TPY cap), more data will be available regarding long-term CO values, during all representative operating conditions.

5. According to recent tests conducted at the Tallahassee Purdom Unit 8, a combined cycle GE 7FA unit achieved between  $NO_X$  emissions of 7.2, 6.1, 6.7, and 8.7 ppmvd at loads of 70, 80, 90, and 100 percent while firing natural gas. Indications are that this unit could probably consistently achieve emissions less than 12 ppmvd if operated as a simple cycle unit.

Response - This is likely a true statement. NOx CEMS data was obtained from the City of Tallahassee for an approximate 16 day period. Some of the hourly averages were in the 10 ppmvd range; however, it could be that the unit was tuned for compliance with a 12 ppmvd limit. PBEC has concerns regarding its ability to continuously meet a 9 ppmvd limit, during the life of the unit. However, in an effort to move forward with processing of the application, a limit of 9 ppmvd (corrected to 15% O<sub>2</sub>, 24 hour average), while firing natural gas, has been accepted.

6. The cost of further  $NO_X$  control by hot selective catalytic reduction should be reexamined. For instance, costs for other similar projects have been estimated at \$10,000 to 15,000 per ton of  $NO_X$  removed. This compares with the estimate of \$20,000 per ton in your application. We do not believe hot SCR catalyst is cost-effective, but want a more accurate evaluation for the record.

Response – Reference the response to Item 3. The Department's comments have been incorporated into the revised analysis.

7. We have not permitted any projects recently that allow 1,500 hours per year of backup fuel oil firing. Please review the attached table and consider how to insure that the proposed project can fit into the range of  $NO_X$  emission limits and hours of fuel oil operation.

Response - This issue was addressed in a letter from PBEC to the Department, dated December 1, 2000 (Attachment 2). Our initial request for 1,500 hours of fuel oil firing was based on a concern over near-term gas pipeline capacity constraints in South Florida. The referenced letter confirmed that we would revise our PSD application to reflect the equivalent of 1,000 hours per year of fuel oil use. In addition, PBEC reconfirmed the fact that natural gas is the primary fuel and that the reliable supply of natural gas to the site would be aggressively pursued.

8. During recent tests conducted at the City of Tallahassee, the 7FA combustion turbine achieved 7.2, 6.1, 6.7, and 8.7 ppmvd at 70, 80, 90, and 100% of full load. While the unit is a combined cycle unit, we believe that it is possible to consistently achieve better than 12 ppmvd in a simple cycle unit. For a requested 12 ppmvd limit, we would suggest only 500 hours of fuel oil firing.

Response - As the Department's policy is to relate the amount of back-up fuel oil firing to the allowable NOx emission limit, PBEC has elected to accept the NOx limit summarized in Item 5 above. This is necessary because PBEC feels that a minimum of 1,000 hours of fuel oil firing flexibility is necessary for the project. As described below in the response to Item 9, PBEC doesn't believe that this amount of fuel oil firing will be required; however the operational flexibility is necessary to minimize risk to the project.

9. Describe the feasibility and effects of the fuel oil delivery. Based upon the application, trucking of the fuel oil is contemplated. At 1500 hours per year of oil operation on all 3 turbines, approximately 70 million gallons may be consumed annually or approximately 9,000 truckloads. If fuel oil operation was concentrated into just a few months, this would require a great deal of truck traffic into and out of the facility.

Response – As stated above, our request for 1,500 hours of oil firing was based on a concern over near-term gas pipeline capacity constraints in South Florida. In spite of these concerns, we are also sensitive to the environmental concerns of the Florida DEP and the community at large. As a result, we've amended our PSD permit application (attached) to change our maximum annual use of distillate oil to the equivalent of 1,000 hours of oil firing.

This revised estimate of fuel oil firing would reduce annual truck traffic below that estimated by the Department and bring the project fuel usage in line with other recently issued Department permits. We estimate that this represents, on average, about 15 truck trips per day, assuming the full 1,000 hours of oil use occurs. The 30 acres upon which the facility is to be constructed is the subject of an agreement between Broward County and the landowner, whereby Broward County is required to make an official finding that industrial development upon the subject property meets traffic concurrency pursuant to the Broward County land development code and comprehensive plan.

Please contact Dave Kellermeyer of Enron North America at (713) 853-3161, if you have any questions or comments concerning the above.

Sincerely,

Enron North America

Ben Jacoby Director Mr. A. Linero December 14, 2000 Page 5

cc:

Dave Kellermeyer, Enron North America Steve Krimsky, Enron North America Bob Iwanchik, ENSR Scott Osbourn, ENSR

### Enclosures

C. Carlson J. Gendleson, SED G. Mach, Browned Co. EPA

NPS

### ATTACHMENT 1



FROM: ENSR

### Department of Planning and Environmental Protection

Air Quality Division 218 S.W. 1st Avenue Fort Lauderdale, FL 33301 (954) 519-1220 • Fax (954) 519-1495

November 21, 2000

Mr. A. A. Linero, P.E.
Administrator, New Source Review
Bureau of Air Regulation, Division of Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Construction Permit Application #0112515-001-AC Pompano Beach Energy, LLC Dear Al:

In response to the above referenced Construction Permit Application for Pompano Beach Energy, LLC, we are offering the following comments:

- 1) Please advise the applicant that separate Prevention of Significant Deterioration (PSD) and construction permits are not required. Only a construction permit which incorporates all PSD requirements will be issued by your office.
- 2) Please advise the applicant that separate Title V and Title IV permits are not required. Only a Title V permit which incorporates all Acid Rain provisions will be issued by your office.
- 3) Please advise the applicant that the Section II. Facility Information Subsection A. General Facility Information: List of Applicable Regulations (Facility-Wide) is incomplete. The applicant must acknowledge that the facility is also subject to Broward County Code, Article IV although an additional county license will not be required.
- 4) Please advise the applicant that the application must meet the provisions of Broward County Code, Sec. 27-175 and 27-176(c)(2)b. Specifically, section 27-175 prohibits an owner or operator of a major source of air pollution from causing, letting, permitting, suffering or allowing the emission of criteria pollutants in quantities that will reduce by more than one-half (½) the margin between the existing ambient concentrations and the applicable National Ambient Air Quality Standard (NAAQS). Section 27-176(c)(2)b states the permit application for any facility whose potential emissions of a pollutant for which a NAAQS has been established, equal or exceed one hundred (100) tons per year, shall contain a demonstration, using any EPA-approved dispersion model, that the source will not reduce by more than one-half (½) the margin between the ambient concentrations and the applicable NAAQS. This requirement does not apply to sources whose potential to emit will be limited by the permit to less than one hundred (100) tons per year.

5) Please advise the applicant that the application must meet the provisions of Broward County Code, Sec. Sec. 27-178, which requires the applicant to submit to DPEP, Air Quality Division, a Pollution Prevention Plan. For example, one issue that might be addressed in the Pollution Prevention Plan is the reuse of the waste heat by a neighboring facility.

6) Finally, please advise the applicant that the equation for estimating the concentration of  $NO_x$  in 40 CFR 60.335(c)(1) is in error. The correct equation can be found in Broward County Code, Sec. 27-177(e).

We apologize for the delay in getting these comments to you. In the future, we will make every effort to submit any comments on applications more expeditiously. In addition, please keep us appraised of any and all significant developments regarding the intent to issue or deny this permit.

Very truly your	s;
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Daniela Banu, Director

DB/wih

#### Enron North America Corp.

P.O. Box 1188 Houston, TX 77251-1188



December 1, 2000

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DEC 08 2000

BUREAU OF AIR REGULATION

(Received by fax on 12/1/00)

Mr. Alvaro A. Linero, P.E.
Administrator, New Source Review Section
Bureau of Air Regulation, Division of Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE:

Request for Additional Information

DEP File No. 0112515-001-AC (PSD-FL-304)

Pompano Beach Energy Center

Dear Mr. Linero:

On behalf of Pompano Beach Energy Center, LLC, we have reviewed your letter requesting additional information, dated November 21, 2000. These data and analyses are in preparation; we expect to be able to submit everything by late next week. We did want to inform you immediately about our response to one issue raised in your letter: i.e., the request to be allowed up to 1500 hours of oil firing annually.

We recognize that the maximum oil usage that has previously been allowed in Florida for dual-fuel peakers is 1000 hours. Our request for a higher limit was based on a concern over near-term gas pipeline capacity constraints in South Florida. These capacity constraints are less critical to the north, where most of the dual-fuel peaker plants have been permitted to date. As stated in our application, we feel that FGT is taking steps to relieve these constraints and that the Project will be less likely to need oil firing after the initial 2 to 3 years of operation. Nevertheless, in the first couple of years of operation, the potential unavailability of the preferred fuel, natural gas, will likely dictate that the Pompano Beach Energy Center needs to fire oil during certain periods of peak power demand.

Although we have concern over the reliability of near-term natural gas supplies, we are also sensitive to the environmental concerns of the Florida DEP and the community at large. We are committed to being a good neighbor to the citizens of Pompano Beach and Broward County. Environmental protection is a major part of that commitment. We feel that our permit application has demonstrated that our environmental performance will be excellent while using either oil or gas. However, we also recognize that our environmental performance will be incrementally better on natural gas, the cleaner fuel.

Mr. Al Linero December 1, 2000 Page 2

As a result, we have decided to amend our PSD permit application to change our maximum annual use of distillate oil to 1000 hours. In addition, we want to reconfirm the fact that natural gas is the primary fuel for the plant and that we will aggressively pursue the reliable supply of natural gas to our site. We will be filing an amended application that reflects this and incorporates responses to your other information requests.

Please contact Dave Kellermeyer of Enron North America at (713) 853-3161 if you have any questions regarding this matter.

Sincerely,

Enron North America

David A. Kellermeyer

David A. Keller

Director

Cc: Steve Krimsky, Enron North America

Ben Jacoby, Enron North America.

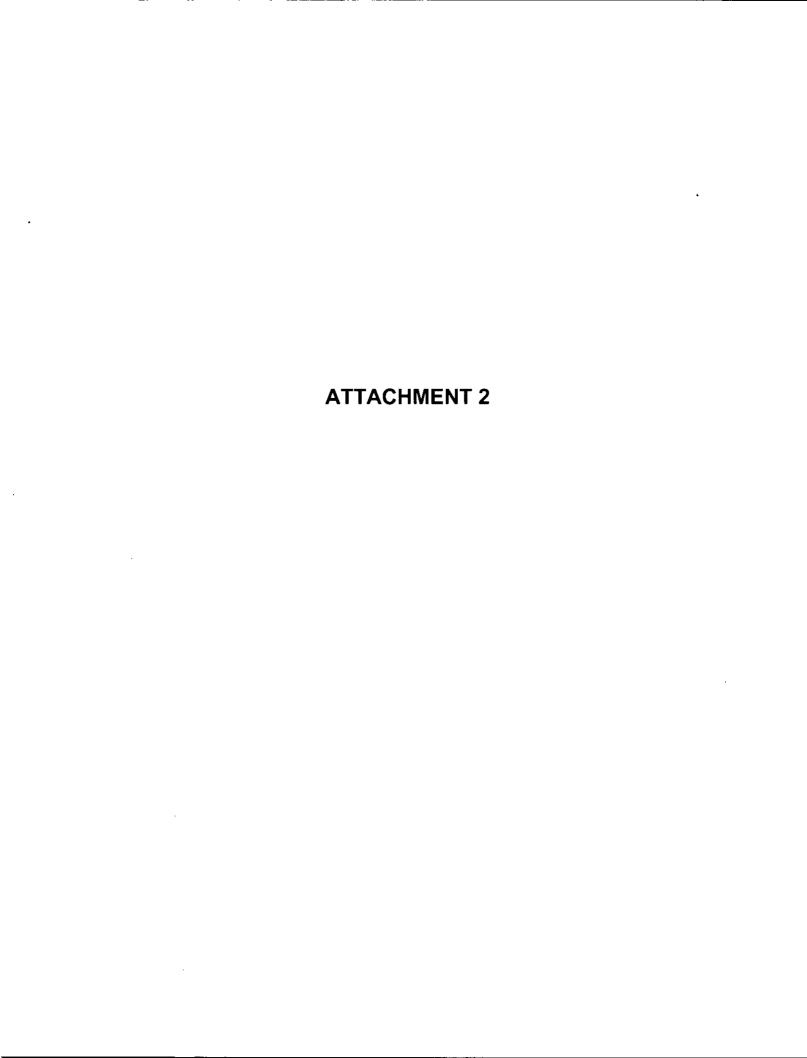
Bob Iwanchuk, ENSR

Scott Osborne, ENSR

C. Carlson

J. andleson, SEP Q. Track, Resward Co.

EPA NPS



On or about March 2001, the Department provided an Intent to Issue air construction permit (Permit) for a nominal 510-megawatt power plan to Pompano Beach Energy Center, LLC (PBEC – then an affiliate of Enron North America).

On or about June 2001, the Department provided an Intent to Issue air construction permit (Permit) for a nominal 510 megawatt power plant to Deerfield Beach Energy Center, LLC (DBEC – than an affiliate of Enron North America).

The Department issued both permits based on its belief that the applicants had provided reasonable assurance......(reference page 1 of respective Intents to Issue.

The Department determined that the applicants had provided reasonable assurance.

An important underlying element in making this determination was the well-known economic standing of the parent company, Enron North America; as evidenced by ownership of established pipeline companies, well-publicized national and international power projects and energy trading activities.

Enron North America was known to have purchased at least 40 General Electric Model 7241 FA (7FA) combustion turbines. The GE 7FA is the only unit on the market capable of achieving the Department's proposed nitrogen oxides limits reflected in the Permits without additional (unplanned) add-on control equipment.

Enron declared bankruptcy for a number of its companies on or about December 1<sup>st</sup>, 2001. The worldwide repercussions of that bankruptcy are progressively being appreciated by the financial, energy, and other government entities. The status of PBEC, LLC and DBEC, LLC with respect to the bankruptcy filings is unknown to the Department.

The Department now has serious doubts that PBEC, LLC or DBEC, LLC still have active contracts with General Electric (through Enron North America or independently of Enron North America) for Model 7FA combustion turbines to be paid for and delivered by the planned startup dates of the two facilities.

According to Section 62 - 4.150, the Department may require proof of financial responsibility prior to issuance of a permit.

The Department may require posting of a bond prior to issuance of a permit.

The Department does not consider DBEC or PBEC to have the same economic standing since the mentioned bankruptcy as presumed by the Department at the time the Intents to Issue were provided.

The Department requires re-establishment of reasonable assurance in accordance with Section 62 - 4.070, F. A. C. prior to the consolidated administrative hearing on the two cases presently scheduled to begin January 29, 2002. Otherwise, the Department will file a Notice of Denial.

The Department requires affirmative establishment of financial responsibility in accordance with Rule 62 - 4.150, F. A. C. prior to the consolidated administrative hearing. Otherwise, the Department will file a Notice of Denial.

To establish reasonable assurance and proof of financial responsibility, the Department requires the following information:

- 1. Copies of contracts between DBEC, PBEC and General Electric (through or independently of Enron North America) with reaffirmation (dated December 1<sup>st</sup>, 2001 or later) by the buyer and the seller that the contract(s) are in force.
- 2. The name(s) of the facility representatives (required in the application) in view of the reported severance of Mr. Ben Jacoby (Attorney-in-Fact) from Enron North America.
- 3. The name(s) of the contact for the applications in view of the reported severance of Mr. Dave Kellermeyer from Enron North America.

- 4. The name of the professional engineer of record for the application to be presented at the ????? Hearing along with a re-affirmation that ENSR (signed by ENSR) is still the consultant for the air permit.
- 5. Copies of contracts (or options) for natural gas in view of the recent request (December 14<sup>th</sup>, 2001) by DBEC for elimination of diesel fuel use from its Deerfield site plan.
- 6. Description of the up-to-date gas delivery alternatives in view of the questionable status of the Enron Calypso Pipeline Project. The Department will also need to be advised if any of the gas will be shuttled from the Gulfstream Pipeline to connections with the Florida Gas Transmission Network in Palm Beach and St. Lucie Counties.
- 7. Provide information reflecting the ability of DBEC and PBEC to finance, construct, start up, manage, and operate power plants in Florida.
- 8. Provide information regarding the ability of DBEC and PBEC to post bonds, should the Department require these.



### STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

CITY OF COCONUT CREEK,

Petitioner,

v. STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION OGC File No. 01-0489

And

POMPANO BEACH ENERGY, L.L.C. (AN AFFILIATE OF ENRON NORTH AMERICA),

Respondents	Res	tod	nde	nts
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## AMENDED PETITION FOR ADMINISTRATIVE HEARING

Petitioner, City of Coconut Creek, a Florida municipal corporation ("CITY"), in compliance with an Order of the Department dated May 21, 2001, hereby files this Amended Petition for Administrative Hearing challenging the Department of Environmental Protection's ("DEP") Intent to Issue Air Construction Permit for Permit No. 0112515-001-AC(PSD-FL-304) ("Permit") to Pompano Beach Energy, L.L.C., an affiliate of ENRON North America ("ENRON"), which would allow the construction of a five hundred ten (510) megawatt "peaking" power plant at 3300 Northwest 27 Avenue in Pompano Beach, Broward County, Florida. As amended grounds for this Administrative Hearing, CITY states:

1. CITY is a Florida municipality comprising approximately 11.7 square miles in the central northern end of Broward County.

Uzer

- The DEP is the permitting authority in this proceeding and has its offices located at 400 North Congress Avenue, West Palm Beach, Florida 33416 and 111 S. Magnolia Drive, Suite 4, Tallahassee, Florida 32301.
- 3. Pompano Beach Energy, L.L.C. has its offices located at 1400 Smith Street, Houston, Texas 77002.

### SUBSTANTIAL INTEREST

4. CITY is a Florida municipality with over 40,000 residents, located within the immediate adjacent area that will be affected by the building of a power plant. As a result, CITY has a substantial interest in this proceeding.

### **BACKGROUND**

- 5. On or about March 10, 2001, the CITY received a copy of DEP's Public Notice of Intent to Issue Air Construction Permit for ENRON's proposed power plant facility.
- 6. On October 23, 2000, ENRON filed its Application with the Broward County Department of Planning and Environmental Protection. On December 15, 2000, ENRON filed a Revised Application with the Broward County Department of Planning and Environmental Protection.
- 7. On December 20, 2000, the Department of Planning and Environmental Protection found that the Application was complete.
- 8. On or about March 21, 2001, the CITY moved for an extension of time to file its Petition.
- 9. On April 9, 2001, the DEP granted CITY's Request for Extension of Time and gave the CITY until April 25, 2001 to file its Petition.

- 10. ENRON is proposing to construct three (3) one hundred seventy (170) megawatt duel-fuel combustion turbines with inlet chillers, three (3) mechanical draft cooling towers, three (3) eighty (80) foot stacks, a natural gas heater, a two and one half million gallon fuel oil storage tank, and a 0.6 million gallon fuel oil storage tank at the site.
- 11. If approved, fuel oil will be permitted at the power plant for up to three thousand (3000) hours per year or one hundred twenty-five (125) days per year.
- 12. The following regional producers of noxious emissions are located within the immediate vicinity of ENRON's proposed cogeneration power plant facility: (1) Broward County North Regional Wastewater Treatment Plant; (2) Florida Power and Light Electrical Substation; (3) Broward County Central Sanitary Landfill; (4) Wheelabrator Resource Recovery Facility; (5) Broward County Hazardous Materials Receiving Facility; and (6) Waste Management Trash Transfer Station. These large regional significant sources of noxious emissions, which are publicly or privately owned, are immediately adjacent to the eastern boundary of the CITY.
- 13. In addition, the proposed power plant is within thirteen (13) miles of the Arthur R. Marshall Loxahatchee National Wildlife Refuge, administered by the U.S. Department of the Interior, and within ten (10) miles of the Florida Everglades, specifically, Conservation Area No. 2, which is administered by the State of Florida Fish and Wildlife Conservation Commission.
- 14. CITY has received no indication that an Environmental Impact
  Statement/Evaluation has been undertaken for this proposed use.

- quantitative cumulative air quality analysis has not been performed with regard to the facilities referenced in Paragraph 12 above. The issuance of a Federal Permit for the Prevention of Significant Deterioration (PSD) subjects the facility to the requirements of the National Environmental Policy Act (NEPA) (specifically regulations in 40 CFR Part 1508). Under NEPA, the cumulative environmental effects of a proposed project and other significant sources must be considered in an environmental assessment or an environmental impact statement.
- 16. CITY's experts believe that a quantitative cumulative air quality analysis should be performed in order to satisfactorily demonstrate that the combined emissions from the sources referenced in Paragraph 12 above do not cause a contravention of applicable air quality standards.

### DISPUTED ISSUES OF FACT AND LAW

- 17. Whether an environmental impact statement/evaluation should have been conducted by ENRON prior to the Notice of Intent to Issue Air Construction Permit.
- 18. Whether the assessment of environmental impacts associated with industrial-related activities, including those on ambient air quality, must be performed prior to the issuance of a permit.
- 19. Whether the impact upon the CITY of the prevailing wind direction from the proposed facilities has been considered and factored into the decision to issue a Permit.
- 20. Whether it is necessary for a quantitative cumulative air quality analysis to be performed prior to the issuance of a Permit to ensure that the combined emissions

from the various sources in the area do not cause a contravention of applicable air quality standards:

- (i) The proposed facility is anticipated to emit approximately 572 tons per year (tpy) of NO<sub>2</sub>, 171 tpy of CO, 55 tpy of PM/PM<sub>10</sub>, 166 tpy of SO<sub>2</sub>, 18 tpy of VOC, and 25 tpy of sulfuric acid mist. The facility will also emit trace quantities of total fluorides (0.09 tpy), mercury (0.003 tpy) and lead (0.003 tpy). Emissions of cumulative hazardous air pollutants (HAP<sub>5</sub>) up to 5 tpy.
- (ii) The issuance of Federal Permits such as Prevention of Significant

  Deterioration subjects the proposed power plant facility to the
  requirements of the National Environmental Protection Act.
- (iii) Under the National Environmental Protection Act, the cumulative environmental effects of a proposed project must be considered in an environmental assessment.
- 21. Whether DEP's Intent to Issue Air Construction Permit was based on erroneous and misleading information concerning the proposed power plant's distance to environmentally sensitive lands and, therefore, should be reassessed:
  - (i) The Technical Evaluation and Preliminary Determination provides in Paragraph 2 entitled "Facility Information" that the proposed power plant is located approximately 60 kilometers (37.2 miles) from the Everglades National Park; this statement may be accurate on its face as to the distance from the park entrance, but a map of the Conservation Areas potentially affected by the proposed power plant demonstrates that the affected

- ecosystems are far closer than stated. Please See Exhibit "A", attached hereto and made a part hereof.
- (ii) The pristine, environmentally sensitive ecosystem of the Loxahatchee National Wildlife Refuge is within thirteen (13) miles of the proposed power plant, as it is located immediately adjacent to Everglades Conservation Area No. 2, to the north;
- (iii) While the public entranceway of Everglades National Park may be over thirty-seven (37) miles away from the proposed power plant, the environmentally sensitive ecosystem of the Florida Everglades, specifically Conservation Area No. 2 is within ten (10) miles of the proposed site; and
- (iv) The proximity of these ecosystems was not taken into account by the DEP in their review of the proposed location.
- 22. The project must use best available control technology ("BACT") to limit the emissions of nitrogen oxide ("NOx"), carbon monoxide ("CO"), volatile organic compounds ("VOCs"), sulfur dioxide ("SO<sub>2</sub>"), sulfuric acid mist, and particulate matter with an aerodynamic diameter less than 10 microns ("PM10"), pursuant to Rule 62-212.400(2)(f), F.A.C.
- 23. Rule 62-210,200(38), F.A.C. defines BACT as "an emission limitation...based on the *maximum* degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and

available methods, systems and techniques (including fuel cleaning or treatment or innovative fuel combustion techniques) for control of each such pollutant." (emphasis added)

- 24. In determining BACT, the Department shall give consideration to, among others, "all scientific, engineering, and technical material and other information available to the Department," "the emission limiting standards or BACT determination of any other state," and "the social and economic impact of such technology." Rule 62-212.400(6), F.A.C.
- 25. The City believes and will demonstrate to the Department that the applicant's proposed BACT limits (or absence thereof) for the turbines, fuel oil heater, tanks, and cooling towers, accepted by the Department, are not consistent with the definition of BACT in Rule 62-210.200(38), F.A.C. and the requirements in Rule 62-212.400(6), F.A.C. as specifically set forth below. The Department's BACT determinations do not recognize the much lower limits currently being permitted in other states, nor do they address the social and economic impacts to the City for failing to appropriately limit emissions from the facility.
- 26. The draft permit establishes BACT for NOx from the gas turbines as 9 ppmvd at 15% O<sub>2</sub> on gas, achieved with dry low NOx combustors and 42 ppmvd at 15% O<sub>2</sub> on fuel oil, achieved with water injection. Continuous compliance would be demonstrated based on a 24-hour block average. (Permit, § III.13.) Other states have permitted a large

number of simple cycle peaking power plants with NOx limits of 2 to 5 ppmvd at 15% O<sub>2</sub> on gas using SCR, XONON, or SCONOx and 5.9 to 13 ppmvd on oil, achieved with water injection and SCR. Continuous compliance is demonstrated based on 1-hour to 3-hour rolling averages. These lower limits have been achieved in practice. The City recommends a much lower NOx limit be established for the turbines, consistent with the permitting history in other states.

- 27. The draft permit establishes BACT for CO for the gas turbines as 9 ppmvd @ 15% O<sub>2</sub> on gas and 20 ppmvd @ 15% O<sub>2</sub> on oil, achieved with good combustion. Compliance would be demonstrated based on a 3-hour source test. (Permit, § III.14.) Other states have permitted simple cycle peaking power plants with CO limits of 2 to 6 ppmvd at 15% O<sub>2</sub> on oil and gas, achieved using an oxidation catalyst. Much lower limits have been demonstrated in source tests and with continuous emission monitors. The City believes a much lower CO limit should be established for the turbines and that continuous compliance be demonstrated with a continuous emission monitor.
- 28. The draft permit establishes BACT for VOCs from the gas turbines as 2.8 ppmvd @ 15% O<sub>2</sub> on gas or oil, achieved with natural gas and good combustion. Compliance would be demonstrated based on a 3-hour source test. (Permit, § III.15.) Other states have permitted simple cycle peaking power plants with VOC limits of 2 ppmvd at 15% O<sub>2</sub> on oil and gas, achieved using an oxidation catalyst. Much lower limits have been demonstrated in source tests. The City believes a much lower VOC limit should be established for the turbines.

- 29. The draft permit indicates that the facility includes one 2.5 million gallon distillate storage tank, one 0.6 million gallon distillate storage tank, one 13 MMBtu/hr gas-fired fuel heater, and four wet mechanical draft cooling towers. (Permit, § III.2.) The draft permit contains no BACT determinations, emission limits, or monitoring requirements for these sources, even though they emit criteria and hazardous air pollutants. These sources, although individually minor, must use BACT and be regulated by permit, pursuant to Rule 62-210.200(112), F.A.C., which defines a facility as "all of the emissions units which are located on one or more contiguous or adjacent properties, and which are under the control of the same person (or persons under common control)." The City requests that the Department conduct a formal BACT analysis for these minor sources and revise the permit to include appropriate emission limits and monitoring requirements.
- 30. The draft permit and files that were reviewed do not identify any other emission sources at the facility. However, power plants normally additionally include an emergency firewater pump and emergency generator, run by diesel internal combustion engines. The diesel exhaust from any such engines are a great concern to the City. Thus, the City requests that the Department investigate whether emergency diesel engines would be used and if so, that these be subjected to a formal BACT analysis and permit limits, pursuant to Rule 62-210.200(112), F.A.C.

- 31. The project proposes to use distillate oil as a backup fuel for an average of 1,000 hours per installed unit. (Permit, § III.7.) The combustion of distillate in the turbines would produce "diesel exhaust," which is recognized by the U.S. Environmental Protection Agency and California as a potent human carcinogen and respiratory irritant. The City is deeply concerned about the impact of these emissions, as well as others, set out below, on the residents of Coconut Creek.
- 32. The definition of BACT in Rule 62-210.200(38) and implementing EPA guidance in the NSR Manual (EPA, New Source Review Workshop Manual, October 1990, Section IV.D.3) require taking into account the "environmental" impacts during the top-down BACT process. The Department is further required to evaluate the social and economic impacts of its decisions, pursuant to Rule 62-212.400(6)(a)4, F.A.C.
- 33. The draft permit establishes BACT for SO<sub>2</sub> and sulfuric acid mist as the use of pipeline natural gas and low sulfur (0.05%) fuel oil, without performing any analyses, evaluating alternatives, or considering the substantial health impacts that may result from this choice. The City maintains that the use of distillate fuel in a densely populated area is inappropriate, has far-reaching social and economic implications for its residents, and is not consistent with Rule 62-212.400(6)(a), F.A.C.
- 34. Notwithstanding the health issues, 0.05% sulfur distillate is not BACT for SO<sub>2</sub> and sulfuric acid mist when firing oil. A sulfur content of 0.05% is equivalent to 5,000 parts per million sulfur by weight ("ppmw"). Lower sulfur distillate, containing only 30

ppmw sulfur, is currently available on the east coast. Further, the EPA has adopted stringent fuel regulations that limit the sulfur content of diesel fuel to 15 ppmw. These regulations go into effect in June 2006 (Federal Register, v. 66, no. 12, January 18, 2001, p. 5002 et seq), at which point ultra low sulfur diesel will be widely available in the Florida market.

- 35. Thus, the City requests the permit be modified to eliminate the use of distillate oil. In the short-term, a backup fuel such as LNG or propane or a noninterruptible gas supply contract for curtailments should be required, until such time as the capacity constraints on the Florida Gas Transmission Pipeline are alleviated, but no later than January 2003. If distillate is retained, diesel exhaust emissions should be rigorously controlled and 30 ppmw diesel fuel be required on startup and 15 ppmw diesel when it becomes available, but no later than June 2006.
- 36. The permit contains no limits on the number of startups/shutdowns nor on the emissions during these periods. During startups and shutdowns, combustion temperatures and pressures change rapidly, resulting in inefficient combustion and much higher emissions of NOx, CO, and VOCs (including aldehydes) than during steady state operation.
- 37. The City is concerned that virtually unlimited and uncontrolled startup and shutdown emissions will result in significant health impacts in downwind areas of Coconut Creek, particularly during combined operation of the Pompano and Deerfield

Beach Energy Centers. Emissions of formaldehyde, for example, can increase by over a factor of 500 during startups, compared to full load operation. If each turbine experienced as few as 100 startups per year, lasting only 10 minutes, the emissions of formaldehyde would exceed 10 ton/yr and require the use of maximum achievable control technology ("MACT"), pursuant to Rule 62-204.800, F.A.C.

38. Omitting limits on startup and shutdown emissions is not consistent with requirements of the Clean Air Act. The U.S. EPA has consistently defined startup and shutdown to be part of the normal operation of a source. The EPA has also consistently concluded that these emissions should be accounted for in the design and implementation or the operating procedure for the process and control equipment. EPA has concluded that "[w]ithout clear definition and limitations, these automatic exemption provisions [for startups and shutdowns] could effectively shield excess emissions arising from poor operation and maintenance or design, thus precluding attainment." (Bennett 9/28/82.) Accordingly, these emissions should have been considered in the BACT analysis and the related health impacts addressed in conjunction with the environmental review required pursuant to Rule 62-210.200(38), F.A.C. Permits issued by other states include limits on startup and shutdown emissions. Thus, the City believes that a permit condition be included that specifically limits the number, duration, and emissions during startups and shutdowns, to comply with BACT and MACT.

<sup>&</sup>lt;sup>1</sup> Letter from Kathleen M. Bennett, Office of Air, Noise and Radiation, to Assistant Administrator for Air, Noise and Radiation Regional Administrators, Regions I-X, Subject: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, September 28, 1982 (Bennett 9/28/82).

<sup>&</sup>lt;sup>2</sup> Letter from Kathleen M. Bennett, Assistant Administrator for Air, Noise and Radiation, to Regional Administrators, Regions I-X, Subject: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, February 15, 1983 (Bennett 2/15/83).

Broward County Code Section 27-178 requires pollution prevention planning for 39.

hazardous air pollutants, among other considerations. The project is not in compliance

with this local regulation because emissions of diesel exhaust, formaldehyde, and other

HAPs have not been assessed and mitigated. Therefore, the project is in violation of Rule

62-210.300(4)(d)15.a F.A.C, which requires compliance with the requirements of

Broward County.

WHEREFORE, Petitioner CITY, respectfully requests a formal administrative

evidentiary hearing, de novo, pursuant to Chapter 120, Florida Statutes, to resolve

disputed issues of material fact and law set forth herein be held and that the DEP should

not issue Permit No. 0112515-001-AC (PSD-FL-304) or, in the alternative, should

prohibit diesel oil from being used at this facility. Additionally, startup/shutdowns

should be limited and monitored. At a minimum, the DEP should, prior to issuing the

Permit, require that ENRON provide a quantitative cumulative air quality analysis to

ensure that the combined emissions from the various industries in the area do not cause a

contradiction of applicable air quality standards.

Respectfully submitted this 5 day of June, 2001.

Assistant City Attorney

### **CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that the original has been filed by facsimile, (850) 921-3000 and Federal Express at: Office of General Counsel, Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000 and a true and correct copy of the foregoing has been furnished by regular U.S. Mail to: Debbie Orshefsky, Attorney for Pompano Beach Energy, L.L.C., Greenberg, Traurig, 515 E. Las Olas Boulevard, Suite 1500, Fort Lauderdale, Florida 33301 this 5 day of June, 2001.

CITY OF COCONUT CREEK CITY ATTORNEY'S OFFICE

NANCY A. COUSINS Assistant City Attorney Florida Bar No. 224154

City of Coconut Creek

4800 West Copans Road

Coconut Creek, Florida 33063

(954) 973-6797

(954) 973-6790 (facsimile)

ACA/CM/Electrical Power Plant/Amended Petition for Admin Hearing 06/05/01

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#### DRAFT PERMIT

#### PERMITTEE:

Pompano Beach Energy, L.L.C. 1400 Smith Street Houston, Texas 77002-7631

Authorized Representative: Mr. Ben Jacoby

Permit No. PSD-FL-304 Project No. 0112515-001-AC

SIC No. 4911

Expires: December 31, 2003

#### PROJECT AND LOCATION:

This air construction permit is issued pursuant to the requirements for the Prevention of Significant Deterioration (PSD) of Air Quality for: three dual-fuel nominal 170 megawatt (MW) General Electric PG7241FA combustion turbine-electrical generators with inlet air chillers; four mechanical draft cooling towers; one 2.5-million gallon fuel oil storage tank; one 0.6 million gallon fuel oil storage tank; a gas-fired natural gas fuel heater; and three 80-foot stacks. The combustion turbines will operate in simple cycle mode and intermittent duty. The units will be equipped with Dry Low NO<sub>X</sub> (DLN-2.6) combustors and wet injection capability.

The project will be located at 3300 Northwest 27<sup>th</sup> Avenue, Pompano Beach in Broward County. UTM coordinates are: Zone 17; 556.7 km E; 3028.5 km N.

### STATEMENT OF BASIS:

This air construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The above named permittee is authorized to construct the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

Attached Appendices and Tables made a part of this permit:

Appendix BD BACT Determination

Appendix GC Construction Permit General Conditions

Appendix GG 40 CFR 60, Subpart GG

(DRAFT)

Howard L. Rhodes, Director Division of Air Resources Management

# AIR CONSTRUCTION PERMIT PSD-FL-304 (0112515-001-AC) SECTION I. FACILITY INFORMATION

#### **FACILITY DESCRIPTION**

This facility is a new site. This permitting action is to install three dual-fuel nominal 170 megawatt (MW) General Electric PG7241FA combustion turbine-electrical generators with inlet air chillers, three 80-foot stacks, one 2.5-million gallon fuel oil storage tank, one 0.6-million gallon storage tank, a gas heater and ancillary equipment. Emissions from the new units will be controlled by Dry Low NO<sub>X</sub> (DLN-2.6) combustors when operating on natural gas and wet injection when firing fuel oil. Inherently clean fuels and good combustion practices will be employed to control all pollutants.

#### **EMISSION UNITS**

This permit addresses the following emission units:

Emissions Unit ID No.	System	Emission Unit Description
001	Power Generation	One nominal 170 megawatt combustion turbine-electrical generator set with inlet air chiller
002	Power Generation	One nominal 170 megawatt combustion turbine-electrical generator set with inlet air chiller
003	Power Generation	One nominal 170 megawatt combustion turbine-electrical generator set with inlet air chiller
004	Fuel Storage	One 2.5-million gallon fuel oil storage tank and one 0.6-million gallon fuel oil storage tank
005	Fuel Heating	One 13 million Btu per hour natural gas heater
006	Inlet Air Chilling	Four 2-cell wet mechanical draft cooling towers

#### REGULATORY CLASSIFICATION

The facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM<sub>10</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>X</sub>), carbon monoxide (CO), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

This facility is not within an industry included in the list of the 28 Major Facility Categories per Table 212.400-1, F.A.C. Because emissions are greater than 250 TPY for at least one criteria pollutant, the facility is also a Major Facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD). Pursuant to Table 62-212.400-2, modifications at this facility resulting in emissions increases greater than any of the following values require review per the PSD rules as well as a determination of Best Available Control Technology (BACT): 40 TPY of NO<sub>X</sub>, SO<sub>2</sub>, or VOC; 25/15 TPY of PM/PM<sub>10</sub>; 100 TPY of CO; or 7 TPY

# AIR CONSTRUCTION PERMIT PSD-FL-304 (0112515-001-AC) SECTION I. FACILITY INFORMATION

of sulfuric acid mist (SAM). This facility and the project are also subject to applicable provisions of Title IV, Acid Rain, of the Clean Air Act.

#### PERMIT SCHEDULE

•	10/23/00	Received Application
•	12/15/00	Received Revised Application
•	12/20/00	Application Complete
•	03/07/01	Distributed Intent to Issue
•	xx/xx/01	Notice of Intent published in

#### **RELEVANT DOCUMENTS:**

The documents listed below are the basis of the permit. They are specifically related to this permitting action, but not all are incorporated into this permit. These documents are on file with the Department.

- Application received on October 23, 2000;
- Letter from Broward County Department of Planning and Environmental Protection dated November 21, 2000;
- Letters from Enron North America dated December 1 and December 14, 2000;
- Revised Application received on December 15, 2000;
- Pollution Prevention Plan received on December 20, 2000;
- Application errata pages received January 19, 2001;
- Letter from Broward County Department of Planning and Environmental Protection dated February 8, 2000;
- CALPUFF air quality and Class I impact analysis received February 16, 2001;
- Department's Intent to Issue and Public Notice Package dated February 27, 2001;
- Letter from U.S. EPA Region IV dated \_\_\_\_\_;
- Letter from National Park Service dated ; and
- Department's Final Determination and Best Available Control Technology Determination issued concurrently with this permit.

# AIR CONSTRUCTION PERMIT PSD-FL-304 (0112515-001-AC) SECTION II. ADMINISTRATIVE REQUIREMENTS

- Regulating Agencies: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and phone number (850) 488-0114. All documents related to reports, tests, and notifications should be submitted to the Broward County Department of Planning and Environmental Protection, 218 Southwest 1<sup>st</sup> Avenue, Fort Lauderdale, Florida 33301 and phone number 954/519-1220. Copies of all such reports, tests, and notifications shall also be submitted to the Department's Southeast District Office at P.O. Box 15425, West Palm Beach, Florida 33416-5425.
- 2. <u>General Conditions</u>: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
- 3. <u>Terminology</u>: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
- 4. <u>Forms and Application Procedures</u>: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]
- 5. Modifications: The permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change. [Chapters 62-210 and 62-212]
- 6. <u>PSD Expiration Approval</u>: Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. [40 CFR 52.21(r)(2)]
- 7. BACT Determination Revision: In accordance with Rule 62-212.400(6)(b), F.A.C. (and 40 CFR 51.166(j)(4)), the Best Available Control Technology (BACT) determination shall be reviewed and modified as appropriate in the event of a plant conversion. This paragraph states: "For phased construction project, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source."

# AIR CONSTRUCTION PERMIT PSD-FL-304 (0112515-001-AC) SECTION II. ADMINISTRATIVE REQUIREMENTS

This reassessment will also be conducted for this project if there are any increases in heat input limits, hours of operation (e.g. conversion to combined-cycle operation), oil firing, short-term or annual emission limits, annual fuel heat input limits or similar changes. [40 CFR 51.166(j)(4) and Rule 62-212.400(6)(b), F.A.C.]

- 8. Completion of Construction: The permit expiration date is December 31, 2003. Physical construction shall be complete by June 30, 2003. The additional time provides for testing, submittal of results, and submittal of the Title V permit to the Department.
- 9. <u>Permit Extension</u>: The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit [Rule 62-4.080, F.A.C.]
- 10. <u>Application for Title V Permit</u>: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least ninety days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's Bureau of Air Regulation, and a copy to the Broward County DPEP. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]
- 11. New or Additional Conditions: Pursuant to Rule 62-4.080, F.A.C., for good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

# AIR CONSTRUCTION PERMIT PSD-FL-304 (0112515-001-AC) SECTION III. EMISSION UNITS SPECIFIC CONDITIONS

#### APPLICABLE STANDARDS AND REGULATIONS

- 1. General Applicability: Unless otherwise indicated in this permit, the construction and operation of the subject emission units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-103, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, 62-297; and the applicable requirements of the Code of Federal Regulations Section 40, Parts 60, 72, 73, and 75.
- 2. Construction Authorization: The permittee is authorized to:
  - a. EUs 001-003: Construct power generation facilities consisting of three simple cycle combustion turbines with a nominal generating capacity of 170 MW each. (Each unit is also subject to Subpart GG of 40 CFR 60, an NSPS for gas turbines as specified in Appendix GG of this permit.)
  - b. EU 004: Construct fuel storage facilities consisting of one 2.5 million gallon distillate fuel oil storage tank and one 0.6 million gallon distillate fuel oil storage tank. (Each unit is also subject to Subpart Kb of 40 CFR 60, an NSPS for the storage of volatile liquids.)
  - c. EU 005: Construct fuel heating facility consisting of one 13 million Btu per hour gasfired fuel heater to heat natural gas for use by the combustion turbines.
  - d. EUs 006: Construct inlet air chilling facilities consisting of four wet mechanical draft cooling towers.

[Application, Rule 62-204.800(7)(b), F.A.C., and 40 CFR 60 Subparts GG and Kb]

3. NSPS General Provisions: Each emissions unit subject to a specific New Source Performance Standard shall also comply with all applicable General Provisions of Subpart A in 40 CFR 60, including: 40 CFR 60.7 (Notification and Record Keeping), 40 CFR 60.8 (Performance Tests), 40 CFR 60.11 (Compliance with Standards and Maintenance Requirements), 40 CFR 60.12 (Circumvention), 40 CFR 60.13 (Monitoring Requirements), and 40 CFR 60.19 (General Notification and Reporting Requirements). [Rule 62-204.800(7)(b), F.A.C.]

#### **GENERAL OPERATION REQUIREMENTS**

- 4. <u>Authorized Fuels</u>: Each gas turbine shall fire only pipeline-quality natural gas as the primary fuel and No. 2 distillate oil (or superior grade) containing a maximum of 0.05 percent sulfur by weight as a backup fuel. [Rules 62-210.200(PTE) and 62-212.400(BACT), F.A.C.]
- 5. <u>Permitted Capacity (Gas Turbines)</u>: The maximum heat input to each gas turbine shall not exceed 1,700 MMBtu per hour when firing natural gas nor 1,900 MMBtu per hour when firing distillate oil. The heat input limits are based on the lower heating value (LHV) of each fuel, 100% load, and ambient conditions of 30° F temperature, 60% relative humidity,

# AIR CONSTRUCTION PERMIT PSD-FL-304 (0112515-001-AC) SECTION III. EMISSION UNITS SPECIFIC CONDITIONS

- and 14.7 psi pressure. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department within 45 days of completing the initial compliance testing. [Design, Rule 62-210.200(PTE), F.A.C.]
- 6. <u>Unconfined Particulate Emissions</u>: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]
- 7. Plant Operation Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator shall notify the Broward County DPEP as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rule 62-4.130, F.A.C.]
- 8. Operating Procedures: Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in the operation of the installed equipment. [Rule 62-4.070(3), F.A.C.]
- 9. <u>Circumvention</u>: The owner or operator shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rules 62-210.650, F.A.C.]
- 10. Restricted Operation: No single combustion turbine shall operate more than 5,000 hours during any consecutive 12-month period. The three combustion turbines shall operate no more than an average of 3,500 hours per installed unit during any consecutive 12-month period. This amount shall be reduced by two hours for each fuel oil-fired hour in excess of an average of 250 hours per installed unit during any consecutive 12-month period. The three combustion turbines shall operate no more than an average of 1000 hours per installed unit on distillate oil during any consecutive 12-month period. [Applicant Request, Rules 62-210.200(PTE) and 62-212.400(BACT), F.A.C.]

#### CONTROL TECHNOLOGY

11. <u>DLN Technology</u>: Dry low NO<sub>X</sub> (DLN-2.6) combustors shall be installed on the combustion turbine to control NO<sub>X</sub> emissions when firing natural gas. [Design, Rules 62-4.070 and 62-212.400(BACT), F.A.C.]

# AIR CONSTRUCTION PERMIT PSD-FL-304 (0112515-001-AC) SECTION III. EMISSION UNITS SPECIFIC CONDITIONS

- 12. Wet Injection: A water injection (WI) system shall be installed to reduce NO<sub>X</sub> emissions when firing distillate oil. [Design, Rules 62-4.070 and 62-212.400(BACT), F.A.C.]
- 13. <u>Tuning</u>: The permittee shall provide manufacturer's emissions performance versus load diagrams for the DLN and wet injection systems upon completion of initial testing. DLN systems shall each be tuned upon initial operation to optimize emissions reductions consistent with normal operation and maintenance practices and shall be maintained to minimize NO<sub>X</sub> emissions and CO emissions, consistent with normal operation and maintenance practices. Operation of the DLN systems in the diffusion-firing mode shall be minimized when firing natural gas. [Rules 62-4.070 and 62-210.650, F.A.C.]

#### **EMISSION LIMITS**

14. <u>Summary</u>: Following is a summary of the emission limits and required technology.

POLLUTANT	CONTROL TECHNOLOGY	EMISSION LIMIT
PM/PM <sub>10</sub> , VE	Pipeline Natural Gas Good Combustion	11/17 lb/hr (Gas/Fuel Oil) 10 Percent Opacity (Gas or Fuel Oil)
VOC (not PSD)	Pipeline Natural Gas Good Combustion	2.8 ppmvd @15% O <sub>2</sub> (Gas or Fuel Oil)
СО	Pipeline Natural Gas Good Combustion	9 ppmvd @15% O <sub>2</sub> (Gas) 20 ppmvd @15% O <sub>2</sub> (Fuel Oil)
SO <sub>2</sub> and Sulfuric Acid Mist	Pipeline Natural Gas Low Sulfur Fuel Oil	2 gr S/100 ft <sup>3</sup> (in Gas) 0.05% S (in Fuel Oil)
NO <sub>X</sub>	Dry Low NO <sub>X</sub> for Natural Gas Wet Injection and Limited Fuel Oil Usage	9 ppmvd @15% O <sub>2</sub> (Gas) 42 ppmvd @15% O <sub>2</sub> (Fuel Oil)

{Note: Mass emissions limits are based on full load and a compressor inlet temperature of 30° F.}

#### 15. Nitrogen Oxides (NO<sub>X</sub>) Emissions

- a. Initial Performance Tests: When firing natural gas, NO<sub>X</sub> emissions shall not exceed 62 pounds per hour nor 9 ppmvd corrected to 15% oxygen. When firing distillate oil, NO<sub>X</sub> emissions shall not exceed 332 pounds per hour nor 42 ppmvd corrected to 15% oxygen. NO<sub>X</sub> emissions (measured as NO<sub>2</sub>) shall be based on a 3-hour test average as determined as determined by EPA Method 7E or 20 during initial performance tests.
- b. Continuous Compliance: When firing natural gas, NO<sub>X</sub> emissions from each combustion turbine shall not exceed 9 ppmvd corrected to 15% oxygen based on a 24-hour block average. When firing distillate oil, NO<sub>X</sub> emissions from each combustion turbine shall not exceed 42 ppmvd corrected to 15% oxygen based on a 24-hour block average. Continuous compliance shall be demonstrated by data collected from the continuous emission monitoring system (CEMS) specified in Condition No. 29 of this section.
- c. NO<sub>X</sub> Reduction Plan: When the average hours of oil firing exceed 500 hours per year per unit, the permittee shall develop a NO<sub>X</sub> reduction plan. This plan shall include a

testing protocol designed to establish the maximum water injection rate and the lowest  $NO_X$  emissions possible without adversely affecting the actual performance of the gas turbine. The testing protocol shall set a range of water injection rates and attempt to quantify the corresponding  $NO_X$  emissions for each rate, noting any performance problems. Based on the test results, the plan shall recommend a new  $NO_X$  emissions limiting standard and shall be submitted to the Department's Bureau of Air Regulation and Broward County DPEP for review. If the Department determines that a lower  $NO_X$  emissions standard is warranted for oil firing, this permit shall be revised.

[40CFR60 Subpart GG; Rules 62-204.800(7) and 62-212.400(BACT), F.A.C.]

- 16. <u>Carbon Monoxide (CO) Emissions</u>: When firing natural gas, CO emissions from each combustion turbine shall not exceed 31 pounds per hour nor 9 ppmvd corrected to 15% oxygen. When firing distillate oil, CO emissions from each combustion turbine shall not exceed 70 pounds per hour nor 20 ppmvd corrected to 15% oxygen. CO emissions shall be based on a 3-hour test average as determined initial and annual EPA Method 10 performance tests. [Rule 62-212.400(BACT), F.A.C.]
- 17. Volatile Organic Compounds (VOC) Emissions: When firing either natural gas or distillate oil, VOC emissions from each combustion turbine shall not exceed 6 pounds per hour nor 2.8 ppmvd corrected to 15% oxygen. VOC emissions shall be based on a 3-hour test average as determined by an initial EPA Method 25A performance test. EPA Method 18 may be conducted concurrently with EPA Method 25A to deduct the ethane and methane emissions from the measured VOC emissions. [Synthetic Minor Limit pursuant to Rule 62-212.400(BACT), F.A.C.]
- 18. Sulfur Dioxide (SO<sub>2</sub>) and Sulfuric Acid Mist (SAM) Emissions: SO<sub>2</sub> and SAM emissions shall be limited by firing pipeline-quality natural gas (≤ 2 grains of sulfur per 100 SCF of gas) as the primary fuel and No. 2 distillate oil (≤ 0.05 percent sulfur by weight) as a backup fuel for no more than 1000 hours per year per unit. Compliance with the fuel specification shall be determined by Condition No. 30 of this section. [40CFR60 Subpart GG; Rules 62-204.800(7) and 62-212.400(BACT), F.A.C.]
- 19. <u>Particulate Matter (PM/PM<sub>10</sub>)</u>: PM emissions shall not exceed 10 pounds per hour when firing natural gas and 17 pounds per hour when firing distillate oil based on a 3-hour test average as determined by an initial EPA Method 5 performance test. [Rule 62-212.400(BACT), F.A.C.]
- 20. <u>Visible Emissions</u>: When firing either natural gas or distillate oil, visible emissions shall not exceed 10% opacity, based on a 6-minute average as determined by EPA Method 9. Except as allowed by Condition No. 22 of this section, this standard applies during all operating conditions. [Rule 62-212.400(BACT), F.A.C.]

#### EXCESS EMISSIONS

- 21. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited. These emissions shall be included in the 24-hour compliance averages for NO<sub>X</sub>. [Rule 62-210.700, F.A.C.]
- 22. Excess Emissions Defined: During startup, shutdown, and documented unavoidable malfunction of the combined cycle gas turbine, the following permit conditions allow excess emissions or the exclusion of monitoring data for specifically defined periods of operation. These conditions apply only if operators employ the best operational practices to minimize the amount and duration of excess emissions during such incidents.
  - a. During startup and shutdown, visible emissions shall not exceed 10% opacity except for up to ten, 6-minute averaging periods during any calendar day, which shall not exceed 20% opacity. Data for each 6-minute averaging period shall be exclusive from other 6-minute averaging periods.
  - b. Excluding startup and shutdown, operation below 50% base load is prohibited.
  - c. In accordance with Condition No. 29 of this section, specific data collected by the CEM systems during startup, shutdown, malfunction, and tuning may be excluded from the NO<sub>X</sub> compliance averaging periods. If a CEM system reports emissions in excess of a 24-hour block emissions standard, the permittee shall notify the Broward County DPEP within one working day with a preliminary report of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident.
  - [G.E. Combined Cycle Startup Curves Data and Rule 62-210.700, F.A.C.]

#### **COMPLIANCE DETERMINATIONS**

- 23. <u>Stack Testing Facilities</u>: Stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C.
- 24. <u>Test Methods</u>: Required tests shall be performed in accordance with the following methods.

EPA Method	Description of Method and Comments					
5	Determination of Particulate Matter Emissions from Stationary Sources (I)					
	• For gas firing, the minimum sampling time shall be two hours per run and the minimum sampling volume shall be 60 dscf per run.					
	• For oil firing, the minimum sampling time shall be one hour per run and the minimum sampling volume shall be 30 dscf per run.					
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources (I, A)					
	CEM system RATA may be used for annual compliance demonstration.					

9	Visual Determination of the Opacity of Emissions from Stationary Sources (I, A)						
10	Determination of Carbon Monoxide Emissions from Stationary Sources (I, A)						
	The method shall be based on a continuous sampling train.						
	• The ascarite trap may be omitted or the interference trap of section 10.1 may be used in lieu of the silica gel and ascarite traps.						
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography (I)						
	<ul> <li>EPA Method 18 is an optional method that may be used concurrently with EPA Method 25A to deduct emissions of methane and ethane from the measured VOC emissions.</li> </ul>						
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Gas Turbines (I)						
	Initial test is only for NOx emissions						
	EPA Method 7E may be substituted for the initial NOx test						
25A	Determination of Volatile Organic Concentrations (I)						

The methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used for compliance testing unless prior written approval is received from the administrator of the Department's Emissions Monitoring Section in accordance with an alternate sampling procedure pursuant to 62-297.620, F.A.C.

[ 40 CFR 60, Appendix A; Rules 62-204.800 and 62-297.100, F.A.C.]

- 25. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, 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 test rate until a new test is conducted. Once the unit is 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. [Rule 62-297.310(2)(b), F.A.C.]
- 26. <u>Compliance Test Schedules</u>: Compliance with the allowable emissions standards shall be determined in accordance with the following schedule.
  - Initial: Initial (I) performance tests for each authorized fuel shall be conducted within 60 days after achieving at least 90% of the permitted capacity, but not later than 180 days of initial operation of each unit. The Department may require initial performance tests to be conducted after any modifications of air pollution control equipment (such as a change in or tuning of combustors) with a shakedown period not to exceed 100 days after restart.
  - Annual: Annual (A) performance tests shall be conducted during each federal fiscal year (October 1 September 30) on each unit as indicated.

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

#### 27. Compliance Determinations

- a. **CO**: Compliance with the CO emissions limits shall be demonstrated by conducting initial and annual tests for CO concurrently with NO<sub>X</sub>, as required. Annual compliance with the CO emissions limit may be conducted at less than capacity when testing is conducted concurrently with the annual RATA testing for the NO<sub>X</sub> CEM system.
- b. **VOC**: Compliance with the VOC emissions limits shall be demonstrated by conducting initial tests. Thereafter, the CO emissions limits shall serve as surrogate standards for VOC emissions limits. No annual testing for VOC emissions is required.
- c. NO<sub>X</sub>: Compliance with the NO<sub>X</sub> emissions limits shall be demonstrated by conducting initial performance tests, as required. Thereafter, compliance shall be demonstrated by data collected from the CEM systems, as specified in Condition No. 29 of this section.
- d. PM/PM<sub>10</sub>: Compliance with the particulate matter emissions limits shall be demonstrated by conducting initial, concurrent tests for PM and visible emissions. Thereafter, compliance with the visible emissions limits shall be demonstrated by conducting annual tests. In addition to the visible emissions limits, the CO emissions limits and fuel specifications shall serve as surrogate standards for particulate matter.
- e. SO<sub>2</sub> and Sulfuric Acid Mist: The fuel specifications of this section effectively limit the potential emissions of SO<sub>2</sub> and sulfuric acid mist. The permittee shall demonstrate compliance with the fuel sulfur limits in accordance with the analysis and record keeping requirements of Condition No. 30 of this section.

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

28. <u>Special Compliance Tests</u>: The DEP may request a special compliance test when, after investigation (such as complaints, increased visible emissions, or questionable maintenance of control equipment), there is reason to believe that any applicable emission standard is being violated. [Rule 62-297.310(7), F.A.C.]

#### **MONITORING REQUIREMENTS**

29. Continuous Emissions Monitoring System: The owner or operator shall install, calibrate, maintain, and operate a continuous emission monitoring (CEM) system in the exhaust stack of each gas turbine to measure and record the emissions of NO<sub>X</sub> from the gas turbines in a manner sufficient to demonstrate compliance with the CEM emission standards of this permit. The oxygen content or the carbon dioxide (CO<sub>2</sub>) content of the flue gas shall also be monitored at the location where NO<sub>X</sub> emissions are monitored to correct the measured NO<sub>X</sub> emissions rates to 15% oxygen. If a CO<sub>2</sub> monitor is installed, the oxygen content of the flue gas shall be calculated by the CEM system using F-factors that are appropriate for the fuel being fired. The CEM system shall be used to demonstrate compliance with the CEM emission standards for NO<sub>X</sub> specified in this permit.

- a. Data Collection. Compliance with the CEM emission standards for NO<sub>x</sub> shall be based on a 24-hour block average. The block average shall be calculated from 24 consecutive hourly average emission rate values. A new block average would be determined for the next 24-hour data set. Each hourly value shall be computed using at least one data point in each fifteen minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly value shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). The owner or operator shall use all valid measurements or data points collected during an hour to calculate the hourly averages. All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour. If the CEM system measures concentration on a wet basis, the CEM system shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, the owner or operator may develop through manual stack test measurements a curve of moisture contents in the exhaust gas versus load for each allowable fuel, and use these typical values in an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Final results of the CEM system shall be expressed as ppmvd, corrected to 15% oxygen.
- b. NO<sub>X</sub> Monitor Certification. The NOx monitors shall be certified and operated in accordance with the following requirements. The NOx monitor shall be certified pursuant to 40 CFR Part 75 and shall be operated and maintained in accordance with the applicable requirements of 40 CFR Part 75, Subparts B and C. For purposes of determining compliance with the CEM emission standards of this permit, missing data shall not be substituted. Instead, the 24-hour block average shall be determined using the remaining hourly data in the 24-hour block. Record keeping and reporting shall be conducted pursuant to 40 CFR Part 75, Subparts F and G. The RATA tests required for the NO<sub>X</sub> monitor shall be performed using EPA Method 7E, of Appendix A of 40 CFR 60. The NO<sub>X</sub> monitor shall be a dual range monitor. The span for the lower range shall not be greater than 25 ppm, and the span for the upper range shall not be greater than 120 ppm, as corrected to 15% O<sub>2</sub>.
- c. Oxygen (CO<sub>2</sub>) Monitor Certification. The oxygen (CO<sub>2</sub>) monitors shall be certified and operated in accordance with the following requirements. Oxygen (and CO<sub>2</sub>) monitors shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 3. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of section 7 shall be made each calendar quarter, and reported semi-annually to each Broward County DPEP. RATA tests required for the oxygen (and CO<sub>2</sub>) monitors shall be performed using EPA Method 3B in Appendix A of 40 CFR 60.

- d. Data Exclusion. Emissions data for NOx and oxygen content (or CO<sub>2</sub>) shall be recorded by the CEM system during episodes of startup, shutdown and malfunction. NO<sub>X</sub> emissions data recorded during these episodes may be excluded from the block average calculated to demonstrate compliance with the CEM emission standards as provided in this paragraph.
  - (1) Periods of data excluded for startup and shutdown shall not exceed two hours in any block 24-hour period.
  - (2) Periods of data excluded for a documented unavoidable malfunction shall not exceed two hours in any block 24-hour period. A "documented unavoidable malfunction" is a malfunction beyond the control of the operator that is documented within 24 hours of occurrence by contacting the Broward County DPEP by telephone or fax.

All periods of data excluded for any startup, shutdown or malfunction episode shall be consecutive for each episode. The permittee shall minimize the duration of data excluded for startup, shutdown and malfunctions, to the extent practicable. Data recorded during startup, shutdown or malfunction events shall not be excluded if the startup, shutdown or malfunction episode was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented. Best operational practices shall be used to minimize hourly emissions that occur during episodes of startup, shutdown and malfunction. Emissions of any quantity or duration that occur entirely or in part from poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited.

- e. Data Exclusion Reports. A summary report of duration of data excluded from the block average calculation, and all instances of missing data from monitor downtime, shall be reported semi-annually to the Broward County DPEP. This report shall be consolidated with the report required pursuant to 40 CFR 60.7. For purposes of reporting "excess emissions" pursuant to the requirements of 40 CFR 60.7, excess emissions shall also include the hourly emissions which are recorded by the CEM system during periods of data excluded for episodes of startup, shutdown and malfunction, as allowed above. The duration of excess emissions shall be the duration of the periods of data excluded for such episodes. Reports required by this paragraph and by 40 CFR 60.7 shall be submitted no less than semi-annually, including semi-annual periods in which no data is excluded or no instances of missing data occur.
- f. *Data Conversion*. Upon request from the Department, the CEM systems emission rates shall be corrected to ISO conditions to demonstrate compliance with the applicable standards of 40 CFR 60.332.
- g. Availability. All CEM systems shall operate continuously to monitor performance of the gas turbines except for monitor breakdowns, repairs, calibration checks, and zero

and span adjustments. Monitor availability shall not be less than 95% in any calendar quarter.

{Permitting Note: Compliance with these requirements will ensure compliance with the other applicable CEM system requirements such as: NSPS Subpart GG; Rule 62-297.520, F.A.C.; 40 CFR 60.7(a)(5) and 40 CFR 60.13; 40 CFR Part 51, Appendix P; 40 CFR 60, Appendix B - Performance Specifications; and 40 CFR 60, Appendix F - Quality Assurance Procedures.}

[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

- 30. <u>Fuel Sulfur Limits</u>: The permittee shall demonstrate compliance with the fuel sulfur limits specified in this permit by maintaining the following records of the sulfur contents.
  - a. Compliance with the fuel sulfur limit for natural gas shall be demonstrated by keeping reports obtained from the vendor indicating the sulfur content of the natural gas being supplied from the pipeline for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods D4084-82, D3246-81 or more recent versions.
  - b. Compliance with the fuel oil sulfur limit shall be demonstrated by taking a sample, analyzing the sample for fuel sulfur, and reporting the results to Broward County DPEP before initial startup. Sampling the fuel oil sulfur content shall be conducted in accordance with ASTM D4057-88, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, and one of the following test methods for sulfur in petroleum products: ASTM D129-91, ASTM D1552-90, ASTM D2622-94, or ASTM D4294-90. More recent versions of these methods may be used. For each subsequent fuel delivery, the permittee shall maintain a permanent file of the certified fuel sulfur analysis from the fuel vendor. At the request of the Department or Broward County DPEP, the permittee shall perform additional sampling and analysis for the fuel sulfur content.

The above methods shall be used to determine the fuel sulfur content in conjunction with the provisions of 40 CFR 75 Appendix D. [Rules 62-4.070(3) and 62-4.160(15), F.A.C.]

#### 31. Determination of Process Variables:

- a. The permittee shall operate and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. Equipment and/or instruments used to directly or indirectly determine such process variables, including devices such as belt scales, weigh hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C]

#### NOTIFICATION, REPORTING, AND RECORDKEEPING

- 32. <u>Test Notifications</u>: The Broward County DPEP shall be notified, in writing, at least 30 days prior to the initial performance tests and at least 15 days before annual compliance tests.
  - [Rule 62-297.310(7)(a)9., F.A.C.]
- 33. <u>NSPS Notifications</u>: All notifications and reports required by 40 CFR60, Subpart A shall be submitted to the Broward County DPEP.
- 34. <u>Annual Reports</u>: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Broward County DPEP by March 1st of each year. [Rule 62-210.370(2), F.A.C.]
- 35. <u>Test Reports</u>: The permittee shall submit test reports indicating the results of the required compliance tests to the Broward County DPEP no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C.
- 36. <u>Semi-Annual Reports</u>: The permittee shall submit semi-annual excess emission reports to the Broward County DPEP. In addition to the information required in 40 CFR 60.7 and 60.334, the report shall summarize the periods of data excluded due to startup, shutdown, and unavoidable malfunction. [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C., and 40 CFR 60.7(1998 version)]
- 37. NSPS Fuel Tank Records: NSPS Subpart Kb applies to any storage tank with a capacity greater than or equal to 10,300 gallons that is used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984. Tanks with a capacity greater than or equal to 40,000 gallons that store a liquid with a maximum true vapor pressure less than 3.5 kPa are exempt from the General Provisions (40 CFR 60, Subpart A) and from the provisions of NSPS Subpart Kb, except for the following record keeping requirement. The permittee shall keep readily accessible records showing the dimension of the storage vessel and the capacity of the storage tank. Records shall be retained for the life of the tank. [40 CFR 60.110b(a) and (c); 40 CFR 60.116b(a) and (b); Rule 62-204.800(7)(b)16., F.A.C.]
- 38. Records and Reports: All measurements, records, and other data required to be maintained by the permittee shall be recorded in a permanent form and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP representatives upon request. [Rule 62-213.440, F.A.C.]

Pompano Beach Energy Center FL-304) Three CTs and Ancillary Equipment County

Florida Gas Transmission Company Sulfur Report From Website

	Perry 36"		Perry 30"		Perry 24"		Brooker 24"		
		ppm	Grains/hcf	ppm	Grains/hcf	ppm	Grains/hcf	ppm	Grains/hcf
10/03/01	33	1.201	0.075	1.756	0.110	1.661	0.104	3.298	0.206
10/02/01	32	1.333	0.083	1.861	0.116	1.734	0.108	2.713	0.170
10/01/01	31	1.638	0.102	1.692	0.106	1.598	0.100	1.942	0.121
09/30/01	30	1.512	0.095	1.751	0.109	1.626	0.102	2.255	0.141
09/29/01	29	1.921	0.120	1.926	0.120	1.815	0.113	2.880	0.180
09/28/01	28	2.034	0.127	2.329	0.146	2.183	0.136	3.442	0.215
09/27/01	27	2.234	0.140	2.368	0.148	2.180	0.136	3.000	0.187
09/26/01	26	2.485	0.155	2.090	0.131	1.928	0.120	2.129	0.133
09/25/01	25	2.954	0.185	1.933	0.121	1.691	0.106	2.197	0.137
09/24/01	24	3.184	0.199	1.865	0.117	1.544	0.097	1.914	0.120
09/23/01	23	2.731	0.171	1.882	0.118	1.675	0.105	1.731	0.108
09/22/01	22	2.362	0.148	1.652	0.103	1.530	0.096	0.196	0.012
09/21/01	21	2.437	0.152	1.767	0.110	1.510	0.094	1.845	0.115
09/20/01	20	2.240	0.140	2.189	0.137	2.046	0.128	1.950	0.122
09/19/01	19	2.154	0.135	1.661	0.104	1.510	0.094	1.647	0.103
09/18/01	18	2.422	0.151	1.642	0.103	1.434	0.090	1.692	0.106
09/17/01	17	2.444	0.153	1.583	0.099	1.428	0.089	1.733	0.108
09/16/01	16	2.292	0.143	1.808	0.113	1.705	0.107	1.898	0.119
09/15/01	15	2.017	0.126	1.737	0.109	1.618	0.101	1.901	0.119
09/14/01	14	2.857	0.179	2.562	0.160	2.110	0.132	2.076	0.130
09/13/01	13	2.605	0.163	1.813	0.113	1.644	0.103	1.856	0.116
09/12/01	12	2.650	0.166	1.950	0.122	1.788	0.112	1.977	0.124
09/11/01	11	2.071	0.129	1.584	0.099	1.409	0.088	1.889	0.118
09/10/01	10	2.413	0.151	2.139	0.134	2.014	0.126	2.154	0.135
09/09/01	9	2.421	0.151	2.164	0.135	2.015	0.126	1.987	0.124
09/08/01	8	2.448	0.153	2.087	0.130	1.976	0.123	2.067	0.129
09/07/01	7	2.765	0.173	2.032	0.127	1.998	0.125	2.146	0.134
09/06/01	6	1.426	0.089	1.048	0.066	0.926	0.058	2.131	0.133
09/05/01	5	1.420	0.089	1.036	0.065	0.924	0.058	2.131	0.133
09/04/01	4	1.315	0.082	1.064	0.067	0.984	0.061	2.240	0.140
09/03/01	3	1.386	0.087	1.083	0.068	1.004	0.063	2.093	0.131
09/02/01	2	1.263	0.079	0.880	0.055	0.803	0.050	1.849	0.116
09/01/01	1	1.164	0.073	0.929	0.058	0.901	0.056	2.388	0.149

draft Permit for the nearby, planned ENRON Deerfield Beach Project, for which an Intent was issued in the interim period and considers conditions in recent Intents and Permits for projects in Southeast and Southwest Florida. Refer to Exhibit 1

# ISSUE 3 - STARTUP AND SHUTDOWN CONDITIONS

The draft Permit includes a condition (29d.) that excludes emission data during periods of startup, shutdown, and malfunction in accordance with Department Rules. The issue of startup and shutdown emissions is one of the items raised by EPA in its comments on the project and by the CITIES in their petitions. The Department plans to include an "Operational Standard" for startup and shutdown in the permit, if issued.

The draft operational standard and rule analysis are attached as Exhibit 2. This reflects consideration of comments received and rule analysis indicating that the Department has authority to control startup and shutdown emissions. This reflects the Department's recent Intents and Final Permits for several projects in Southeast and Southwest Florida.

The Department also plans to require a continuous emission monitoring system (CEMS) at one of the units to gather information regarding actual carbon monoxide (CO) emissions during startup of simple cycle combustion turbines. This was one of the possibilities suggested by EPA in its comments on the project. The data collected will allow the Department to set firm CO limits during startup and shutdown if feasible.

# **ISSUE 4 – EMERGENCY EQUIPMENT**

The draft Permit did not include the firewater protection system that typically requires a small on-site emergency diesel-fueled pump. The issue of emergency equipment is one of the items raised in the petitions from the CITIES. Normally, such equipment is exempt from

permitting Department rules. As part of a new major facility subject to permitting, the Department plans to include the equipment in the permit.

# ISSUE 5 - OTHER "MINOR SOURCES"

The draft Permit included diesel storage tanks, cooling towers that dissipate heat removed from warm ambient air prior to introduction into the unit compressors, and a small gas-fired fuel heater. An issue related to this equipment (described as "minor sources") is one of the items raised in the petitions from the CITIES.

As part of a new major facility subject to permitting, the Department included this equipment in the permit and, where appropriate, referenced the applicable New Source Performance Standards. The Department plans to add some minor details, as appropriate, in the permit that further clarify the purpose and capabilities of the mentioned units.

# ISSUE 6 – VOLATLE ORGANIC COMPOUNDS (VOC) EMISSION LIMIT

The draft Permit includes a VOC limit of 2.8 ppmvd. The issue of the VOC limit is one of the items in the petitions filed by the CITIES against the ENRON Project. The Department plans to limit the VOC emissions in the Permit, if issued, to 1.4 ppmvd. This reflects the emission proposed by ENRON in its original application. This will match the Department's draft Permit for the nearby, planned ENRON Deerfield Beach Project, for which an Intent was issued in the interim period.

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CASE NOS. 01-2682, 01-2683, 01-2684

#### INTERROGATORIES

Please state, in redlined format showing additions and deletions appropriately marked, all
changes that you propose to the language of the Permit as a result of "Issue 1" identified in
your Notice of Change.

GATENBERG TRAURIC, P.A.
1221 BRICKELL AVENUE MIAMI, FLORIDA 33131
305-579-9500 PAX 805-979-0717 www.gtlaw.com

MIAMI NEW YORK WASHINGTON, D.C. ATLANTA PHILADRIPHIA TYSONS CORNER CHICAGO BOSTON PHOENIX WILMINGTON LOS ANGELES DENVER SÃO PAULO FORT LAUDREDALE BOCA RATON WEST PALM BRACH ORLANDO TALLABASSEE

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CASE NOS. 01-2682, 01-2683, 01-2684

2. Please identify each fact on which you relied in changing your position with respect to "Issue 1" identified in your Notice of Change.

> GREENSERG TRAURIG, P.A. 1221 BRICKELL AVENUE MIAMI, FLORIDA \$3131 305-579-0500 Fax 305-579-6717 www.gtlaw.com

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CASE NOS. 01-2682, 01-2683, 01-2684

3. With respect to each fact identified in response to the preceding interrogatory, please identify each person known to you who has, claims to have or whom you believe to have knowledge of that fact.

305 579 0717;

GREENBERG TRAURIC, P.A. 1221 BRICKELL AVENUE MIAMI, FLORIDA 33131 305-579-0500 Pax 305-579-0717 www.grlaw.com

MIAMI NEW YORK WASHINGTON, D.C. ATLANTA PRILADELPHIA TYSONS CORNER CRICAGO BOSTON PROBRIX WILMINGTON LOS ANGELES DENVER São Paulo Fort Laudbreale Boca Raton West Palm Brace Orlando Tallamasser

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CASE NOS. 01-2682, 01-2683, 01-2684

4. Please identify each document on which you relied in changing your position with respect to "Issue 1" identified in your Notice of Change.

> GREENBERG TRAURIC, P.A. 1221 BRICKELL AVENUE MIAMI, FLORIDA 33131 305-379-0500 FAX 305-579-6717 www.gtlow.com

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CASE NOS. 01-2682, 01-2683, 01-2684

5. Please state, in redlined format showing additions and deletions appropriately marked, all changes that you propose to the language of the Permit as a result of "Issue 2" identified in your Notice of Change.

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CASE NOS. 01-2682, 01-2683, 01-2684

6. Please identify each fact on which you relied in changing your position with respect to "Issue 2" identified in your Notice of Change.

> GREENSERG TRAURIG, P.A. 1221 Baickell Avenur Mami, Florida 33131 305-579-0500 Fax 805-579-0717 www.grlaw.com

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CASE NOS. 01-2682, 01-2683, 01-2684

7. With respect to each fact identified in response to the preceding interrogatory, please identify each person known to you who has, claims to have or whom you believe to have knowledge of that fact.

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CASE NOS. 01-2682, 01-2683, 01-2684

Please identify each document on which you relied in changing your position with respect
to "Issue 2" identified in your Notice of Change.

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GERENBERG TRAUBIC, P.A.
1221 BRICKELL AVENUE MIAMI, PLORIDA 33131
505-579-0500 FAX 305-879-0717 www.gtlaw.com

MIAMI NEW YORK WASHINGTON, D.C. ATLANTA PHILADELPHIA TYSONS CORRER CRICAGO BOSTON PROENIX WILMINGTON LOS ANGELES DERVER
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CASE NOS. 01-2682, 01-2683, 01-2684

9. Please state, in redlined format showing additions and deletions appropriately marked, all changes that you propose to the language of the Permit as a result of "Issue 3" identified in your Notice of Change.

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CASE NOS. 01-2682, 01-2683, 01-2684

10. Please identify each fact on which you relied in changing your position with respect to "Issue 3" identified in your Notice of Change.

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11. With respect to each fact identified in response to the preceding interrogatory, please identify each person known to you who has, claims to have or whom you believe to have knowledge of that fact.

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CASE NOS. 01-2682, 01-2683, 01-2684

12. Please identify each document on which you relied in changing your position with respect to "Issue 3" identified in your Notice of Change.

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CASE NOS. 01-2682, 01-2683, 01-2684

13. Please state, in redlined format showing additions and deletions appropriately marked, all changes that you propose to the language of the Permit as a result of "Issue 4" identified in your Notice of Change.

305-579-0500 FAX 305-379-0717 www.gtlaw.cam

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CASE NOS. 01-2682, 01-2683, 01-2684

14. Please identify each fact on which you relied in changing your position with respect to "Issue 4" identified in your Notice of Change.

> GREENBERG TRAURIG, P.A. 1221 BRICKELL AVENUE MIAMI, FLORIDA 33137 205-579-0500 Fax 305-279-0717 www.gilaw.com

MIAMI NEW YORK WASHINGTON, D.C. ATLANTA PHILABELPHIA TYSONS CORNER CHICAGO BOSTON PROGREE WILMINGTON LOS ANGELES DERVER SÃO PAULO FORT LAUDERDALE BOGA RATON WIST PALM BEACH ORLANDO TALLARASSEE

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15. With respect to each fact identified in response to the preceding interrogatory, please identify each person known to you who has, claims to have or whom you believe to have knowledge of that fact.

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1221 BRICKELL AVENUE MIAMI, FLORIDA \$3131 305-579-0500 FAX 305-379-0717 www.gtlaw.com

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16. Please identify each document on which you relied in changing your position with respect to "Issue 4" identified in your Notice of Change.

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MIAM) NEW YORK WASHINGTON, D.C. ATLANTA PHILADELPHIA TYSONS CORNER CHICAGO BOSTON PROPRIE WILMINGTON LOS ANGELES DERVER São Paulo Fort Lauderdale Boca Raton West Palm Beach Orlando Tallamassre

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17. Please state, in redlined format showing additions and deletions appropriately marked, all changes that you propose to the language of the Permit as a result of "Issue 5" identified in your Notice of Change.

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18. Please identify each fact on which you relied in changing your position with respect to "Issue 5" identified in your Notice of Change.

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19. With respect to each fact identified in response to the preceding interrogatory, please identify each person known to you who has, claims to have or whom you believe to have knowledge of that fact.

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20. Please identify each document on which you relied in changing your position with respect to "Issue 5" identified in your Notice of Change.

> CREENBERG TRAURIC, P.A. 1221 BRICKELL AVENUE MIAMI, FLORIDA 22151 205-579-0508 PAX 261-279-0717 www.gliaw.com

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21. Please state, in redlined format showing additions and deletions appropriately marked, all changes that you propose to the language of the Permit as a result of "Issue 6" identified in your Notice of Change.

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GREENBERG TRAUBIG, P.A. 1221 BRICKELL AVENUE MIAMI, FLORIDA \$3131 305-579-0500 FAX 305-679-0717 www.gilaw.com

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23. With respect to each fact identified in response to the preceding interrogatory, please identify each person known to you who has, claims to have or whom you believe to have knowledge of that fact.

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GREENBERG TRAUBIC, P.A. 1221 BRICKELL AVENUE MIAMI, FLORIDA 38131 305-579-0500 FAX 305-279-0717 www.gilaw.com

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CASE NOS. 01-2682, 01-2683, 01-2684

24. Please identify each document on which you relied in changing your position with respect to "Issue 6" identified in your Notice of Change.

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25. Please state, in redlined format showing additions and deletions appropriately marked, allchanges that you propose to the language of the Permit other than the changes that you have specifically identified in response to the foregoing interrogatories as a result of "Issues" "1" through "6" identified in your Notice of Change.

> GRESNBERG TRAURIC, P.A. 1221 BRICKELL AVENUE MIAMI, FLORIDA 33131 305-579-0500 FAX 305-579-0717 www.grluw.com

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26. Please identify each fact on which you relied in changing your position with respect to any changes that you propose to the language of the Permit (other than the changes that you have specifically identified in response to the foregoing interrogatories as a result of "Issues" "1" through "6" identified in your Notice of Change).

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27. With respect to each fact identified in response to the preceding interrogatory, please identify each person known to you who has, claims to have or whom you believe to have knowledge of that fact.

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CASE NOS. 01-2682, 01-2683, 01-2684

28. Please identify each document on which you relied in changing your position with respect to any changes that you propose to the language of the Permit (other than the changes that you have specifically identified in response to the foregoing interrogatories as a result of "Issues" "1" through "6" identified in your Notice of Change).

> GREENBERG TRAURIO, P.A. 1221 BRICKELL AVENUE MIAKI, FLORIDA 33131 305-579-0500 PAX 305-279-0717 www.gtlaw.com

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29. Please identify all persons who participated in answering these interrogatories (whether by providing responsive information, by drafting responses, or by approving responses) and as to each such person, identify the particular interrogatory or interrogatories with respect to which he or she participated in answering and the nature of his or her participation.

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1221 BRICKELL AVENUE, MIAMI, FLORIDA \$3121 305-579-0560 FAX 305-279-0717 www.gtlaw.som

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CITY OF COCONUT CREEK

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# STATE OF FLORIDA DEPARTMENT OF ADMINISTRATIVE HEARINGS

CITY OF COCONUT CREEK, et al.,

Petitioners.

CONSOLIDATED

DOAH CASE Nos. 01-2682

2682

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, and POMPANO BEACH ENERGY CENTER, L.L.C., etc.,

Respondents.

01-2683 01-2684

# CITY OF COCONUT CREEK'S ANSWERS TO POMPANO BEACH ENERGY CENTER'S FIRST SET OF INTERROGATORIES

Petitioner, City of Coconut Creck, through undersigned counsel, hereby responds to Respondent, Pompano Beach Energy Center, L.L.C.'s, First Set of Interrogatories as follows:

#### I. GENERAL OBJECTIONS

The following are general objections to each and every interrogatory ("interrogatory"):

- 1. Petitioner objects to each interrogatory to the extent, if at all, it seeks documents representing communications between Petitioner's counsel and Petitioner. Petitioner will not produce any documents which are privileged from disclosure based on the attorney-client privilege.
- 2. Petitioner objects to each interrogatory to the extent, if at all, it seeks documents representing attorney work product. Petitioner will not produce any documents which are privileged from disclosure based on the work product privilege.
- 3. Petitioner objects to producing any document to the extent that it requires the Petitioner to gather or obtain information or documents already in the possession of or equally available to Respondent.

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- 4. By producing documents pursuant to any interrogatory, Petitioner does not: (a) admit that such documents (or related documents) are properly discoverable, (b) waive any objection which might otherwise be made to such documents, or (c) admit that any such documents are admissible at trial.
- 5. Petitioner reserves the right to supplement, amend or correct all or any part of these responses provided herein.

#### II. SPECIFIC RESPONSES TO EACH INTERROGATORY

1. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any of the facts alleged in the Petition and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Petitioner objects to this request as the request is overly broad and unduly burdensome. Subject to the foregoing objections, those persons currently known to City are:

GAI Consultants, Inc. - general environmental assessment of PBEC

O'Brien & Gere Engineers, Inc. - general cumulative impact analysis of PBEC

Environmental Management - Emission estimates; BACT limits; air pollution control technology cost and design; health risk assessments; permitting; air monitoring; source testing; compliance determinations; BACT and MACT analyses; cost-effectiveness analyses; assessment, measurement, estimation, modeling, and control of diesel fumes; water conservation systems including dry cooling and zero discharge systems.

Egan Environmental Inc. - dispersion modeling; emission estimates; permitting, air quality regulations; Clean Air Act compliance strategies; air toxics; hazard assessment; health risk assessments.

Engelhard - cost, design, and performance of SCR and oxidation catalysts on simple cycle gas turbines and other combustion sources.

Peerless - cost, design, and performance of SCR on simple cycle gas turbines and other combustion sources.

Mitsubishi - cost, design, and performance of SCR and oxidation catalysts on simple cycle gas turbines and other combustion sources.

Hitachi - cost, design, and performance of SCR and oxidation catalysts on simple cycle gas turbines and other combustion sources.

Cormetech - cost, design, and performance of SCR and oxidation catalysts on simple cycle gas turbines and other combustion sources.

HUG/Miratech - cost, design, and performance of SCR and oxidation catalysts on simple cycle gas turbines and other combustion sources.

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Steuler - cost, design, and performance of SCR and oxidation catalysts on simple cycle gas turbines and other combustion sources.

Alstom power - cost, design, and performance of SCONOx, SCR, and oxidation catalysts on simple cycle gas turbines and other combustion sources.

Goal Line Environmental Technologies - cost, design, and performance of SCONOx and oxidation catalysts on simple cycle gas turbines and other combustion sources.

Arnold Silverman • Emission estimates; BACT limits; air pollution control technology cost and design; health risk assessments; permitting; air monitoring; source testing; compliance determinations; BACT and MACT analyses; cost-effectiveness analyses; assessment, measurement, estimation, modeling, and control of diesel fumes; water conservation systems including dry cooling and zero discharge systems.

Catalytica - cost, design, and performance of XONON on simple cycle gas turbines and other combustion sources.

California Air Resources Board - Emissions and BACT levels for gas turbines and other combustion sources; assessment, measurement, estimation, modeling, and control of diesel fumes.

Air pollution control districts and agencies in California, Washington, Oregon, Arizona, Connecticut, Massachusetts, New York, and New Jersey, among others - Emissions and BACT levels for gas turbines and other combustion sources.

United States Environmental Protection Agency - limits on diesel fuel; emissions during start-up and shut-down; BACT; hours restriction.

Sheila N. Rose, Development Services Director, City of Coconut Creek – geographical locations of power plant in relation to Everglades National Park, Loxahatchee National Wildlife Refuge and other environmentally sensitive lands

Susan Hess, Director of Community Development, City of Coral Springs - geographical locations of power plant in relation to Everglades National Park, Loxahatchee National Wildlife Refuge and other environmentally sensitive lands

Various individuals at the Department of Environmental Protection and the Environmental Protection Agency – aware of all issues concerning this matter.

2. Please describe, by category and custodian, all documents, data compilations, and tangible things in your possession, custody or control that are relevant to any of the allegations contained in the Petition.

Objection. Interrogatory requests work product information.

3. Please identify each person known to you, your agents, or your attorneys, who has knowledge about, or possession, custody or control of, any model, plat, map, drawing, motion picture, videotape, or photograph pertaining to any fact or issue involved in this controversy; and describe as to each, what item such person has, the name and address of the person who took or prepared it, and the date it was taken or prepared.

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This interrogatory is overly broad and burdensome. However, without waiving any of City's objections, City's response to interrogatory number (1) identifies those persons currently known to City to have knowledge about, or possession of subject items.

4. Please identify with particularity each and every fact upon which you rely in support of your contention that the DEP should not issue the Permit or should amend the Permit.

Without waiving any of City's objections, the facts currently known to City were alleged in City's First and Second Amended Petition and are contained in the documents provided in response to PBEC's First Request for Production of Documents. City further relies on innumerable public documents which are at the Florida Department of Environmental Protection, the Environmental Protection Agency and other public agencies.

5. For each fact identified in response to the preceding interrogatory, please identify each person known to you, your agents, or your attorneys, who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to the fact and, as to each such persons, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, this interrogatory is answered in City's response to interrogatory number (1) and (3) above.

6. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to your contention, as alleged in paragraph 12 of your Petition, that "the proposed Plant has failed to use best available control technology" and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, this interrogatory is answered in interrogatory number (1) and (3) above.

7. Please identify with particularity each and every fact on which you rely in support of your contention, as alleged in paragraph 12 of your Petition, that "the proposed Plant has failed to use best available control technology."

Subject to the foregoing objections, the facts currently known to City are provided in the First and Second Amended Petitions and other information provided in City's responses to PBEC's First Request for Production of Documents.

8. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to your claim, as alleged in paragraph 31 of your Petition, that "DEP's Intent to Issue Air Construction Permit was based on erroneous information concerning the proposed power plant's distance to environmentally sensitive lands" and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Sheila N. Rose, Development Services Director, City of Coconut Creek. Based on review of maps and computer related documents. Also various personnel at Everglades National Park and Loxahatchee National Wildlife Refuge.

Susan Hess, Director of Community Development, City of Coral Springs

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9. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in "disput[ing] the DEP's best available control technology determinations contained in Appendix BD," as alleged in pages 6-13 of your Petition, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3) above.

10. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 15 of your Petition, that

The distance between the proposed Plant and environmentally sensitive lands including Loxahatchee National Wildlife Refuge and Conservation No. 2 of the Florida Everglades as represented by ENRON is inaccurate and disputable by City. As discussed above, these areas are much closer to the Plant as [sic] represented by ENRON and relied upon by DEP.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Sheila N. Rose, Development Services Director, City of Coconut Creek

Susan Hess, Director of Community Development, City of Coral Springs

11. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 15 of your Petition, that

The DEP's BACT determinations do not comply with federal or state law adopted pursuant to the Federal Clean Air Act and its amendments.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

12. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 15 of your Petition, that

The DEP has failed to enforce BACT as mandated by Rule 62-210, F.A.C.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

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13. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 15 of your Petition, that

The DEP has failed to give due consideration to the emissions limiting standards or BACT determination of other states as required under Rule 62-212, F.A.C. In addition, the DEP has failed to identify the maximum degree of reduction in violation of the Florida Administrative Code.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

14. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 15 of your Petition, that

The draft permit is deficient as it contains no BACT determinations, emission limits, or monitoring requirements for the 0.6 million distillate storage tank, gas-fired fuel heater and four wet mechanical draft cooling towers even though they emit criteria and hazardous air pollutants. These sources fall under BACT and must be regulated by permit pursuant to Rule 62-210.200(112), F.A.C.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

15. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 16 of your Petition, that

The Draft Permit is deficient in that it does not identify and provide BACT analysis for other emission sources at the facility such as emergency fire water pumps, emergency generators, which should be subject to a formal BACT analysis pursuant to 62-210.200(112), F.A.C.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

16. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 16 of your Petition, that

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The effects of diesel exhaust as a result of the combustion of distillate in the turbines was not considered as a collateral environmental impact in a BACT analysis contrary to Rule 62-210, F.A.C. and federal guidance.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

17. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 16 of your Petition, that

The DEP has failed to consider the impact of its BACT decisions on the City's economic and social impacts and has failed to consider the collateral environmental impacts of its BACT decisions pursuant to 62-212.400(6)(a)4, F.A.C., and consistent with EPA guidance.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

18. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 16 of your Petition, that

The use of distillate fuel without the DEP's performance of analyses, evaluating alternatives or considering the substantial health impacts that may result from this choice in a densely populated area is inappropriate and not consistent with Rule 62-212.400(6)(a), F.A.C.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

19. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 16 of your Petition, that

Sulfur Distillate is not BACT for SO<sub>2</sub> and Sulfuric Acid Mist when firing oil. At the very least, if distillate is retained, diesel exhaust emissions should be controlled and 30 ppmw diesel fuel should immediately be required and 15 ppmw diesel should be required when available, but no later than June, 2006.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

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Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

20. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 16 of your Petition, that

The DEP's failure to limit start-up and shut-down is inconsistent with the Clean Air Act and does not comply with BACT and MACT.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

21. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 17 of your Petition, that

The proposed Permit contains inadequate monitoring requirements and, therefore, is not practically enforceable. Because they are not practically enforceable, the monitoring requirements do not quality as legitimate restrictions on emissions.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

22. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 17 of your Petition, that

The Permit is inconsistent with federal case law as it does not require continuous compliance with the PM10 emission limits.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

23. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 17 of your Petition, that

The proposed air Permit does not comply with the Pollution Prevention Plan of Broward County as required pursuant to Rule 62-210.300(4)(d), F.A.C.

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and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

- 24. Have you relied on the opinions of any expert consultants or witnesses in asserting any of the allegations in your Petition? If so, then please state as to each such consultant or witness that person's name and business address, the person's qualifications as an expert, the allegations of the Petition with respect to which you relied on the person's opinions, the opinions asserted by the person on which you relied in asserting the Petition, and a summary of the grounds for each opinion.
- Yes. City relied on the expert opinions of the persons identified in City's response to interrogatory number (1) and (3) in asserting the allegations in paragraphs 9 through 13, 30, 31 and such facts as are alleged on pages 6 through 18.
- 25. Do you intend to call any expert witnesses at the trial of this case? If so, please state as to each such witness the name and business address of the witness, the witness's qualifications as an expert, the subject matter on which the witness is expected to testify, the substance of the facts and opinions to which the witness is expected to testify, and a summary of the grounds for each opinion.

Subject to the foregoing objections, the City currently expects to call some or all of the persons City identified in City's response to interrogatory number (1) as witnesses to discuss the subject matter articulated in interrogatory (1) and in the allegations of the Second Amended Petition.

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STATE OF FLORIDA ) 88: COUNTY OF BROWARD

THE FOREGOING INSTRUMENT was acknowledged before me this 9th day of November, 2001, by Sam Irvin, who is known to me and who did take an oath, deposes and says that he has read the foregoing answers to interrogatories, and that they are true and correct to the best of his knowledge, information and belief.

NOTARY PUBLIC

My Commission Expires:

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# STATE OF FLORIDA DEPARTMENT OF ADMINISTRATIVE HEARINGS NOV 26 PH 1: 32

CITY OF CORAL SPRINGS, et al.,

Petitioners.

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STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, and POMPANO BEACH ENERGY CENTER, L.L.C., etc.,

Respondents.

DIVISION OF ADMINISTRATIVE MEARINGS

CONSOLIDATED

DOAH CASE Nos.

01-2683

01-2684

# POMPANO BEACH ENERGY CENTER'S **OBJECTIONS AND RESPONSES TO** FIRST SET OF INTERROGATORIES SERVED BY CITY OF CORAL SPRINGS

Respondent, Pompano Beach Energy Center, L.L.C., pursuant to Fla.R.Civ.P. 1.340 and F.A.C. 28-106.206, respectfully objects and responds as follows to the interrogatories propounded by the City of Coral Springs.

Respectfully submitted,

Greenberg Traurig, P.A. 1221 Brickell Avenue Miami, Florida 33131 Telephone: (305) 579-0500

Facsimile: (305) 579-0723

Kerri L. Barsh

Florida Bar No. 443840

C. Ryan Reetz

Florida Bar No. 934062

Paul C. Savage

Florida Bar No. 088587

Counsel for Pompano Beach Energy, L.L.C.

GREENBERG TRAURIG, P.A.

1221 BRICKELL AVENUE MIAMI, FLORIDA 33131

305-579-0500 Fax 305-579-0717 www.gtlaw.com

# **CERTIFICATE OF SERVICE**

I certify that copies of the foregoing document and of the referenced interrogatories were served by U.S. Mail on November 16, 2001 to:

Martha L. Nebelsiek, Esq.
Department of Environmental Protection
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Eugene M. Steinfield, Esq. City of Margate 5790 Margate Boulevard Margate, Florida 33063

Nancy A. Cousins, Esq. City of Coconut Creek 4800 West Copans Road Coconut Creek, Florida 33063

Kerry L. Ezrol, Esq. Goren, Cherof, Doody & Ezrol, P.A. Suite 200 3099 E. Commercial Boulevard Ft. Lauderdale, FL 33308 John Hearn, Esq. City of Coral Springs 9551 West Sample Road Coral Springs, Florida 33065

Paul S. Stuart, Esq. City of Coconut Creek 4900 W. Copans Rd. Coconut Creek, FL 33062

Maite Azcoitia, Esq.
Jose Raul Gonzalez, Esq.
Broward County Attorney's Office
Governmental Center, Suite 423
115 S. Andrews Avenue
Fort Lauderdale, Florida 33301

C. Rvan Reetz

#### **GENERAL OBJECTIONS**

- A. Energy Center objects to the interrogatories to the extent that they purport to impose duties beyond those imposed by the Florida Rules of Civil Procedure and F.A.C. 28-106.206.
- B. Energy Center objects to the interrogatories to the extent that they purport to require disclosure of information subject to the attorney-client privilege, the work product privilege, or any other applicable privilege.

# RESPONSES TO INDIVIDUAL INTERROGATORIES

 Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any of the facts alleged in the Petition and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to the interrogatory as overbroad, unduly burdensome, and as vague, ambiguous, and misleading with respect to the phrase "facts alleged in the Petition." The Petition is vaguely drafted and contains numerous contentions which are either factually incorrect or are argument. Moreover, a number of the so-called "facts alleged in the Petition," such as the statement that the petitioner is a Florida municipality, the DEP is the permitting authority in this proceeding, or the location of Energy Center's offices, are undisputed and are the subject of such widespread knowledge as to render any literal response virtually infinite in length. Subject to and without waiver its objections, Energy Center responds as follows: for persons with knowledge of petitioner's allegations, Energy Center refers petitioner to petitioner's response to Energy Center's First Set of Interrogatories, and to any subsequent response that may be compelled by the ALJ or otherwise made by the

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petitioner. In addition, Energy Center identifies the following persons who have substantial knowledge concerning, or relevant to, the basis for, and propriety of, Energy Center's application for the Permit:

#### **David Kellermeyer**

Enron North America
1400 Smith Street
Houston, TX 77002-7361
(knowledge includes, without limitation, general knowledge of permit application, knowledge concerning BACT, PSD permitting, applicable regulations)

#### Scott Osbourn

ENSR Inc.

150 2nd Avenue N., Suite 1500

St. Petersberg, FL 33701

(knowledge includes, without limitation, knowledge concerning PSD permitting, applicable regulations, BACT, pollution prevention plan for Broward County Code Section 27-178)

#### Ben Jacoby

Enron North America
1400 Smith Street
Houston, TX 77002-7361
(knowledge includes, without limitation, general knowledge of permit application)

#### Steven Krimsky

Enron North America
1400 Smith Street
Houston, TX 77002-7361
(knowledge includes, without limitation, general knowledge of permit application)

#### **Bob Iwanchuk**

ENSR Inc.

2 Technology Park Drive

Westford, MA 01886

(knowledge includes, without limitation, general knowledge of permit application)

#### Mike Griffin

ENSR Inc.

2 Technology Park Drive

Westford, MA 01886

(knowledge includes, without limitation, knowledge concerning emission estimation and estimates, BACT)

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#### **Bob Fraser**

ENSR Inc.

2 Technology Park Drive

Westford, MA 01886

(knowledge includes, without limitation, knowledge of BACT, availability of SCR, XONON, SCONOx)

#### **Brian Stormwind**

ENSR Inc.

2 Technology Park Drive

Westford, MA 01886

(knowledge includes, without limitation, knowledge of air quality impact assessments, prevailing wind direction)

#### **Bob Paine**

ENSR Inc.

2 Technology Park Drive

Westford, MA 01886

(knowledge includes, without limitation, knowledge of air quality impact assessments)

#### Dave Heinold

ENSR Inc.

2 Technology Park Drive

Westford, MA 01886

(knowledge includes, without limitation, knowledge of PSD Class I air impact analysis and protocol document)

#### Kimberly A. Brown

Kimberly A. Brown & Associates

2641 N. Ocean Boulevard, Ste. 905

Ft. Lauderdale, FL 33308

(knowledge includes, without limitation, knowledge concerning certain regulatory requirements, pollution prevention plan for Broward County Code Section 27-178)

#### Gary McCutchen

RTP Environmental Associates, Inc.

304-A West Millbrook Road

Raleigh, NC 27609

(knowledge includes, without limitation, knowledge concerning PSD permitting, applicable regulations, BACT)

## Douglas A. Leach

Enron Global Markets

1400 Smith Street

Houston, TX 77002-7361

(knowledge includes, without limitation, knowledge concerning availability and price of ultralow sulfur distillate fuel oil)

#### Alvaro Linero

New Source Review Section
Florida DEP
2600 Blair Stone Road
Tallahassee, FL 32399-2400
(knowledge includes, without limitation, knowledge concerning DEP's review of application)

#### Deborah Galbraith

Florida DEP
2600 Blair Stone Road
Tallahassee, FL 32399-2400
(knowledge includes, without limitation, knowledge concerning DEP's review of application)

#### Jarrett Mack

last-known address: Broward County DPEP 218 SW 1<sup>st</sup> Avenue Ft. Lauderdale, FL 33301 954-519-1220 2. Please identify each person known to you, your agents, or your attorneys, who has knowledge about, or possession, custody or control of, any model, plat, map, drawing, motion picture, videotape, or photograph pertaining to any fact or issue involved in this controversy; and describe as to each, what item such person has, the name and address of the person who took or prepared it, and the date it was taken or prepared.

Energy Center objects to the interrogatory, as applied to the facts of this case, as vague and ambiguous with respect to the phrase "pertaining to any fact or issue involved in this controversy," and, depending upon the intended construction, as overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Due to the vagueness of the Petition, and petitioners' failure to provide proper responses to the discovery propounded by Energy Center, Energy Center is unable to determine which disputed "fact[s] or issue[s]" are actually "involved in this controversy." Subject to and without waiver of its objections, Energy Center states that (1) the DEP file concerning the permit, which is in DEP's possession, contains documents which may be within the scope of this interrogatory, and (2) Energy Center will produce copies of documents within the scope of this interrogatory to the extent that Energy Center determines that it is likely to rely upon such documents at trial.

3. Please identify with particularity each and every fact upon which you rely in support of your contention that the DEP should issue the Permit.

Energy Center objects to the interrogatory as overbroad, unduly burdensome, and as vague, ambiguous, and misleading with respect to the phrase "each and every fact upon which you rely in support of your contention that the DEP should issue the permit." There are a potentially infinite number of facts on which Energy Center may ultimately need to rely in support of its position at trial, including basic science and engineering facts, and it is wholly unclear from the Petition and from petitioner's insufficient response to Energy Center's First Set of Interrogatories which contentions the petitioner seriously intends to advance at trial, which will affect the proof that must be submitted by Energy Center. Subject to and without waiver of its objections, Energy Center responds that its application for the Permit, including all exhibits, supplements and other materials in the DEP file, constitutes the principal basis on which it seeks issuance of the Permit.

4. For each fact identified in response to the preceding interrogatory, please identify each person known to you, your agents, or your attorneys, who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to that fact and, as to each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 4 on the same grounds as interrogatory no. 3, which is incorporated into interrogatory no. 4. As with interrogatory no. 3, the interrogatory seeks to elicit potentially unbounded information concerning a potentially infinite number of facts. Subject to and without waiver of its objections, Energy Center states that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit (as described in Energy Center's response to interrogatory no. 1).

5. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to your contention that the proposed Plant has or will use best available control technology and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

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Energy Center objects to interrogatory no. 5 as duplicative of the preceding interrogatories, and further objects on the grounds identified in response to the preceding interrogatories. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

6. Please identify with particularity each and every fact on which you rely in support of your contention that the proposed Plant has or will use best available control technology.

Energy Center objects to interrogatory no. 6 as duplicative of the preceding interrogatories, and further objects on the grounds identified in response to the preceding interrogatories. Subject to, and without waiver of, its objections, Energy Center refers petitioner to its response to interrogatory no. 3.

7. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to the claim, as articulated on page TE-2 of the Technical Evaluation and Preliminary Determination that the proposed power

plant's distance to Everglades National Park is approximately 60 kilometers northnortheast of the Everglades National Park and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to the interrogatory as improper, abusive, harassing, overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. The location of Everglades National Park is a matter of general public knowledge, and the proposed plant's location and page TE-2 are both matters of public record.

8. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in supporting the DEP's best available control technology determinations contained in Appendix BD and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 8 as duplicative of the preceding interrogatories, and further objects on the grounds identified in response to the preceding interrogatories. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (which implicitly includes the propriety of the DEP's initial determinations) (as described in Energy Center's response to interrogatory no. 1).

9. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP's BACT determinations do comply with federal or state law adopted pursuant to the Federal Clean Air Act and its amendments, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 9 as duplicative of the preceding interrogatories, and further objects on the grounds identified in response to the preceding interrogatories. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (which implicitly includes the propriety of the DEP's initial determinations) (as described in Energy Center's response to interrogatory no. 1).

10. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP enforced BACT as mandated by Rule 62-210, F.A.C. and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 10 as duplicative of the preceding interrogatories, and further objects on the grounds identified in response to the preceding interrogatories. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (which implicitly includes the propriety of the DEP's initial determinations) (as described in Energy Center's response to interrogatory no. 1).

\$1. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP has given due consideration to the emissions limiting standards or BACT determination of other states as required under Rule 62-212, F.A.C. In addition, the DEP has identified the maximum degree of reduction in accordance with Florida Administrative Code, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 11 as unintelligible. To the extent that the interrogatory can be rewritten to make it intelligible, Energy Center objects to the interrogatory as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Moreover, Energy Center objects that the interrogatory mischaracterizes Energy Center's present position and is premature in seeking to elicit Energy Center's ultimate response to petitioner's claim of "lack of due consideration," inasmuch as petitioner's failure to identify, with any particularity, the supposed "emissions limiting standards or BACT determination of other states" in either its Petition or its discovery responses has made it impossible for Energy Center, thus far, to understand the substance of petitioner's allegation (Petition, p. 15) that "due consideration" was not given and, accordingly, to respond thereto. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1). Energy Center further responds that the various personnel at DEP are presumably aware of the matters relied upon by DEP, and that the petitioners in this consolidated proceeding are aware of the extent to which they chose to submit any information to DEP in support of their respective positions against issuance of the Permit.

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12. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the Permit is not deficient as it contains BACT determinations, emission limits, or monitoring requirements for the 0.6 million distillate storage tank, gas-fired fuel heater and four wet mechanical draft cooling towers, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 12 as unintelligible. To the extent that the interrogatory can be rewritten to make it intelligible, Energy Center objects to the interrogatory as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Moreover, Energy Center objects that the interrogatory mischaracterizes Energy Center's present position and is premature in seeking to elicit Energy Center's ultimate response to petitioner's claims. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

13. Please identify each person who has, claims to have or whom you believe may knowledge or discoverable information pertaining to any fact on which you rely contending that the Permit is not deficient in that it does identify and provide BACT analysis for other emission sources at the facility such as emergency fire water pumps, emergency generators, which should be subject to a formal BACT analysis pursuant to 62-210.200(112), F.A.C., and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 13 as unintelligible. To the extent that the interrogatory can be rewritten to make it intelligible, Energy Center objects to the interrogatory as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Moreover, Energy Center objects that the interrogatory mischaracterizes Energy Center's present position and is premature in seeking to elicit Energy Center's ultimate response to petitioner's claims. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

14. Please identify each person who has, claims to have or whom you, believe may have knowledge or discoverable information pertaining to any fact on which you rely contending that the effects of diesel exhaust as a result of the combustion of distillate in the turbines was considered as a collateral environmental impact in a BACT-analysis pursuant to Rule 62-210, F.A.C. and federal guidance, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 14 as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Moreover, Energy Center objects that the interrogatory mischaracterizes Energy Center's present position (and the law) and is premature in seeking to elicit Energy Center's ultimate response to petitioner's claims. Energy Center further objects that the interrogatory mischaracterizes the facility's emissions due to combustion of distillate by terming it "diesel exhaust." Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

15. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP has considered the impact of its BACT decisions, considered the collateral environmental impacts of its BACT decisions pursuant to 62-212.400(6)(a)4, F.A.C., and consistent with EPA guidance, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 15 as unintelligible. To the extent that the interrogatory can be rewritten to make it intelligible, Energy Center objects to the interrogatory as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Moreover, Energy Center objects that the interrogatory mischaracterizes Energy Center's present position and is premature in seeking to elicit Energy Center's ultimate response to petitioner's claims. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

16. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the use of distillate fuel without the DEP's performance of analyses, evaluating alternatives or considering the substantial health impacts that may result from this choice in a densely populated area is appropriate and consistent with Rule 62-212.400(6)(a), F.A.C., and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 16 as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Moreover, Energy Center objects that the interrogatory mischaracterizes Energy Center's present position (and the law, and the facts) and is premature in seeking to elicit Energy Center's ultimate response to petitioner's claims. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

17. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that Sulfur Distillate is BACT for So<sub>2</sub> and Sulfuric Acid Mist when firing oil, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 17 as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Moreover, Energy Center objects that the interrogatory mischaracterizes Energy Center's position. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

18. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP's failure to limit start-up and shut-down is consistent with the Clean Air Act and does comply with BACT and MACT, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 18 as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Moreover, Energy Center objects that the interrogatory mischaracterizes Energy Center's position, as well as the relevant facts. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

19. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information as to the Air Quality Monitoring studies and tests done on the proposed power plant site and, for each person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to the interrogatory as vague and ambiguous, and depending upon the intended construction, as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence, because, as Energy Center understands the interrogatory, "Air Quality Monitoring studies and tests" were not required as part of the permitting process.

20. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the proposed Permit contains adequate monitoring requirements and, therefore, is practically enforceable, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 20 as duplicative of the preceding interrogatories, and further objects on the grounds identified in response to the preceding interrogatories. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the propriety of monitoring under the Permit (as described in Energy Center's response to interrogatory no. 1).

21. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the Permit is consistent with federal case law as to compliance with the PM10 emission limits, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 21 as vague, ambiguous, misleading, and not reasonably calculated to lead to the discovery of relevant, admissible evidence, all with respect to the phrase "consistent with federal case law as to compliance with the PM10 emission limits." Energy Center further objects that the interrogatory mischaracterizes Energy Center's present position and is premature in seeking to elicit Energy Center's ultimate response to petitioner's claims (which have not been adequately developed in either the Petition or in petitioner's response to the discovery propounded by Energy Center). Depending upon the construction given to the interrogatory, Energy Center further objects to the interrogatory as overbroad, unduly burdensome, and/or duplicative of the previous interrogatories. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

22. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the proposed air Permit does comply with the Pollution Prevention Plan of Broward County as required pursuant to Rule G2-210.300(4)(d), F.A.C., and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 22 as vague, ambiguous, overbroad, and not reasonable calculated to lead to the discovery of relevant, admissible evidence. Subject to, and without waiver of, its objections, Energy Center states that the persons identified in response to interrogatory no. 1 – particularly Scott Osbourn and Kimberly Brown – have relevant knowledge (as described in Energy Center's response to interrogatory no. 1).

23. Have you relied on the opinions of any expert consultants or witnesses in connection with the allegations of the Petition. If so, then please state as to each such consultant or witness that person's name and business address, the person's qualifications as an expert, the allegations of the Petition with respect to which you relied on the person's opinions, the opinions asserted by the person on which you relied, and a summary of the grounds for the each opinion.

Energy Center objects to the interrogatory as vague and ambiguous with respect to the phrase "in connection with the allegations of the Petition," and, depending upon the intended construction, as overbroad, unduly burdensome, not reasonably calculated to lead to the discovery of relevant, admissible evidence, and intentionally violative of the attorney-client privilege, the work-product doctrine and any other applicable privileges. Subject to and without waiver of the foregoing objections, Energy Center states that it did not draft the Petition, and therefore did not rely on any experts or consultants in drafting the Petition.

24. Do you intend to call any expert witnesses at the trial of this case? If so, please state as to each such witness the name and business address of the witness, the witness's qualifications as an expert, the subject matter on which the witness is expected to testify, the substance of the facts and opinions to which the witness is expected to testify, and a summary of the grounds for each opinion.

Energy Center anticipates that it will likely call one or more expert witnesses at the trial of this case. To date, the determination of which experts to call has not been made, and petitioner has delayed and hindered that process by failing to identify its contentions with specificity in the Petition and by failing to provide proper responses to the discovery propounded by Energy Center. Energy Center will identify its expert witnesses as required by the Order of Pre-Hearing Instructions, subject to any amendments, and subject to any other agreement among counsel for the identification of experts.

Number	Disputed Issue	Comments	Follow Up/Testimony
28	Whether an environmental impact statement/evaluation should have been conducted by ENRON prior to the Notice of Intent to Issue Air Construction Permit.	NEPA is not triggered by FEDP issuing a PSD permit (i.e., this is not a Federal Action)	Can we get stipulation that this is not in dispute?
29	Whether the assessment of environmental impacts associated with industrial-related activities, including those on ambient air quality, must be performed prior to issuance of a permit.	Individual plant impacts less than SILs, mean that a facility will not cause or contribute to violation of a health-based standard	Air Quality Impact Assessment Testimony (Bob Paine)
30	Whether the impact upon the CITY of the prevailing wind direction from the proposed facilities also been considered and factored into the decision to issue a Permit.	Use of 5 years of hourly meteorological data in the air quality impact assessment <i>did</i> factor in prevailing wind considerations.	Air Quality Impact Assessment Testimony (Bob Paine)
31	Whether it is necessary for a quantitative cumulative air quality analysis to be performed prior to issuance of a Permit to ensure that the combined emissions from the various sources in the area do not cause a contravention of applicable air quality standards. (note: subparts to this cite NEPA cumulative impact requirements)	<ul> <li>NEPA is not triggered by FDEP issuing a PSD permit</li> <li>Individual plant impacts less than SILs, mean that a facility will not cause or contribute to violation of a health-based standard.</li> </ul>	Air Quality Impact Assessment Testimony (Bob Paine)
32	Whether DEP's Intent to Issue Air Construction Permit was based on erroneous and misleading information concerning the proposed power plant's distance to environmentally sensitive lands and, therefore, should be reassessed.	The impact assessment addressed Class I impacts in the Everglades to the satisfaction of NPS. Impacts on other "sensitive areas" were addressed in Section 7 of application by evaluating peak impacts in comparison to most sensitive plant damage thresholds.	Air Quality Impact Assessment Testimony (Bob Paine)
33	Project must use BACT to limit emissions of NOx, CO, VOCs, SO2, sulfuric acid mist, and PM10, pursuant to Rule 62-213.400(2)(f), F.A.C.	VOC emissions are insufficient to trigger BACT review threshold.	Other than the VOC error, this is not in dispute.
34	Rule 62-210.200(38), F.A.C., defines BACT as "an emission limitationbased on the <i>maximum</i> degree of reduction"	Statement of fact, not of an issue in dispute.	
35	In determining BACT, the Department shall give consideration to, among others, "all scientific, engineering, and technical material and other information available to the Department," "the emission limiting standards or BACT determination of any other state," and "the social and economic impact of such technology." Rule 62-212.400(6), F.A.C.	Statement of fact. They are setting the stage for arguments that DEP did not address social and economic impacts, as required by FAC. Also, they later imply that DEP did not consider more stringent limits set by other state.	
36	The City believes and will demonstrate to the Department that the applicant's proposed BACT limits for the turbines, fuel oil heater, tanks, and cooling towersare not consistent with the definition of BACT in Rule 62-210.200(38), F.A.C. and the requirements of Rule 62-212.400(6), F.A.Cthe Department's BACT determinations do not recognize the much lower limits currently being permitted in other states, nor do they address the social and economic impacts to the City	Statement of fact/intent.	

Number	Disputed Issue	Comments	Follow Up/Testimony
37	Turbine BACT for NOx was established as 9 ppm @ 15% O2 for gas and 42 ppm @ 15% O2 for oil on 24-hour block average. Other states have permitted large numbers of simple cycle peaking power plants with NOx limits of 2 to 5 ppm on gas using SCR, XONON, or SCONOx and 5.9 to 13 ppm on oil, achieved with water injection and SCR. Continuous compliance is based on 1 to 3-hour rolling averages. These lower limits have been achieved in practice. The City recommends a much lower NOx limit be	- The "large number" statement is factually incorrect, particularly for oilThe Top-Down BACT analysis did address lower emission limits and the use of SCR, XONON, and SCONOx. These technologies were found to not be "available" within the context of BACT - These lower emitting facilities are based on LAER determinations in California	- McCutchen testimony on how top-down BACT is done - Frasier (ENSR) testimony on BACT determinations elsewhere - Osbourn (ENSR) on BACT evaluation for
38	established.  Turbine BACT for CO was established as 9 ppm @ 15% O2 for gas and 20 ppm @ 15% O2 for oil. Other states have permitted simple cycle peaking power plants with CO limits of 2 to 6 ppm on oil and gas using an oxidation catalyst. Much lower limits have been demonstrated in source tests and with continuous emission monitors. The City believes a much lower CO limit should be established and that continuous compliance be demonstrated with a continuous emission monitor.	- The Top-Down BACT analysis did address lower limits and the use of an oxidation catalyst. DEP determined that an oxidation catalyst is not cost effective.  (Note: we may want to offer up installation of a CO CEMS to resolve the compliance demonstration issue)	PBEC project.  - McCutchen testimony on how top-down BACT is done - Frasier (ENSR) testimony on BACT determinations elsewhere - Osbourn (ENSR) on BACT evaluation for PBEC project.
39	The draft permit establishes BACT for VOCs as 2.8 ppm @ 15% O2 on gas or oil. Other states have permitted simple cycle peaking power plants with VOC limits of 2 ppm @ 15% O2 on gas or oil, using an oxidation catalyst. The City believes a much-lower VOC limit should be established for the turbines.	- The facility is not subject to BACT for VOCs	
40	The draft permit indicates that the facility includes one 2.5 million gallon distillate storage tank one 0.6 million gallon distillate storage tank, one 13 MMBtu/hr gas-fired fuel heater, and four wet mechanical draft cooling towers. The draft permit contains no BACT determinations, emission limits, or monitoring requirements for these sources	<ul> <li>The distillate tanks are sources of VOCs only, which are not subject to BACT for this facility.</li> <li>The application did do a BACT evaluation for the fuel heater.</li> <li>This could be cured by a de novo permit which provide specific emission limits for the cooling tower and gas heater.</li> </ul>	
41	The draft permit does not identify an emergency firewater pump or emergency generator. The City requests that the Department investigate whether emergency diesel engines would be used, and if so, these be subjected to a formal BACT analysis and permit limits.	- No emergency generator - There will be an emergency fire pump; do we want to include this now or address it later?	

Number	Disputed Issue	Comments	Follow Up/Testimony
42	The project proposes to use distillate oil as a backup fuel for an average of 1,000 hours per installed unit. The combustion of distillate in the turbines would produce "diesel exhaust" which is recognized by EPA and California as a potent human carcinogen and respiratory irritant. The City is deeply concerned about the impact of these emissions on the residents of Coconut Creek.	- More a statement of concern than disputed issue. We should challenge their statement that turbines produce "diesel exhaust". Also, EPA does not recognize diesel exhaust as a "potent human carcinogen".  - Actually, there is no relevant stature or rule associated with this issue that they are challenging.	ronow op/resumony
43	The definition of BACT in Rule 62-210.200(38) and implementing EPA guidance in the NSR Manual (EPA, New Source Review Workshop Manual, October 1990) require taking into account the "environmental" impacts during the top-down BACT process. The Department is further required to evaluate the social and economic impacts of its decisions, pursuant to Rule 62-212.400(6)(a)4, F.A.C.	The NSR Guidelines describes how an evaluation of energy, economic, and environmental impacts can be used to eliminate higher-ranked control technologies. The evaluation in the application does address environmental impacts of each potential BACT technology.	
44	The draft permit establishes BACT for SO2 and sulfuric acid mist as the use of pipeline natural gas and low sulfur (0.05%) fuel oil, without performing any analyses, evaluating alternatives, or considering the substantial health impacts that may result from this choice. The City maintains that the use of distillate fuel in a densely populated area is inappropriate, has far reaching social and economic implications for its residents, and is not consistent with Rule 62-212.400(6)(a)4, F.A.C.	<ul> <li>Distillate and residual fuel oil is already extensively used in County at Port Everglades</li> <li>The city has not provided any supporting information to document the "far reaching social and economic implications for its residents:.</li> </ul>	
45	Notwithstanding the health issues, 0.05% sulfur distillate is not BACT for SO2 and sulfuric acid mist when firing oil. Lower sulfur distillate, containing only 30 ppmw sulfur, is currently available on the east coast. Further, the EPA has adopted stringent fuel regulations that limit the sulfur content of diesel fuel to 15 ppmw in June 2006.	- Ultra Low sulfur fuel (15 ppm) is estimated by DOE to cost 4 to 10 cents per gallon more than 0.05% sulfur fuel. This would have a cost effectiveness of SO2 control of \$2,500 to \$10,000. Availability of 30 ppm is questionable other than in shipments that would exceed onsite storage capacity.	- Expert testimony on availability?
46	The City requests the permit be modified to eliminate the use of distillate oil. In the short term, a backup fuel such as LNG or propane, or an uninterruptible gas supply should be required. If distillate is required, the emissions should be rigorously controlled and 30 ppmw diesel fuel be required on startup and 15 ppmv when it becomes available, but no later than June 2006.	- Does BACT require the consideration of all fuels? What about landfill gas from the local landfill?	-Determine cost of LNG/propane, interruptible gas supply. Is there currently any firm capacity?

Number	Disputed Issue	Comments	Follow Up/Testimony
47	The permit contains no limits on the number of startups/shutdowns nor on the emissions during these periods. During startups and shutdowns, combustion temperatures and pressures change rapidly, resulting in inefficient combustion and much higher emissions of NOx, CO and VOCs than during steady state operation.	- Simple statement of alleged facts.	
48	The City is concerned that virtually unlimited and uncontrolled startup and shutdown emissions will result in significant health impacts in downwind areas of Coconut Creek. Emissions of formaldehyde can increase by over a factor of 500 during startup. If each turbine experienced 100 startups per year lasting 10 minutes, the emissions of formaldehyde would exceed 10 ton/yr and require the use of MACT.	- Statement of alleged facts	ENSR – research facts regarding statement on formaldehyde increase during startup.
49	Omitting limits on startup and shutdown emissions is not consistent with requirements of the Clean Air Act. These emissions should have been considered in the BACT analysis and related health impacts addressed in conjunction with the environmental review required pursuant to Rule 62-210.200(38). The City believes a that a permit condition be included that specifically limits the number, duration, and emissions during startups and shutdowns, to comply with BACT and MACT.	- DEP has proposed a startup conditions for the El Paso Deerfield Beach project that is probably acceptable.	Address in technical meeting with DEP?
50	Broward County Code Section 27-178 requires pollution prevention planning for hazardous air pollutants, among other considerations. The project is not in compliance with this local regulation because emissions of diesel exhaust, formaldehyde, and other HAPs have not been assessed and mitigated.	- Applicant met with DPEP on 2 (or more?) occaisions and produced a pollution prevention plan that was acceptable to the County.	Osbourn testimony on preparation of P2 Plan and meetings with DPEP.

# ATTACHMENT "A" TO RESPONSES TO CORAL SPRINGS INTERROGATORIES

ALLEGED FACT	PERSON	KNOWLEDGE
Fuel oil will be permitted up to 3000 hours per year or one hundred 125 days per year.	Al Linero, DEP	Hours actually proposed in permit as amended by Department's Notice of change in Department Position filed October 25, 2001 and revised draft permit and best available composition filed November 2001.
These large regional significant sources of "noxious emissions", which are	Broward County permitting/compliance personnel	Locations of stationary sources
publicly or privately owned, are immediately adjacent to the eastern boundary of the CITY.	Al Linero, DEP	Approximate locations of certain stationary sources
Issuance of a Federal PSD Permit subjects to NEPA, cumulative environmental effects, and EIA/EIS	Al Linero and Tom Rogers, DEP	State permitting actions pursuant to DEP Regulations do not subject project to NEPA and EIS/EIA.
	Staff or management at Council of Environmental Quality (CEQ)	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.
Quantitative cumulative air quality analysis should be performed to demonstrate that combined emissions from (all) sources do not cause a	Cleve Holladay and Tom)Rogers of DEP Jehbie Golbreit	DEP Rule requirements regarding compliance demonstrations with applicable air quality standards.
contravention of applicable air quality standards.	Applicant's expert, Dr. R. Ewanchuk of ENSR.	General PSD requirements regarding compliance with air quality standards
Whether an EIS/EIA should have been conducted by ENRON prior to the DEP issuance of Intent	Al Linero and Tom Rogers of DEP.	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.
issuance of filterit	Staff or management at Council of Environmental Quality (CEQ)	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.

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Whether the EIA associated with must be performed prior to the issuance of a permit.	Staff or management at Council of Environmental Quality (CEQ)	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.
, , , , , , , , , , , , , , , , , , ,	Staff or management at Council of Environmental Quality (CEQ)	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.
Whether the impact upon the Cities of the prevailing wind direction from	-Cleve Holladay and Debbie Galbraith of DEP.	Model output parameters
proposed facilities has been considered and factored into the decision to issue a Permit.	Applicant's expert, Dr. Robert Ewanchuk of ENSR.	Model input and output parameters
Whether it is necessary for a quantitative cumulative air quality analysis to be performed prior to the issuance of a Permit to ensure that the combined	Cleve Holladay and Tom Rogers of DEP	DEP Rule requirements regarding compliance demonstrations with applicable air quality standards.
emissions from the various sources in the area do not cause a contravention of applicable air quality standards	Applicant's expert, Dr. R. Ewanchuk of ENSR.	General PSD requirements regarding compliance with air quality standards
The issuance of Federal Permits such as PSD subjects facility to NEPA EIS	Al Linero and Tom Rogers of DEP.	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.
;	Staff or management at Council of Environmental Quality (CEQ)	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.
Under NEPA, cumulative effects of proposed project must be considered in an EIA.	Al Linero and Tom Rogers of DEP.	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.
all EIA.	Staff or management at Council of Environmental Quality (CEQ)	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.
DEP's Intent was based on erroneous and misleading information concerning	Cleve Holladay and Tom Rogers of DEP	Basis of Department's Intent
the proposed power plant's distance to environmentally sensitive lands and, therefore, should be reassessed	Applicant's expert, Dr. Robert Ewanchuk of ENSR.	Basis of application for Air (PSD) Permit

The TEPD says proposed power plant is located 60 km from the Everglades National Park (ENP). Map of the	Cleve Holladay and Tom Rogers of DEP  Palbil Galbia!	What TEPD actually says
Conservation Areas potentially affected demonstrates affected ecosystems are far closer than stated.	National Park Service (NPS) personnel in Denver such as Paul Bunyak and John Notar. Everglades Park Manager.	Areas of concern to NPS with respect to PSD. Exact location of Everglades National Park and distance from any given location.
Loxahatchee National Wildlife Refuge is within thirteen (13) miles of the proposed power plant, as it is located immediately adjacent to Everglades Conservation Area No.2, to the north	U. S. Fish & Wildlife Service (USFWS) personnel in Denver such as Ellen Porter. Loxahatchee Refuge Manager.	Areas of concern to USFWS with respect to PSD. Exact location of Loxahatchee and distance from any given location.
Public entrance of ENP may be over 37 miles away from plant, but ecosystem of the Florida Everglades, specifically Conservation Area No. 2 is within ten miles.	Personnel at Southeast Florida Water Management District and personnel at U.S. Army Corps of Engineers.	Exact location of Conservation Area No. 2 and distance from any given location
The proximity of these ecosystems was not taken into account by the DEP in their review of the proposed location	Cleve Holladay and Form Rogers of DEP	What was taken into account in review regarding proposed project location.
mon review of the proposed location	Applicant's expert, Dr. Robert Ewanchuk of ENSR.	What was taken into account in preparation of application for Air (PSD) Permit
The project must BACT to limit NO <sub>X</sub> , CO, VOCs, SO <sub>2</sub> , sulfuric acid mist, and PM <sub>10</sub> pursuant to Rule 62-212.400(2)(f),	Al Linero of DEP	Which pollutants are subject to a BACT determination.
F.A.C.	Applicant's experts including Dr. Robert Ewanchuk and Scott Osbourn of ENSR.	Pollutants for which BACT proposals were submitted.
ENRON's proposed BACT limits (or absence thereof) for the turbines, fuel oil heater, tanks, and cooling towers,	Al Linero of DEP.	DEP's definition of BACT. Draft BACT determination for Enron Pompano Project.
accepted by the Department, are not consistent with the definition of BACT.	Dr. Robert Ewanchuk and Scott Osbourn of ENSR	Definition of BACT used by applicant and BACT proposal for Enron Pompano Project.

BACT not consistent with the requirements in Rule 62-212.400(6), F. A.C. Does not address the social and	Al Linero of DEP	DEP requirements for BACT determinations.
economic impacts to the City for failing to appropriately limit emissions from the facility.	Dr. Robert Ewanchuk and Scott Osbourn of ENSR	Matters addressed in BACT proposals.
Other states require NO <sub>X</sub> limits of 2 to 5 ppmvd on gas using SCR, XONON, or SCONOx and 5.9 to 13 ppmvd on oil, achieved with water injection and SCR.	Al Linero, Jeff Koerner, Teresa Heron, Mike Halpin, and Joe Kahn, of DEP	BACT determinations and compliance requirements (and demonstrations) for some intermittent duty simple cycle combustion turbine projects in some other states
Continuous compliance is demonstrated based on 1-hour to 3- hour rolling averages. These lower limits have been achieved in practice.	New Source Review Administrators of other states	BACT determinations and compliance requirements (and demonstrations) for intermittent duty simple cycle combustion turbine projects in their respective states.
; ;	New Source Review Administrators for EPA Regions	BACT determinations and compliance requirements for intermittent duty simple cycle combustion turbine projects in their respective regions.
	Bob Blaszczak of EPA Office of Air Quality Planning and Standards	How to access information on BACT determinations entered by states and EPA Regions from the RACT/BACT/LAER Clearinghouse

Other states require limits of 2 to 6 ppmvd on oil and gas using oxidation catalyst.  Much lower limits have been	Al Linero, Jeff Koerner, Teresa Heron, Mike Halpin, and Joe Kahn, of DEP	BACT determinations and compliance requirements (and demonstrations) for some intermittent duty simple cycle combustion turbine projects in some other states
demonstrated in source tests and with continuous emission monitors (CEMS).  City believes a much lower CO limit should be established for the turbine.	New Source Review Administrators of other states	BACT determinations and compliance requirements (and demonstrations) for some intermittent duty simple cycle combustion turbine projects in their respective states.
Continuous compliance should be demonstrated with a continuous emission monitor.	New Source Review Administrators for EPA Regions	BACT determinations for some intermittent duty simple cycle combustion turbine projects in their respective regions.
	Bob Blaszczak of EPA Office of Air Quality Planning and Standards	How to access information on BACT determinations entered by states and EPA Regions from the RACT/BACT/LAER Clearinghouse
Other states require VOC limits of 2 ppmvd on oil and gas using oxidation catalyst.  Much lower limits have been	Al Linero, Jeff Koerner, Teresa Heron, Mike, Halpin, and Joe Kahn, of DEP	BACT determinations and compliance requirements (and demonstrations) for some intermittent duty simple cycle combustion turbine projects in some other states
demonstrated in source tests.  The City believes a much lower VOC limit should be established for the turbines.	New Source Review Administrators of other states	BACT determinations and compliance requirements (and demonstrations) for some intermittent duty simple cycle combustion turbine projects in their respective states.
•	New Source Review Administrators for EPA Regions	BACT determinations for some intermittent duty simple cycle combustion turbine projects in their respective regions.
	Bob Blaszczak of EPA Office of Air Quality Planning and Standards	How to access information on BACT determinations entered by states and EPA Regions from the RACT/BACT/LAER Clearinghouse

Draft permit contains no BACT determinations, emission limits, or monitoring requirements for minor sources (storage tanks, gas-fired fuel heater, cooling towers).	Al Linero of DEP	DEP requirements for BACT determinations.
These sources, although individually minor, must use BACT and be regulated by permit, pursuant to Rule 62-210.200(112), F.A.C., which defines a		
facility as "all of the emissions units which are located on one or more contiguous or adjacent properties, etc.	Dr. Robert Ewanchuk and Scott Osbourn of ENSR	Matters addressed in BACT proposals.
The City requests that DEP conduct a formal BACT analysis for these minor sources and revise the permit to include appropriate emission limits and monitoring requirements.		
Power plants normally additionally include an emergency firewater pump and emergency generator, run by diesel internal combustion engines.	Dr. Robert Ewanchuk and Scott Osbourn of ENSR and Dave Kellermeyer and Greg Krause of Enron	Whether an emergency generator and an emergency firewater pump are actually planned for the facility
The diesel exhaust from any such engines are a great concern to the City.		
The Cities request DEP investigate whether emergency diesel engines would be used and perform a formal BACT analysis and permit limits, pursuant to Rule 62-210.200(112), F.A.C.	Al Linero of DEP	Whether emissions from such units are included within DEP BACT determinations

The combustion of distillate in the turbines would produce "diesel exhaust," which is recognized by the U.S. Environmental Protection Agency and California as a potent human carcinogen	Sims Roy of EPA OAQPS.	Believe he would have an opinion whether combustion of distillate in combustion turbines produce "diesel exhaust" or an opinion about who would have such knowledge or opinion.
and respiratory irritant.  The Cities are deeply concerned about the impact of these emissions, as well as others, on the residents of the cities.	Staff and Management at EPA and California.	Whether EPA or California recognize diesel exhaust as carcinogen and respiratory irritant if indeed it is produced by combustion of distillate in combustion turbines.
	Staff and management of Cities	Depth of concern by cities regarding impacts of diesel exhaust if indeed it is produced by combustion of distillate in combustion turbines.
BACT definition requires "environmental" impacts during the "top-down" process.	Al Linero of DEP	DEP requirements for BACT determinations.
Department is required to evaluate social and economic impacts of its decisions, pursuant to Rule 62-212.400(6)(a)4, F.A.C.	Dr. Robert Ewanchuk and Scott Osbourn of ENSR	Matters addressed in BACT proposals.
Draft permit establishes BACT for SO <sub>2</sub> and sulfuric acid mist as the use of pipeline natural gas and low sulfur (0.05%) fuel oil, without performing any analyses, evaluating alternatives, or	Al Linero of DEP	DEP's BACT determination for SO <sub>2</sub> and sulfuric acid mist emissions for Enron Pompano project.
considering the substantial health impacts that may result from this choice.	Dr. Robert Ewanchuk and Scott Osbourn of ENSR.	BACT proposals for SO <sub>2</sub> and sulfuric acid mist emissions for Enron Pompano project.
City maintains that the use of distillate fuel in a densely populated area is		
inappropriate, has far-reaching social and economic implications for its residents, and is not consistent with Rule 62-212.400(6)(a), F.A.C.	Staff and management of Cities	What Cities actually maintain regarding use of distillate fuel in a densely populated area.

0.05% sulfur distillate is not BACT for SO <sub>2</sub> and sulfuric acid mist when firing oil.	Al Linero of DEP.	DEP's BACT determination for SO <sub>2</sub> and sulfuric acid mist emissions for Enron Pompano project.
A sulfur content of 0.05% is equivalent to 5,000 ppmw.	Dr. Robert Ewanchuk and Scott Osbourn of ENSR.	BACT proposals for SO <sub>2</sub> and sulfuric acid mist emissions for Enron Pompano project.
Lower sulfur distillate, containing only 30-ppmw sulfur, is currently available on the east coast.	Any person with knowledge of engineering or chemistry.	That a sulfur content of 0.05 percent by weight is actually equivalent to 500 ppmw and not 5,000 ppmw.
EPA has adopted regulations that limit the sulfur content of diesel fuel to 15 ppmw.	Staff at Department of Energy and major refined products distribution companies such as Louis Dreyfus, Chevron-Texaco, Exxon-Mobil, etc	Availability of distillate containing 30 ppmw. Extent of availability of ultra low sulfur diesel in June 2006.
These regulations go into effect in June 2006 at which point ultra low sulfur diesel will be widely available in the Florida market.	Staff at EPA OAQPS.	EPA regulations regarding sulfur content of diesel fuel. Date these regulations go into effect.
Non-diesel backup fuel such as LNG (liquefied natural gas), propane, or non-interruptible gas supply contract for curtailments should be required, until	Al Linero of DEP	Opinion as to availability of LNG, propane as non-diesel backup fuel.
constraints on the FGT are alleviated, but no later than January 2003.	Staff at Florida Gas Transmission Company and at Federal Energy Regulatory Commission.	Availability of LNG, propane or non- interruptible gas supply. Constraints on FGT.
If distillate is retained, diesel exhaust emissions should be rigorously	The state of the s	
controlled and 30-ppmw diesel fuel be required on startup and 15 ppmw diesel when it becomes available, but no later than June 2006.	Staff at Department of Energy and major refined products distribution companies such as Louis Dreyfus, Chevron-Texaco, Exxon-Mobil, etc.	Availability of distillate containing 30 ppmw. Extent of availability of ultra low sulfur diesel in June 2006.

There are no limits on the number of startups and shutdowns nor on the emissions.	Al Linero of DEP.	Requirements during startup and shutdown.
During startups and shutdowns, combustion temperatures and pressures change rapidly, resulting in inefficient combustion and much higher emissions of NO <sub>X</sub> , CO, and VOCs (including	John Reynolds of DEP and experts at General Electric Power Systems.	What occurs during startup and shutdown of their combustion turbines. Emissions of some or all mentioned pollutants during startup and shutdown.
aldehydes) than during steady state operation.	Sims Roy of OAQPS.	Believe he would have an opinion on these matters or would know who has an opinion or knowledge about these matters.
Virtually unlimited and uncontrolled startup and shutdown emissions will result in significant health impacts in downwind areas, particularly during combined operation of the Pompano and Deerfield Beach Energy Centers.	Don't know of anyone	With knowledge that there will be significant health effects in downwind areas.
Emissions of formaldehyde, for example, can increase by over a factor of 500 during startups, compared to full load operation.  If each turbine experienced as few as 100	Sims Roy of OAQPS	An opinion or knowledge whether formaldehyde emissions can increase by a factor of 500 during startups compared to full load operation or an opinion about who might have knowledge or an opinion.
startups per year, lasting only 10 minutes, the emissions of formaldehyde would exceed 10 ton/yr and require the use of maximum achievable control technology ("MACT"), pursuant to Rule 62-204.800, F.A.C.	Experts at General Electric Power Systems.	What occurs during startup and shutdown of their combustion turbines. Emissions of some or all mentioned pollutants during startup and shutdown.

Omitting limits on startup and shutdown emissions is not consistent with requirements of the Clean Air Act.	David Solomon of EPA OAQPS and the New Source Review Administrators for EPA Regions.	EPA's definitions, requirements, and conclusions regarding startup and shutdown.
The U.S. EPA has consistently defined startup and shutdown to be part of the		
normal operation of a source.	Al Linero and John Reynolds of DEP	DEP BACT determination and startup and shutdown requirements.
The EPA has also consistently concluded that these emissions should be accounted for in the design and		
implementation or the operating procedure for the process and control equipment.  EPA has concluded that "[w]ithout clear	Jim Little or Katy Fourney of EPA Region IV.	Opinions of recent draft permits prepared by DEP in relation to startup and shutdown provisions.
definition and limitations, these		
automatic exemption provisions [for startups and shutdowns] could effectively shield excess emissions arising from poor operation and maintenance or design, thus precluding attainment."	Al Linero, Jeff Koerner, Teresa Heron, Mike Halpin, and Joe Kahn, of DEP	Startup and shutdown requirements for some intermittent duty simple cycle combustion turbine projects in some other states
Accordingly, these emissions should have been considered in the BACT analysis and the related health impacts addressed in conjunction with the	New Source Review Administrators of other states	Startup and shutdown requirements for some intermittent duty simple cycle combustion turbine projects in their respective states.
environmental review required pursuant to Rule 62-210.200(38), F.A.C.  Permits issued by other states include limits on startup and shutdown	New Source Review Administrators for EPA Regions	Startup and shutdown requirements for some intermittent duty simple cycle combustion turbine projects in their respective regions.
emissions. Thus, the City believes that a		
permit condition be included that specifically limits the number, duration, and emissions during startups and shutdowns, to comply with BACT/MACT.	Bob Blaszczak of EPA Office of Air Quality Planning and Standards	How to access information on BACT determinations entered by states and EPA Regions from the RACT/BACT/LAER Clearinghouse

Pollution	Requirements of Broward County Pol Prevention Planning regulation.	Ms. Daniela Banu, Mr. Jarrett Mack, and Mr. William Hahne, P.E. of the Broward County Department of Planning and Environmental Protection.	Broward County Code Section 27-178 requires pollution prevention planning for hazardous air pollutants, among other considerations.
			The project is not in compliance with this local regulation because emissions of diesel exhaust, formaldehyde, and
ordance with	Conclusions whether application was based on submittal by Enron in accord Broward County Pollution Prevention regulation.	Mr. Hahne and Mr. Mack.	other HAPs have not been assessed and mitigated.  Therefore, the project is in violation of Rule 62-210.300(4)(d)15.a F.A.C., which requires compliance with the requirements of Broward County.
l County llation.	Discussions held with Broward Count regarding requirements of Broward Co Pollution Prevention Planning regulati Preparation and submittal of documen	Scott Osbourn of ENSR, Dave Kellermeyer of Enron; Kim Brown of Brown and Associates.	
	to satisfy said requirement.		
ion Planning Broward protocol,	Manner by which Department address Broward County Pollution Prevention regulation. Communication with Brow County staff regarding the review prot inclusion in Department evaluation, an suitability of submittal.	Al Linero of DEP:	
res ior Bro	Manner by which Department addres Broward County Pollution Prevention regulation. Communication with Bro County staff regarding the review pro inclusion in Department evaluation, a	Al Linero of DEP	

## REVIEW OF COCONUT CREEK PETITION

ITEM	CLAIM	DEP POSITION	ACTIONS
11. Fuel Oil Use	Fuel oil will be permitted up to 3000 hours per year or one hundred 125 days per year.	Fuel oil (diesel) will be permitted for up to 500 hours per year per unit after 2004.	DEP advises Parties of change in position
12. Noxious emissions	These large regional significant sources of "noxious emissions", which are publicly or privately owned, are immediately adjacent to the eastern boundary of the CITY.	Term "noxious emissions undefined". Some of the sources may be "major facilities" or major sources as defined in rules.	None. Don't recognize term.
15. "Federal Permit" and NEPA	Issuance of a "Federal PSD) Permit subjects to NEPA, cumulative environmental effects, and EIA/EIS	"State Permit" not a "Federal Permit". DEP PSD rules approved. NEPA (EIS) requirements not in State permitting rules.	Let ENRON handle, but be ready to clarify. DEP PSD program approved, reference 40CFR52, Subpart K
16. Cumulative Analysis	Quantitative cumulative air quality analysis should be performed to demonstrate that combined emissions from (all) sources do not cause a contravention of applicable air quality standards.	The "Ambient Impact Analysis" and the "Additional Impact Analyses" required by Rules 62-212.400(5)(d) and (e), F.A.C. were performed. Demonstrated that the proposed facility "will not cause or contribute to a violation of any ambient air quality standard or maximum allowable increase". For parts of the mentioned analysis, emissions from other faculties were considered in accordance with the applicable rules	Let ENRON handle in prima facie case. Be ready to explain rules.
17. EIS/EIA not included	Whether an EIS/EIA should have been conducted by ENRON prior to the DEP issuance of Intent	See 15 above.	See 15 above.

18. EIA	Whether the EIA associated with must be performed prior to the issuance of a permit.	See 15 above	See 15 above
19. Prevailing winds	Whether the impact upon the CITY of the prevailing wind direction from proposed facilities has been considered and factored into the decision to issue a Permit.	The statistical distribution of historical wind directions was considered when predicting ambient air quality impacts in all directions surrounding the proposed facility. This includes the frequency and speed of wind directions towards Coconut Creek.	Let ENRON handle. DEP (Cleve Holladay) ready to explain.
20. Quantitative air quality analysis	Whether it is necessary for a quantitative cumulative air quality analysis to performed prior to the issuance of a Permit to ensure that the combined emissions from the various sources in the area do not cause a contravention of applicable air quality standards	The "Ambient Impact Analysis" and the "Additional Impact Analyses" (summarized in Chapters 6 and 7 of the application and other supplementary submittals) required by the rules were performed by ENRON and reviewed by the Department prior to the Notice of Intent to Issue Air Construction Permit. These evaluations demonstrated that the proposed facility "will not cause or contribute to a violation of any ambient air quality standard or maximum allowable increase". For parts of the mentioned analysis, emissions from other faculties were considered in accordance with the applicable rules.	Let ENRON handle. Cleve ready to explain
20(ii) NEPA	The issuance of Federal Permits such as PSD subjects facility to NEPA EIS	The permit is not a Federal Permit. State Air Construction (PSD) Permits pursuant to Chapters 62-210 and 62-212, F.A.C. are not subject to NEPA.	Let ENRON handle. Al ready to explain
20(iii) NEPA	Under NEPA, cumulative effects of proposed project must be considered in an EIA.	NEPA is not applicable to this State Permitting action y	Let ENRON handle. Al ready to explain

21. Erroneous distances	DEP's Intent was based on erroneous and misleading information concerning the proposed power plant's distance to environmentally sensitive lands and, therefore, should be reassessed	Disagree	Let ENRON handle. Cleve ready to explain
21(i)	The TEPD says proposed power plant is located 60 km from the Everglades National Park (ENP). Map of the Conservation Areas potentially affected demonstrates affected ecosystems are far	Per Rule 62-204.360(4)(a), F.A.C., all areas of the State are designated Class II except the ENP, Chassahowitzka National Wilderness Area (NWA), St. Marks NWA, and Bradwell Bay NWA. Per Rule 62-204.360(4)(b)1., F.A.C. the ENP is a Class I Area.	Let ENRON handle. Cleve ready to explain.
	closer than stated.	All parts of South Florida except the ENP are Class II Areas. Therefore the mentioned Conservation Areas are Class II Areas.	
		Different "maximum allowable (air pollutant concentration) increases" apply in Class I areas than apply in Class II Areas. These differences are delineated in Rule 62-204.260, F.A.C., "Prevention of Significant Deterioration Increments". The distance given to the Class I ENP was provided for the purpose of rule applicability. It is correct and was not given to mislead regarding overall and undefined environmental sensitivity of nearby Class II Areas.	
21(ii) Distance to Loxahatchee	Loxahatchee National Wildlife Refuge is within thirteen (13) miles of the proposed power plant, as it is located immediately adjacent to Everglades Conservation Area No.2, to the north	The mentioned Loxahatchee National Wildlife Refuge is a Class II Area and differs from the ENP Class I Area with respect to applicable air regulations.  Everglades Conservation Area No. 2 is a Class II Area distinct from the Class I ENP	Let ENRON handle. Cleve ready to explain.

21(iii) Distance to Everglades	Public entrance of ENP may be over 37 miles away from plant, but ecosystem of the Florida Everglades, specifically Conservation Area No.2 is within ten miles.	Everglades Conservation Area No. 2 is a Class II Area distinct from the Class I ENP.	Let ENRON handle. Cleve ready to explain.
21(iv) Proximity of Ecosystems	The proximity of these ecosystems was not taken into account by the DEP in their review of the proposed location	Proximity of the Class I ENP was taken into account. The "Ambient Impact Analysis" and the "Additional Impact Analyses" (summarized in Chapters 6 and 7 of the application and other supplementary submittals) required by Rules 62-212.400(5)(d) and (e), F.A.C. were performed by ENRON and reviewed by the Department prior to the Notice of Intent to Issue Air Construction Permit. These evaluations demonstrated that the proposed facility "will not cause or contribute to a violation of any ambient air quality standard or maximum allowable increase" in the Class I ENP and in the Class II Areas.	Let ENRON handle. Cleve ready to explain.
22. BACT Required	The project must BACT to limit NO <sub>X</sub> , CO, VOCs, SO <sub>2</sub> , sulfuric acid mist, and PM <sub>10</sub> pursuant to Rule 62-212.400(2)(f), F.A.C.	Per Rule 62-212.400(d)2.b., F.A.C., the proposed project is a new Major Facility with respect to the PSD regulations because emissions of several pollutants will be greater than 100 tons per year (tpy) and the type of facility is listed in Table 212.400-1, F.A.C. Per Rule 62-212.400(f), F.A.C., PSD review is required for the pollutants emitted in excess of the values given in Table 212.400-2, F.A.C. The value applicable to VOC is 40 tpy. VOC emissions rate will be 18 tpy. Therefore a BACT is not required for VOC	Let ENRON handle. Al ready to explain  DEP introduce lower VOC emission limit per Notice to Parties.
25. Proposed BACT limits	ENRON's proposed BACT limits (or absence thereof) for the turbines, fuel oil heater, tanks, and cooling towers, accepted by the Department, are not consistent with the definition of BACT.	DEP did recognize lower limits permitted in certain other states. Such limits were typically required in areas that fail to meet the NAAQS. Areas in Florida that are out of compliance with the NAAQS are permitted in accordance with Rule 62-212.500, F.A.C., and require Lowest Achievable Emissions Rate (LAER, not BACT) defined at Rule 62-210.200(155) per Rule 62-212.500(7).	Let ENRON handle. Al ready to explain.

25. Social and Economic Impacts	BACT not consistent with the requirements in Rule 62-212.400(6), F. A.C. Does not address the social and economic impacts to the City for failing to appropriately limit emissions from the facility.		
26. NO <sub>X</sub> BACT	Other states require NO <sub>X</sub> limits of 2 to 5 ppmvd on gas using SCR, XONON, or SCONOx and 5.9 to 13 ppmvd on oil, achieved with water injection and SCR.	Only one state permitted any simple cycle power plants with $NO_X$ limits of 5 ppmvd on gas using SCR. DEP determined that SCR it is not cost-effective to limit $NO_X$ emissions to the range of 2 to 5 ppmvd of $NO_X$ by SCR while burning gas. The Department doubts that the CITY can show any simple cycle intermittent unit permitted to a limit less than 5 ppmvd $NO_X$ .	Let ENRON handle. Al ready to explain/refute.  DEP introduce lower NO <sub>X</sub> limit when firing diesel per Notice to Parties.
		No intermittent duty, simple cycle gas and oil fired unit has been permitted at all using XONON.	
		No intermittent duty, simple cycle unit has been permitted at all using SCONO <sub>X</sub> .	
	-	The Department recently determined that water injection to achieve 36 ppmvd of $NO_X$ is BACT when firing backup fuel oil on an intermittent duty simple cycle combustion turbine. Basis is recent determinations made for the nearby ENRON Deerfield Beach Project and Constellation South Pond Project.	
26. Averaging time	Continuous compliance is demonstrated based on 1-hour to 3- hour rolling averages. These lower limits have been achieved in practice.		. 5(

27. CO BACT	Other states require limits of 2 to 6 ppmvd on oil and gas using oxidation catalyst.  Much lower limits have been demonstrated in source tests and with continuous emission monitors (CEMS). City believes a much lower CO limit should be established for the turbines and that continuous compliance be demonstrated with a continuous emission monitor.	DEP determined that oxidation catalyst for CO is not cost-effective at intermittent duty, simple cycle GE 7FA units. DEP presented data on page BD-12 of the BACT determination showing that emissions less than 2 ppmvd CO are achieved without oxidation catalyst. DEP supports installation of CEMS on one unit	Let ENRON handle. Al ready to explain/refute.  DEP introduce CO CEMS requirement per Notice to Parties.
28. VOC BACT	Other states require VOC limits of 2 ppmvd on oil and gas using oxidation catalyst. Much lower limits have been demonstrated in source tests. The City believes a much lower VOC limit should be established for the turbines.	ENRON did in fact propose a much lower VOC limit of 1.4 ppmvd. However, the project does not trigger a BACT requirement for VOC even with a limit of 2.8 ppmvd. The Department proposes to limit the VOC emissions in the Permit, if issued, to 1.4 ppmvd. This will match the Department's draft Permit for the nearby, planned ENRON Deerfield Beach Project, for which an Intent was issued in the interim period.	Let ENRON handle. Al ready to explain/refute.  DEP introduce revise VOC limit of 1.4 ppmvd per Notice to Parties.
29. Minor sources  :	Draft permit contains no BACT determinations, emission limits, or monitoring requirements for minor sources (storage tanks, gas-fired fuel heater, cooling towers). These sources, although individually minor, must use BACT and be regulated by permit, pursuant to Rule 62-210.200(112), F.A.C., which defines a facility as "all of the emissions units which are located on one or more contiguous or adjacent properties, etc. The City requests that DEP conduct a formal BACT analysis for these minor sources and revise the permit to include appropriate emission limits and monitoring requirements.	Rule 62-212(5)(c), F.A.C. requires that the proposed <u>facility</u> or modification apply BACT <u>for each pollutant</u> subject to preconstruction review requirements as set forth in Rule 62-212.400(2)(f), F.A.C. The rule does not specify a <u>unit-by-unit</u> BACT determination.  DEP BACT determinations consistent with pollutant-by-pollutant requirements and emphasized larger sources over the minor sources.	Let ENRON take first shot. Al ready to explain because ENRON may not understand this possibly subtle interpretation.  (Martha – consult with Pat Comer)

30. Emerge Equipn		Power plants normally additionally include an emergency firewater pump and emergency generator, run by diesel internal combustion engines. The diesel exhaust from any such engines are a great concern to the City. The City requests DEP investigate whether emergency diesel engines would be used and perform a formal BACT analysis and permit limits, pursuant to Rule 62-210.200(112), F.A.C.	The draft Permit did not include the firewater protection system that typically requires a small on-site emergency diesel-fueled pump. The issue of emergency equipment is one of the items raised in the petitions from the CITIES. Normally, such equipment is exempt from permitting Department rules. As part of a new major facility subject to permitting, the Department plans to include the equipment in the permit. The Department plans to add some minor details, as appropriate, in the permit that further clarify the purpose and capabilities of the mentioned units  An emergency diesel generator is not planned at the facility.	ENRON needs to include firewater pump in de novo proceeding and explain any BACT proposal.  Al ready to explain facility BACT on a pollutant-by-pollutant basis versus unit-by-unit basis.
31. Diesel	Exhaust	The combustion of distillate in the turbines would produce "diesel exhaust," which is recognized by the U.S. Environmental Protection Agency and California as a potent human carcinogen and respiratory irritant. The City is deeply concerned about the impact of these emissions, as well as others, on the residents of Coconut Creek.	The term diesel exhaust (DE) is not a defined pollutant with respect to permitting rules applicable to stationary source permitting in Chapters 62-4, 62-210, 62-212, 62-213, and 62-296, F.A.C.  DE is described in various EPA documents (e.g. Health Assessment Document for Diesel Exhaust, EPA/600/8-90/057E, July 2000, SAB Review Draft). According to this document "DE is emitted from 'on road' diesel engines (vehicle engines) or 'nonroad' diesel engines (e.g. locomotives, marine vessels, heavy-duty equipment, etc). There is no mention of combustion turbines (CTs).  The context for DE is clearly 'reciprocating engines' and not combustion turbines (CTs). CTs such as the General Electric 7FA combust fuel at a higher temperature than reciprocating engines and with a great deal of excess air (lean combustion). The exhaust from CTs cannot be characterized as DE.	Let ENRON handle. Al ready to explain/refute.
32. BACT requires	ments	BACT definition requires "environmental" impacts during the "top-down" process. Department is required to evaluate social and economic impacts of its decisions, pursuant to Rule 62-212.400(6)(a)4, F.A.C.	The definition of BACT does require the Department to take into account possible environmental impacts of the control technology, and not the project, when it makes a BACT determination.	Let ENRON handle. Al ready to explain.

33. Impacts from SO <sub>2</sub> BACT	Draft permit establishes BACT for SO <sub>2</sub> and sulfuric acid mist as the use of pipeline natural gas and low sulfur (0.05%) fuel oil, without performing any analyses, evaluating alternatives, or considering the substantial health impacts that may result from this choice. City maintains that the use of distillate fuel in a densely populated area is inappropriate, has far-reaching social and economic implications for its residents, and is not consistent with Rule 62-212.400(6)(a), F.A.C.	Pipeline natural gas and low sulfur fuels are inherently clean fuels. Because pipeline natural gas is already very low in sulfur content, it represents the top technology and is accepted as BACT for the main fuel. Fuel oil is used as the backup fuel. Given that fuel oil is the backup fuel, ENRON proposed and the Department approved a specification of 0.05 percent sulfur. The fuel oil satisfying the requirement is the same widely available fuel used in transportation.  The Department did not consider any additional analysis to be necessary as the only other reasonably available fuels oils to be considered have higher sulfur content. For example, the nearby FPL plant uses 1 percent sulfur fuel oil.	Let ENRON handle. Al ready to explain.
34. 0.05 percent sulfur not BACT	0.05% sulfur distillate is not BACT for SO <sub>2</sub> and sulfuric acid mist when firing oil. A sulfur content of 0.05% is equivalent to 5,000 ppmw. Lower sulfur distillate, containing only 30-ppmw sulfur, is currently available on the east coast. EPA has adopted regulations that limit the sulfur content of diesel fuel to 15 ppmw. These regulations go into effect in June 2006 at which point ultra low sulfur diesel will be widely available in the Florida market.	Disagree that 0.05% sulfur fuel oil is not BACT for the backup fuel. The statement that 0.05% sulfur is equivalent to 5,000 ppmw is an error. The correct value is 500 ppmw. If the 30-ppmw sulfur distillate is available, it is not BACT. The difference in cost between 0.05 % sulfur fuel oil and the 30-ppmw sulfur fuel oil (if available in Florida) is certainly more than 5 cents per gallon. At a difference of only 3 cents per gallon, the marginal cost of sulfur dioxide control would be is \$7,500 per ton of SO <sub>2</sub> removed. This value is not considered cost-effective.  The petitioners will need to provide information that the fuel is actually available in Southeast Florida and that it costs no more than about 2 cents per gallons more than the 0.05% sulfur fuel oil. The Department does not believe the petitioner can do this, while ENRON can provide facts sufficient facts to further buttress their proposal.	Let ENRON handle. Al ready to explain.

35. Eliminate distillate	Non-diesel backup fuel such as LNG (liquefied natural gas), propane, or non-interruptible gas supply contract for curtailments should be required, until constraints on the FGT are alleviated, but no later than January 2003.	DEP will not modify the permit to eliminate use of distillate fuel oil without a request or agreement by ENRON to do this or by recommended order from the Administrative Law Judge.  LNG is not available as a backup fuel. Propane is not available in the amounts needed to support the facility as a backup fuel. Enron can rebut the claims and there is no need for the Department to do any work on this.  DEP proposes limiting fuel oil use to 500 (instead of 1000) hours per year per unit after 2004, when it is likely that at least one of the gas projects planned by Duke, ENRON, El Paso, AES, and FGT Co., will be completed and provide more gas to South Florida. This will make the permit consistent with the draft permit for the ENRON Deerfield project with respect to hours of fuel oil use and takes into consideration recent issuance of a draft permit to El Paso in Deerfield that allows no fuel oil use.	ENRON explains its position.  Department must present its position per Notice to Parties. Al will explain.
35. Limit diesel 15 ppmw of sulfur	The manufacture of the manufactu	The Department will not change the fuel oil specification because the requirement is not cost-effective for sulfur dioxide/sulfur trioxide control.	Let ENRON handle. Al ready to explain.
36. Limits on startups and shutdowns	No limits on the number of startups and shutdowns nor on the emissions. During startups and shutdowns, combustion temperatures and pressures change rapidly, resulting in inefficient combustion and much higher emissions of NO <sub>X</sub> , CO, and VOCs (including aldehydes) than during steady state operation.	The issue of startup and shutdown emissions is one of the items raised by EPA in its comments on the project and by the CITIES in their petitions. The Department has authority to control startup and shutdown emissions and plans to include a "Work Practice BACT in the permit. This reflects consideration of comments received and rule analysis indicating that. This will match the Department's recent Intents and Final Permits for several projects in Southeast and Southwest Florida.	Let ENRON handle.  Department can explain its position per Notice to Parties. Al will explain.

		The Department also plans to require a continuous emission monitoring system (CEMS) at one of the units to gather information regarding actual carbon monoxide (CO) emissions during startup of simple cycle combustion turbines. This was one of the possibilities suggested by EPA in its comments on the project. The data collected will allow the Department to set firm CO limits during startup and shutdown if feasible.	
37. Startup and shutdown impacts	Virtually unlimited and uncontrolled startup and shutdown emissions will result in significant health impacts in downwind areas (Coconut Creek, particularly during combined operation of the Pompano and Deerfield Beach Energy Centers.  Emissions of formaldehyde, for example, can increase by over a factor of 500 during startups, compared to full load operation. If each turbine experienced as few as 100 startups per year, lasting only 10 minutes, the emissions of formaldehyde would exceed 10 ton/yr and require the use of maximum achievable control technology ("MACT"), pursuant to Rule 62-204.800, F.A.C.	Even during startup and shutdowns, the ground level concentrations of CO and NO <sub>X</sub> will not exceed the National Ambient Air Quality Standards (incorporated at Rule 62-,F.A.C.). The standards are designed to protect the public with an adequate margin of safety. The Department disagrees that emissions of formaldehyde will exceed 10 tons per year. The petitioner will need to present facts. ENRON will be able to rebut the claims.	Let ENRON handle.

38. Number of Startups and shutdowns

Omitting limits on startup and shutdown emissions is not consistent with requirements of the Clean Air Act. The U.S. EPA has consistently defined startup and shutdown to be part of the normal operation of a source. 12 The EPA has also consistently concluded that these emissions should be accounted for in the design and implementation or the operating procedure for the process and control equipment. EPA has concluded that "[w]ithout clear definition and limitations, these automatic exemption provisions [for startups and shutdowns] could effectively shield excess emissions arising from poor operation and maintenance or design, thus precluding attainment." (Bennett 9/28/82.) Accordingly, these emissions should have been considered in the BACT analysis and the related health impacts addressed in conjunction with the environmental review required pursuant to Rule 62-210.200(38), F.A.C. Permits issued by other states include limits on startup and shutdown emissions. Thus, the City believes that a permit condition be included that specifically limits the number, duration, and emissions during startups and shutdowns, to comply with BACT/MACT.

With due respect to the EPA memoranda, the Department is not required to follow them. The Department is also not required to implement EPA's comments on projects permitted pursuant to the Department's PSD rules. However the Department respects the input by EPA Region IV as a commenter on the project and planned to revise the permit in partial consideration of those comments.

Limitations on startup and shutdown emissions are not required by Department rules. However the rules require adherence to <u>best</u> operating practices and cannot "shield excess emissions arising from poor operation". The Department believes that the requirement to use best operating practices is consistent with the definition of BACT, which can be "a design, equipment, work practice, operational standard or combination thereof". The Department has gathered additional information from initial tests at the first units similar units to begin operation in Florida and is better able to describe the measures to control startup emissions.

The Department included Work Practice BACT for startup in several recent permits issued subsequent to the Draft ENRON Pompano permit and EPA's comments. EPA Region IV commented favorably on the new approach, specifically for El Paso projects in Broward, Palm Beach, and Manatee Counties.

There is no need to limit the number of startup and shutdowns. The previously described Work Practice BACT is sufficient.

Let ENRON handle.

Department can explain its position per Notice to Parties. Al will explain.

<sup>&</sup>lt;sup>1</sup> Letter from Kathleen M. Bennett, Office of Air, Noise and Radiation, to Assistant Administrator for Air, Noise and Radiation Regional Administrators, Regions I-X, Subject: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, September 28, 1982 (Bennett 9/28/82).

<sup>&</sup>lt;sup>2</sup> Letter from Kathleen M. Bennett, Assistant Administrator for Air, Noise and Radiation, to Regional Administrators, Regions I-X, Subject: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, February 15,1983 (Bennett 2/15/83).

39. Pollution Prevention Plan	· · · · · · · · · · · · · · · · · · ·	The Department included the requirement to submit a Pollution Prevention Plan to Broward County in a request for additional information dated November 21, 2000. The request was prominently mentioned as Item 1 of the mentioned letter.  By the Specific Operating Agreement between the Department and the County, Broward County interprets its own rules. ENRON met with County staff met on November	Let ENRON handle. Al ready to explain.
		30, 2000 to discuss the requirements and submitted a Pollution Prevention Plan to Broward County and the Department as a revision to the application transmitted with a letter dated December 14, 2000.  Following a review of the submittal, the County's Air	
		Permitting Manager advised the Department by electronic mail dated January 4, 2001 that "We have reviewed the response to your incompleteness letter as well as the revised application dated December, 2000. Our review indicates that the application, as amended, adequately addresses Broward County ordinances 27-176(c)(2)(b) and 27-178".	
		The Department relied on that conclusion by the staff competent to make it. ENRON can provide facts regarding their own discussions with the County. The County's staff can be called to testify regarding their conclusions.	

## **CITY OF CORAL SPRINGS**

VS.

# DEERFIELD BEACH ENERGY CENTER, L.L.C. (AN AFFILIATE OF ENRON NORTH AMERICA) AND DEPARTMENT OF ENVIRONMENTAL PROTECTION

\*\*\*Should you encounter problems printing the PDF files, select the "print as image" box in the Adobe Acrobat Reader print menu.

Date	Proceedings
11/16/01	Deerfield Beach Energy Center's Notice of Non- Oppostion to Joint Motion to Consolidate (filed via facsimile).
	Broward County`s Response to Deerfield Beach Energy Center`s First Request for Production of Documents (filed via facsimile).
11/14/01	City of Coconut Creek's Response to Deerfield Beach Energy Center's First Request for Production of Documents (filed via facsimile).
11/09/01	Joint Motion to Consolidate (filed Respondent via facsimile).
10/26/01	Notice of Appearance (filed by K. Ezrol).
10/24/01	Deerfield Beach Energy Center`s Objections and Response to City of Coral Springs` Request for Production of Documents filed.
10/19/01	Deerfield Beach Energy Center`s First Request for Production of Documents Directed to Broward County filed.
10/19/01	Deerfield Beach Energy Center`s First Request for Production of Documents Directed to City of Coral Springs filed.

10/19/01	Deerfield Beach Energy Center's First Request for Production of Documents Directed to City of Coconut Creek filed:
10/16//01	Ocelogre Tearlie lies tricions is sued
09/26/01	Notice of Appearance are Service Address filed by Deenield Beach Energy Center, L.E.
03/07/01	Order issued: (consolidated cases are: 01-0027/27, 01-0027/28, 01-0027/29)
07/25/01	Joint Response to Initial Orderfiled 1.7
07/13/01	Intial Ocier issued
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## Docket Sheet 01-2682

### **CITY OF CORAL SPRINGS**

VS.

# POMPANO BEACH ENERGY, L.L.C. (AN AFFILIATE OF ENRON NORTH AMERICA) AND DEPARTMENT OF ENVIRONMENTAL PROTECTION

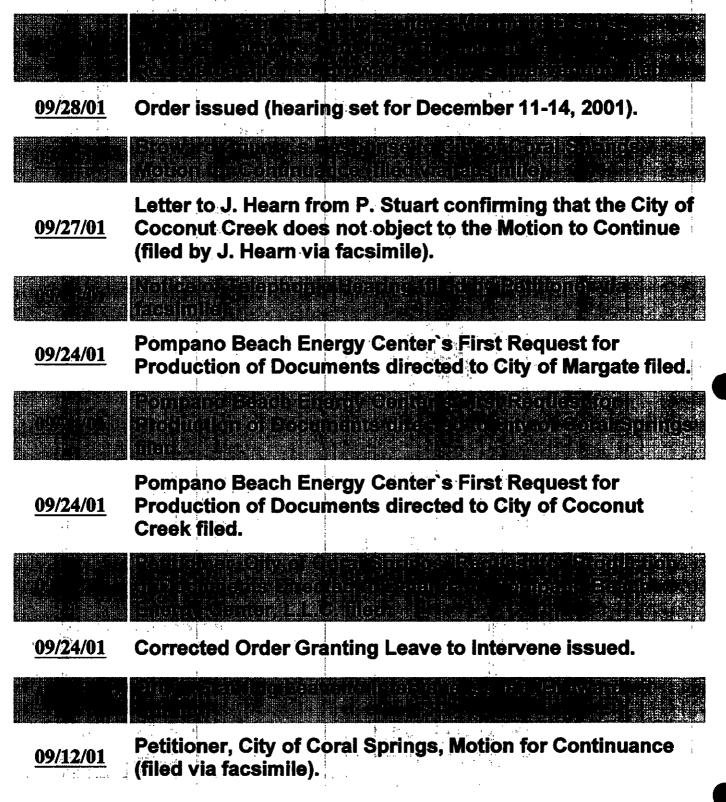
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Date	Proceedings
<u>11/13/01</u>	City of Margate's Notice of Service of Answers to Pompano Beach Energy Center's First Set of Interrogatories filed.
111/13/01	City of Margate's Response to Respondent's First Request for Production filed.
11/13/01	City of Margate s Answers to Pompano Beach Energy Center's First Set of Interrogatories filed.
11/09/01	City of Coconut Creek's Response to Respondent's First Request for Production (filed via facsimile).
11/09/01	City of Coconut Creek's Notice of Service of Answers to Pompano Beach Energy Center's First Set of Interrogatories (filed via facsimile).
<u>11/09/01</u>	Joint Motion to Consolidate (Cases requested to be consolidated, 012982, 012683, 01-2684, 012727, 01-2728, 012729) filed via facsimile:
11/09/01	City of Coconut Creek's Answers to Pompano Beach Energy Center's First Set of Interrogatories (filed via facsimile).
111/07//01	Pompano Beach Energy Center's Response to DEP started Notice of Change of Agency Position (filed via facsimile)

11/07/01	Pompano Beach Energy Center's Request for Production of Documents Directed to Department of Environmental Protection (filed via facsimile).
11/07/01	Pompano Beach Energy Center's Notice of Serice of First Set of Interrogatories to Department of Environmental Protection (filed via facsimile).
<u>10/29/01</u>	City of Coral Springs` First Set of Interrogatories Directed to State of Florida Department of Environmental Protection filed.
	Manager Company Control of the Contr
<u>10/24/01</u>	Pompano Beach envery Center's Objections and Response to City of Coral Springs' Request for Production of Documents filed.
10/23/01	City of Coral Springs` First Set of Interrogatories Directed to Pompano Beach Energy Center, L.L.C. filed.
<u>10/22/01</u>	City of Coral Springs` Notice of Service of Answers to Pompano Beach Energy Center`s First Set of Interrogatories filed.

	<u>10/19/01</u>	Order issued (the City's Motion for extension of time to respond to Pompano's Interrogatories is granted).
	10/19/01	Notice of Appearance (filed by K. Ezrol).
	<u>10/19/01</u>	Letter to C. R. Reetz from E. Steinfeld response to letter of 10/12/01 filed.
	10/19/01	Pompano Beach Energy Center's Memorandum in Partial Opposition to City of Coconut Creek's Motions for Extension of Time (filed via facsimile).
	<u>10/19/01</u>	Pompano Beach Energy Center's Memornadum in Partial Opposition to City of Coconut Creek's Motions for Extension of Time (filed via facsimile).
	10/18/01	Order issued (Pompano's Motion to Dismiss and/or Motion for Reconsideration are denied without prejudice. The City s Motions for extension of time to respond to Pompano's discovery are granted).
)	<u>10/17/01</u>	City of Margate's Motion for Extension of Time in Which to Respond to Pompano Beach Energy Center's First Request for Production to City of Margate filed.
	10/15/01	Broward County's Response to Pompano Beach Energy Center's Motion to Dismiss Broward County's Petition and/or Motion for Reconsideration of Broward County's Intervention (filed via facsimile).
	<u>10/11/01</u>	City of Coconut Creek's Motion for Extension of Time in Which to Respond to Pompano Beach Energy Center's First Request for Production to City of Coconut Creek (filed via facsimile).
	10/11/01 10/11/01	City of Coconut Creek's Motion for Extension of Time in Which to File Answers to Pompano Beach Energy Center's First Set of Interrogatories Directed to City of Coconut Creek (filed via facsimile).
)	10/01/01	Amended Notice of Hearing issued. (hearing set for

December 11 through 14, 2001; 1:00 p.m.; Pompano Beach, FL, amended as to Date).



[09/10/01]	Pompano Beach Energy Center's Notice of Service of First: Set of Interrogatories to City of Margate filed:
<u>09/10/01</u>	Pompano Beach Energy Center's First Set of Interrogatories Directed to City of Coral Springs filed.
09/10/01	Pompano Beach Energy Center's Notice of Service of First   Set of Interrogatories to City of Coconut Creek filed.
09/10/01	Pompano Beach Energy Center's First Set of Interrogatories Directed to City of Coconut Creek filed.
09/10/01	Pompano Beach Energy Center's Notice of Service of First Set of Interrogatories to City of Coral Springs filed.
09/10/01	Pompano Beach Energy Center's First Set of Interrogatories Directed to City of Margate filed.
09/06/01	Broward County's Amended Petition to Interene (filed via facsimile).
<u>08/27/01</u>	Order issued (Broward`s Motion to Intervene is denied without prejudice and Broward may file an amended petition to intervene within 10 days from the date of this Order).
	Notice of Hearing issued (hearing set for October 29.
08/23/01	through November 1, 2001; 1:00 p.m.; Pompano Beach, EL):
08/23/01 08/23/01	through November 1, 2001; 1:00 p.m.; Pompano Beach,
	through November 1, 2001; 1:00 p.m.; Pompano Beach, [FL).
08/23/01	through November 1, 2001; 1:00 p.m.; Pompano Beach, FL):  Order of Pre-hearing Instructions issued.  Pompano Beach Energy Center's Response to Broward.

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#### STATE OF FLORIDA DEPARTMENT OF ADMINISTRATIVE HEARINGS

CITY OF CORAL SPRINGS, et al.,

Petitioners.

٧.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, and POMPANO BEACH ENERGY CENTER, L.L.C., etc.,

Respondents, etc.

CONSOLIDATED

DOAH CASE NOS.

01-2682

01-2683

01-2684

POMPANO BEACH ENERGY CENTER'S REQUEST FOR PRODUCTION OF DOCUMENTS DIRECTED TO DEPARTMENT OF ENVIRONMENTAL PROTECTION

Respondent, Pompano Beach Energy Center, L.L.C., pursuant to Fla.R.Civ.P. 1.350 and F.A.C. 28-106.206, requests that co-respondent, State of Florida Department of Environmental Protection, produce the following documents within the time provided by law or such shorter time as is established by the Administrative Law Judge:

#### **DEFINITIONS AND INSTRUCTIONS**

A. "Energy Center" shall refer to respondent Pompano Beach Energy Center, L.L.C. and to Enron North America; and to their corporate parents, subsidiaries, affiliates. successors, officers, directors, shareholders, employees, attorneys, agents, and other representatives known to you.

B. "DEP," "you" and "your" shall refer to Respondent State of Florida Department of Environmental Protection; and to its officials, employees, attorneys, agents, and other representatives known to you.

> CREENBERG TRAURIC, P.A. 1221 BRICKELL AVENUE MIAME, FLORIDA 33131 305-579-0500 PAX 305-579-0717 www.gtlew.com

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C. The "Permit" shall refer to the Draft Permit challenged by the petitioners in this proceeding, and any actual or prospective amendments thereto.

- D. The "Plant" shall refer to the facility that is the subject of the Permit.
- E. The "Notice of Change" shall refer to the Notice of Change of Agency Position submitted by you in this proceeding, and dated October 25, 2001.
- F. The term "document" shall refer to all information and materials within the scope of Fla.R.Civ.P. 1.350 and specifically includes (without limitation) all information kept on audiotane, videotane, computer storage devices, or other electronic storage media. A draft or non-identical copy is a separate document within the meaning of this term.
  - G. The terms "all" and "each" shall be construed as all and each.
- H. The connectives "and" and "or" shall be construed either disjunctively or conjunctively as necessary to bring within the scope of the discovery request all responses that might otherwise be outside its scope.
- I. The term "concerning" means relating to, referring to, pertaining to, describing, evidencing, or constituting.
  - J The use of the singular form of any word includes the plural and vice versa.
- K. The term "person" means any natural person, individual, sole proprietorship, partnership, corporation, association, organization, joint venture, firm, other business enterprise, governmental body, or group of natural persons or other entities.
- L. "Date" shall mean the exact day, month, and year, if ascertainable, or if not, the best available approximation of the date (based, if necessary, upon relationship with other events). Requests for identification of a "time period" shall mean the beginning and ending

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dates of the time period, if ascertainable, or if not, the best available approximation of those dates (based, if necessary, upon relationship with other events).

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M. The term "communication" means the transmittal of information (in the form of facts, ideas, inquiries, or otherwise).

#### **DOCUMENTS REQUESTED**

- All documents identified in your responses to Energy Center's First Set of 1. Interrogatories, which was served on you together with this Request for Production.
- All documents on which you relied in changing your position with respect to "Issue 1" identified in your Notice of Change.
- All documents on which you relied in changing your position with respect to 3. "Issue 2" identified in your Notice of Change.
- 4. All documents on which you relied in changing your position with respect to "Issue 3" identified in your Notice of Change.
- All documents on which you relied in changing your position with respect to "Issue 4" identified in your Notice of Change.
- All documents on which you relied in changing your position with respect to "Issue 5" identified in your Notice of Change.
- All documents on which you relied in changing your position with respect to 7. "Issue 6" identified in your Notice of Change.

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. 8. All documents on which you relied in changing your position with respect to any changes that you propose to the language of the Permit (other than the documents that you have produced in response to the foregoing requests for production).

- 9. All documents concerning any data or other facts on which you relied in changing your position with respect to "Issue 1" identified in your Notice of Change.
- 10. All documents concerning any data or other facts on which you relied in changing your position with respect to "Issue 2" identified in your Notice of Change.
- 11. All documents concerning any data or other facts on which you relied in changing your position with respect to "Issue 3" identified in your Notice of Change.
- 12. All documents concerning any data or other facts on which you relied in changing your position with respect to "Issue 4" identified in your Notice of Change.
- 13. All documents concerning any data or other facts on which you relied in changing your position with respect to "Issue 5" identified in your Notice of Change.
- 14. All documents concerning any data or other facts on which you relied in changing your position with respect to "Issue 6" identified in your Notice of Change.
- All documents concerning any data or other facts on which you relied in changing your position with respect to any changes that you propose to the language of the and the control of the second control of the second control of the second second second control of the second sec Permit (other than the documents that you have produced in response to the foregoing requests for production). الأراب أحالها ووليته والأراجي والمتعارض المتعارض والمتعارض والمتعا
- All documents concerning any communication with any person with respect to whether DEP should change its position with respect to "Issue 1" identified in your Notice of Change.

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All documents concerning any communication with any person with respect to 17. whether DEP should change its position with respect to "Issue 2" identified in your Notice of Change.

All documents concerning any communication with any person with respect to 18. whether DEP should change its position with respect to "Issue 3" identified in your Notice of Change.

19. All documents concerning any communication with any person with respect to whether DEP should change its position with respect to "Issue 4" identified in your Notice of Change.

All documents concerning any communication with any person with respect to 20. whether DEP should change its position with respect to "Issue 5" identified in your Notice of Change.

All documents concerning any communication with any person with respect to 21. whether DEP should change its position with respect to "Issue 6" identified in your Notice of Change.

All documents concerning any communication with any person with respect to 22. whether DEP should change its position with respect to any aspects of the language of the Permit (other than "Issues" "1" through "6" identified in your Notice of Change).

All documents concerning any "comments" received by you as described in 23. paragraph 3 of your Notice of Change.

All "other Intent to Issue Air Construction Permits and Final Permits to applicants for similar projects," as described in paragraph 4 of your Notice of Change.

> GREENBERG TEAURIC, P.A. 1221 BRICKELL AVENUE MIAMI, PLORIDA 88131 305-579-0500 PAX 305-579-0717 www.gtlaw.com

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- 25. All documents concerning the "additional data" described in paragraph 5 of your Notice of Change.
- 26. All documents concerning the "information [gathered] regarding several recently approved or announced pipeline projects", as alleged in paragraph 6 of your Notice of Change.
- 27. All documents concerning the "proposed changes to the draft Permit", as described in paragraph 7 of your Notice of Change.
- 28. All documents concerning whether "the proposed changes to the draft Permit will result in decreased emissions", as alleged in paragraph 7 of your Notice of Change.
- 29. To the extent not produced in response to the foregoing requests, all: other documents on which you rely in support of any contention that the draft Permit should be modified or amended in any fashion.

Respectfully submitted.

Greenberg Traurig, P.A. 1221 Brickell Avenue Miami, Florida 33131 Telephone: (305) 579-0500

Facsimile: (305) 579-0723

Florida Bar No. 443840

C. Ryan Reetz

Florida Bar No. 934062

Paul C. Savage

Florida Bar No. 088587

Counsel for Pompano Beach Energy, L.L. C. GREENBERG TRAUBIC, P.A.

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#### CERTIFICATE OF SERVICE

I certify that copies of the foregoing document were served by facsimile & U.S. Mail on

November 7, 2001 to:

Martha L. Nebelsiek, Esq. Department of Environmental Protection 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000

Eugene M. Steinfield, Esq. City of Margate 5790 Margate Boulevard Margate, Florida 33063

Nancy A. Cousins, Esq. City of Coconut Creek 4800 West Copans Road Coconut Creek, Florida 33063

Kerry L. Ezrol, Esq. Goren, Cherof, Doody & Ezrol, P.A. Suite 200 3099 E. Commercial Boulevard Ft. Lauderdale, FL 33308

John Hearn, Esq. City of Coral Springs 9551 West Sample Road Coral Springs, Florida 33065

Paul S. Stuart, Esq. City of Coconut Creek 4900 W. Copans Rd. Coconut Creek, FL 33062

Maite Azcoitia, Esq. Jose Raul Gonzalez, Esq. Broward County Attorney's Office Governmental Center, Suite 423 115 S. Andrews Avenue Fort Lauderdale, Florida 33301

#### **INTERROGATORIES**

1. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any of the facts alleged in the Petition and, for each person, please state the specific nature and substance of the knowledge that you believe the person may have.

#### Refer Attachment 1.

- 2. Please identify each person known to you, your agents, or your attorneys, who has knowledge about, or possession, custody or control of, any model, plat, map, videotape, or photograph pertaining to any fact or issue involved in this controversy; and describe as to each, what items such person has, the name and address of the person who took or prepared it, and the date it was taken or prepared.
- 3. Please identify with particularity each and every fact upon which you rely in your support of your decision to issue a Public Notice of Intent to Issue Air Construction Permit.
  - The Tri-County (Miami-Dade, Broward, and Palm Beach Counties) area is in attainment with the National Ambient Air Quality Standards (NAAQSs).
  - The State Rules for the Prevention of Significant Deterioration (PSD) at Section 62-212.400, F.A.C. are applicable to the Enron Pompano Beach Energy Center (PBEC) project.
  - Project must not "cause or contribute" to a violation of any NAAQS or maximum allowable increase.
  - All of the Tri-County Broward area (with the exception of the Everglades National Park (ENP) is classified as a "Class II area per Rule
  - The Class II area has a unique set of "Significant Impact Levels" (SILs) for PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub>, and CO.
  - Modeling of emissions from the PBEC indicate that groundlevel concentration increases in the Class II area for each pollutant will be less than the respective SIL for each pollutant.

- The ENP is classified as a "Class I" area per Rule
- The Class I area has a unique set of "Significant Impact Levels" (SILs) for PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub>, and CO.
- Modeling of emissions from the PBEC indicate that groundlevel concentration increases in the ENP Class I area for each pollutant will be less than the respective SIL for each pollutant.
- By definition, impacts on air quality that are less than the respective SIL for each pollutant do not cause or contribute to a violation of a NAAQS or allowable increase.
- The Department concludes that the project will not cause or contribute to a violation of any NAAQS or allowable increase.
- Best Available Control Technology (BACT) determinations are required for sulfur dioxide (SO<sub>2</sub>), sulfuric acid mist (SAM), nitrogen oxides (NO<sub>x</sub>), particulate matter (PM/PM<sub>10</sub>), and carbon monoxide (CO) in accordance with Rule 62-212.400, F.A.C.
- 4. For each fact identified in response to the preceding interrogatory, please identify each person known to you, your agents, or your attorneys, who has, claims to have knowledge or discoverable information pertaining to the fact and, as to each such person, please state the specific nature and substance of the knowledge that you believe the person may have.
- 5. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information supporting your determination that the proposed Plant has or will use best available control technology and, for each person, please state the specific nature and substance of the knowledge that you believe the person may have.
- 6. Please identify with peculiarity each and every fact on which you rely in support of your contention that the proposed Plant has or will use best available control technology.
- 7. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to the claim as articulated on page TE-2 of ENRON's Technical Evaluation and

Preliminary Determination that the proposed power plant's distance to Everglades National Park is approximately 60 miles north-northeast of the Everglades National Park, and, for each such person, please state the specific nature and substance of knowledge that you believe the person may have.

Mr. Cleve Holladay of DEP has one or more maps of Florida prepared by the U.S. Geological Survey that delineate the Everglades National Park from its surroundings. Mr. Holladay is aware that certain cities such as Pompano Beach are labeled on the same map(s). The point on the ENP nearest to Pompano Beach can be found by visual inspection.

The distance between the two points can be measured in inches and converted to miles by use of a conversion factor shown on the map. The orientation of North is shown on the map. The shortest line segment that can be drawn from the ENP to Pompano Beach points to a direction slightly east of a true north bearing.

The Department believes that ENRON's consultant ENSR has knowledge or discoverable information regarding the approximate distance of the proposed power plant to the Everglades National Park (ENP). Specifically, Dr. Robert Ewanchuk of ENSR or persons under his supervision would have that information.

The Department believes that the National Park Service also has information regarding such distances. Mr. John Bunyak or Mr. John Notar of the NPS or persons working under their supervision would have such knowledge or materials from which such distances can be derived.

The Park Manager of the ENP would have information from which such distances can be derived.

8. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in supporting the DEP's best available control technology determinations contained in Appendix BD and for each such person, please state the specific nature and substance of knowledge that you believe the person may have.

The Department's Professional Engineer Adminstrator for the New Source Review Section and permitting engineer for the ENRON application has knowledge and discoverable information in support of the Department's Best Available Control technology determination (BACT). His name is Al Linero.

The discoverable information is listed in the references given in the subject Appendix BD. Additional information consists of the cumulative public record of about one dozen BACT determinations made for similar projects in Florida. A list that is reasonably representative was included in the appendix provided with the Department's Notice of Change in Position filed on October 25, 2001. The list includes the ENRON project file that is also part of the public record.

Mr. John Reynolds, who works under the supervision of Mr. Linero also has discoverable information. He has information regarding the costs of controlling nitrogen oxides emissions by selective catalytic reduction catalyst (SCR). He also has a number of documents related to NO<sub>X</sub> emissions tests conducted on units similar, if not identical, to the General Electric combustion turbines proposed by ENRON for the Pompano project.

Mr. Reynolds is in possession of various documents published by GE regarding  $NO_X$  control on their units. He also has documents describing estimated emissions of  $NO_X$  under various modes of operation. He has descriptions of the time required to reach low emissions modes after ignition of the units.

The applicant submitted information in the application that is part of the public record. Dr. Robert Ewanchuk, or Mr. Scott Sumner, or Mr. Scott Osbourne of ENSR or Mr. Dave Kellermeyer of ENRON or persons working for them would likely have additional background information used in the preparation of the application.

Mr. Robert Blazczcak of the Environmental Protection Agency's RACT/BACT/LAER Clearinghouse (RBLC) coordinates a database set up pursuant to the Clean Air Act Section \_\_\_\_\_ that contains BACT determinations conducted by EPA or States. Ms. Teresa Heron who reports to Mr. Linero submits Florida's BACT determinations to Mr. Blazczak for inclusion into the RBLC. She would have some of the submittal sheets.

9. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP's BACT determinations do comply with federal or state law adopted pursuant to the Federal Clean Air

- Act and its amendments, and for each such person, please state the specific nature and substance of knowledge that you believe the person may have.
- 10.Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP enforced BACT as mandated by Rule 62-210, F.A.C. and for each such person, please state the specific nature and substance of knowledge that you believe the person may have.
- 11. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP has given due consideration to the emissions limiting standards or BACT determinations of other states as required under Rule 62-212, F.A.C. In addition, the DEP has identified the maximum degree of reduction in accordance with Florida Administrative Code, and, for each such person, please state the specific nature and substance of knowledge that you believe the person may have.
- 12. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the Permit is not deficient as it contains BACT determinations, emission limits, or monitoring requirements for the 0.6 million distillate storage tank, gas-fired fuel heater and four wet mechanical draft cooling towers, and, for each such person, please state the specific nature and substance of knowledge that you believe the person may have.
- 13. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the Permit is not deficient in that it does identify and provide BACT analysis for other emission sources at the facility such as emergency fire water pumps, emergency generators, which should be subject to a formal BACT analysis pursuant to 62-210.200(112), F.A.C., and, for each such person, please state the specific nature and substance of knowledge that you believe the person may have.

The Department did not make this contention. The Department is not aware of an emergency diesel generator but believes that a firewater pump is a routine requirement at such facilities. Refer to the Department's Notice advising change in position filed on October 25, 2001 where the firewater pump is addressed. The Department relies on the review conducted by Mr.

- Al Linero, P.E. Adminstrator for New Source Review who reviewed the applicant's BACT submittal and made a facility BACT determination that includes a firewater pump.
- 14. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the effects of diesel exhaust as a result of the combustion of distillate in the turbines was considered as a collateral environmental impact in a BACT analysis pursuant to Rule 62-210, F.A.C. and federal guidance, and, for each such person, please state the specific nature and substance of knowledge that you believe the person may have.

The Department did not make this contention.

15. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP has considered the impact of its BACT decisions, considered the collateral environmental impacts of its BACT decisions pursuant to 62-212.400(6)(a)4, F.A.C., and consistent with EPA guidance, and, for each such person, please state the specific nature and substance of knowledge that you believe the person may have.

The Department does not make this contention taken as a whole. Consistency with EPA guidance is not a requirement to issue a permit. However, the applicant probably believes that its application was consistent with such guidance.

Scott Osbourne, BobEwanchuk, and Scott Sumner of ENSR and Dave Kellermeyer of ENRON would have knowledge based on their application intended to comply with at the Department requirements.

The Department's Administrator for New Source Review prepared the draft BACT determination and would obviously know the extent to which he considered impacts pursuant to 62-212.400(6)(a)4, F.A.C.

16. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the use of distillate fuel without the DEP's performance of analyses, evaluating alternatives or considering the substantial health impacts that may result from this choice in a densely populated area is appropriate and consistent with Rule 62-212.400(6)(a)4, F.A.C., and consistent with EPA guidance, and, for each such person, please

state the specific nature and substance of knowledge that you believe the person may have.

The Department did not make such a contention. Fuel oil is the backup fuel and is not a BACT determination as such. The specification limiting fuel oil to very low (0.05 percent) is part of the facility BACT determination for SO<sub>2</sub> and SO<sub>3</sub>. That determination includes primarily firing clean pipeline quality natural gas, which is clearly the main alternative to fuel oil.

17.Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that Sulfur Distillate is BACT for SO<sub>2</sub> and Sulfuric Acid Mist when firing oil, and, for each such person, please state the specific nature and substance of knowledge that you believe the person may have.

The Department did not contend that "Sulfur Distillate is BACT for SO<sub>2</sub> and Sulfuric Acid Mist when firing fuel oil". The Department requires that as part of the facility BACT determination for the mentioned pollutants, fuel oil used as backup must be limited to 0.05 percent sulfur content by weight.

18. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that DEP's failure to limit start-up and shutdown is consistent with the Clean Air Act and does comply with BACT and MACT, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

The Department did not make any contentions regarding any failures on the part of the Department. The Department did advise of a change in position that will result in Operating Practices applicable to startup and shut down.

- 19. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information as to the Air Quality Monitoring studies and tests done on the proposed power plant site and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.
- 20. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the proposed Permit contains adequate monitoring requirements and, therefore is practically enforceable, and, for

each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

The Department did not make any contentions regarding practical enforceability. The Department does not discount the possibility that such a claim could be made and supported.

21. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the Permit is consistent with federal case law as to compliance with  $PM_{10}$  emission limits, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

The Department did not make (and does not plan to make) any contentions regarding consistency with federal case law as to compliance with PM<sub>10</sub> emission limits. The Department does not discount the possibility that such a claim could be made and supported.

22. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the proposed air Permit does comply with the Pollution Prevention Plan of Broward County as required pursuant to Rule G2-210.300is consistent with federal case law as to compliance with PM<sub>10</sub> emission limits, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

The Department did not make such a specific contention. However the Department believes that such a contention is supportable.

ENRON and the Department met separately with the Broward County Air Quality Division by teleconference or in person. By agreement, matters related to review of the application for compliance with the mentioned Pollution Prevention Plan (P<sup>2</sup> Plan) were referred to the Broward County Air Quality Division who wrote the P<sup>2</sup> rule.

Mr. William Hahne, Professional Engineer, of the Broward Program discussed the rule requirements with ENRON and the Department. He or his supervisor, Mr. Jarrett Mack, reviewed the submittal. After at least receiving and probably reviewing the submittal, Mr. Mack advised the

Department that the application submitted to the Department for an Air Permit was now complete as far as Broward County was concerned.

Ms. Daniela Banu, Broward County Director of Air Quality who is Mr. Mack's supervisor has knowledge of the matter. The Department believes that Mr. Steve Somerville, the Director of the Broward County Department of Planning and Environemtnal Protection also has some knowledge regarding internal deliberations about the adequacy of ENRON's P<sup>2</sup> submittal.

These individuals  $\underline{may}$  have communicated with their Commission, County Attorney, or their County Manager about ENRON's application and whether it complies with rules including the  $P_2$  requirements.

Ms. Kimberly Brown, a consultant for ENRON is bel; ieved to have visited with Mr. Hahne, Mr. Mack, and possibly Ms. Banu to gain insight as to the precise requirements of the P<sup>2</sup> Plan and Broward's role in reviewing any submittals pursuant to the P<sup>2</sup> rule.

23. Have you relied on the opinions of any expert consultants or witnesses in connection with the allegations of the Petition. If so, then please state as to each such consultant or witness that person's name and business address, the person's qualifications as an expert, the allegations of the Petition with respect to which you relied on the person's opinions, the opinions asserted by the person on which you relied, and a summary of the grounds for each opinion.

The Department did not rely on any expert consultants except to the extent that applicants use qualified personnel whose work is submitted under the seal of a professional engineer licensed to practice in the State of Florida. The Department believes that the individual responsible for reviewing or supervising the review of ENRON's air permit application is an expert and will serve as an expert witness. However his profession is not as an expert witness or as a consultant.

24.Do you intend to call any expert witnesses at the trial of this case? If so, please state as to each such witness the name and business address of the witness, the witness's qualifications as an expert, the subject matter on which the witness is expected to testify, the substance of the facts and opinions to which the witness is expected to testify, and a summary of the grounds for each opinion.

The Department intends to call Al Linero, Professional Engineer Administrator of the New Source Review Section of DEP. His address is 2600 Blairstone Road, MS 5505, Tallahassee, Florida 32399.

Mr. Linero has a Bachellor's degree and is a professional engineer in the field of Chemical Engineering. He has a Master of Engineering degree in the field of Environmental Engineering. His main area of concentration was air sciences.

He has over twenty-eight years of experience in air pollution measurement, control, and assessment of which approximately seven were in the field of environmental (mostly air pollution) consulting, ten were in corporate environmental sciences and engineering, and eleven have been in government.

He was the Director of the Broward County Air Quality Division and is the Administrator of the DEP New Source Review Program. He has seven years of experience in conducting or reviewing all of the Department determinations of best available control technology (BACT) pursuant to the rules for the prevention of significant deterioration of air quality (PSD). He has supervised the personnel responsible for review of ambient air quality impacts pursuant to the PSD rules.

Mr. Linero will testify as to the Department's updated determination that fuel oil can be fired for only 500 hours per year after 2004 instead of 1000 hours as given in the permit. The grounds for the opinion are outlined in the Department's Notice advising of a change in position.

Briefly, the Department noted that the Gulfstream natural gas pipeline will be constructed by 2004 and several other large pipeline projects have been proposed by various companies to the Federal Energy Regulatory Commission. At the present time, requiring less than 1000 hours per year per unit of fuel oil use would impact a relatively scarse fuel in Southeast Florida. By 2004 (or by completion of any of the mentioned projects) a requirement to use less than 500 hours per year per unit of fuel oil will not impact scarse supplies of natural gas as these will no longer be scarse.

# Pompano Beach Energy Project

Air Construction Permit Application

March 26, 2001 Pompano Beach



# Gulfstream Pipeline

- Across the Gulf
- Manatee to Belle Glade
- · St. Lucie and Osceola
- 1.1 Billion SCFD
- \$1.6 Billion Cost
- 10,000 megawatts
- · Duke & Williams
- Operational 2002



## Power Projects in Florida

- Since mid -1998
- Throughout State
- 20,000 megawatts
- · Mainly Gas-fired
- · Typically Fuel Oil
- Simple Cycle
- Combined Cycle
- Many Companies



## FGT Phases IV & V

- FPL Fort Myers
- · Tampa to Fort Myers
- \$268,000,000 (IV)
- 297,000,000 SCFD
- TECO, FPL Sanford
- \$466,000,000 (V)
- 428,000,000 SCFD
- Upgrades, Laterals



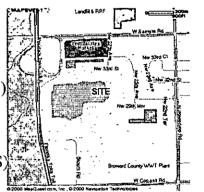
# Enron Pompano Project

- Pompano Beach Energy
- Enron affiliate
- 510 megawatts
- Combustion turbines
- Simple Cycle
- Primary Fuel Gas
- Diesel Oil Backup



## Vicinty

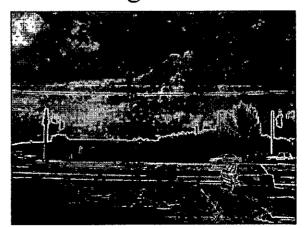
- · South of Sample Road
- East of Turnpike
- North of Copans Road
- Festival Flea Market (N)
- Waste Landfill (N)
- Tradewinds Park (W)
- Broward WWT Plant (S
- Light Industrial (E)



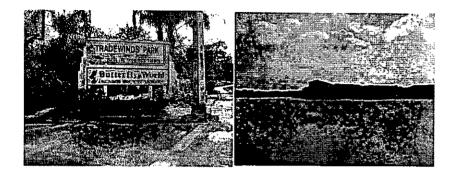
## Festival Flea Market



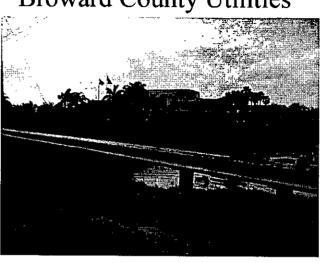
## Waste Management Landfill



## **Tradewinds Park**



## **Broward County Utilities**

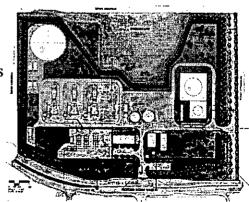


## Site

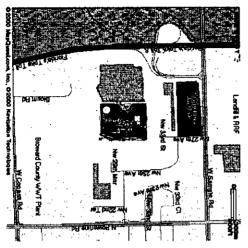


# Project Layout

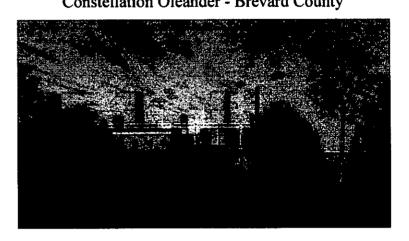
- Three 170 MW Units
- Combustion Turbines
- General Electric 7FAs
- Inlet Air Chillers
- Three 80-foot Stacks
- Four Cooling Towers
- 2.5 million gal Tank
- 0.6 million gal Tank



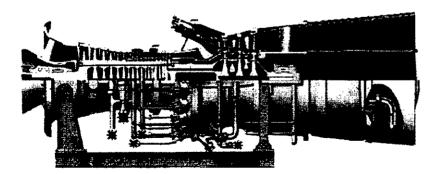
Project Overlay on Site



Side View Similar Project Constellation Oleander - Brevard County



## **GE 7FA Combustion Turbine**



## Emissions in Tons Per Year

Pollutant	TPY	<u>PSD</u>
• Particulate Matter	55	25/15
<ul> <li>Carbon Monoxide</li> </ul>	171	100
<ul> <li>Nitrogen Oxides</li> </ul>	572	40
• Volatile Compounds	18	40
<ul> <li>Sulfur Dioxide</li> </ul>	166	40
<ul> <li>Sulfuric Acid Mist</li> </ul>	25	7

## Hours of Operation and Fuel Use

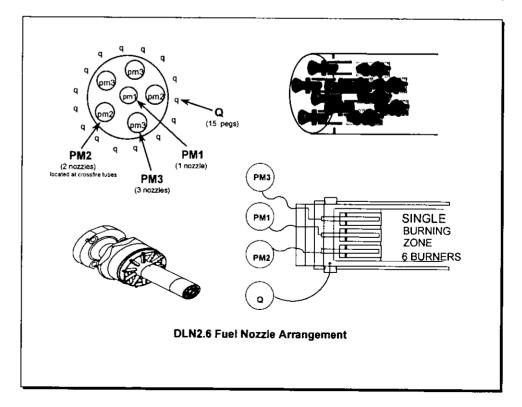
- 3500 Hours Per Year Per Unit
- 40 Maximum Percent Capacity Factor
- Pipeline Quality Natural Gas
- No. 2 Distillate Fuel Oil 0.05 percent Sulfur
- 1000 Hours Per Year Per Unit on Fuel Oil
- After 250 Hours on Fuel Oil, Big Restriction
- Reduce 2 Hours for Every Hour on Fuel Oil
- E.G. if 1000 on F.O., then Only 1000 on Gas

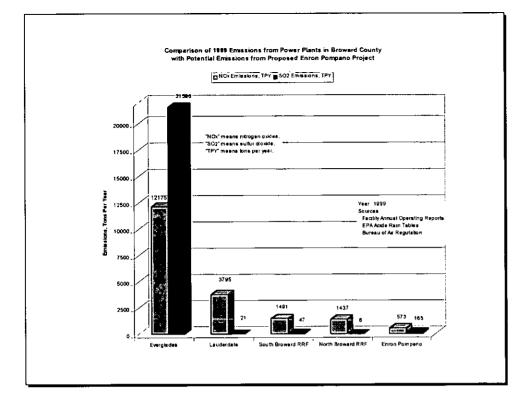
## No. 2 Fuel Oil Use

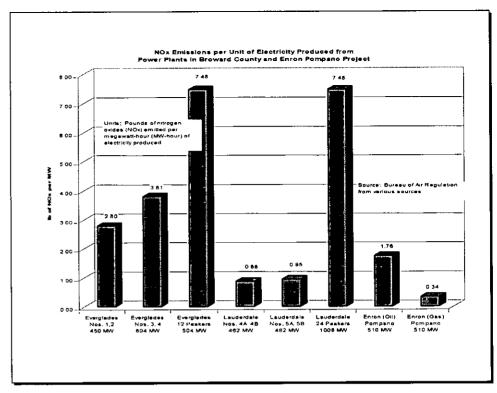
- No. 2 Fuel Oil Distilled Fraction
- Less than 0.05 percent sulfur
- Visibility (Opacity) 0 to 10 percent
- Not Residual Fuel Oil Bottoms from Distillation
- Typically 1 to 2.5 percent sulfur
- Opacity 20 to 40 percent

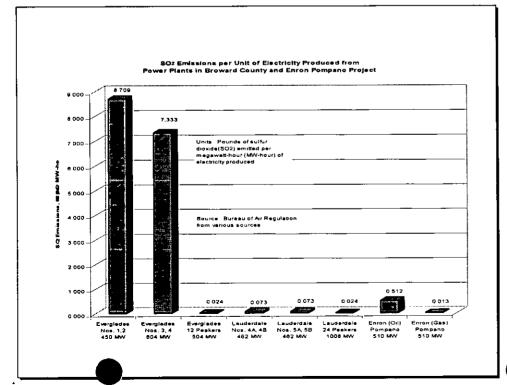
## Best Available Control Technology

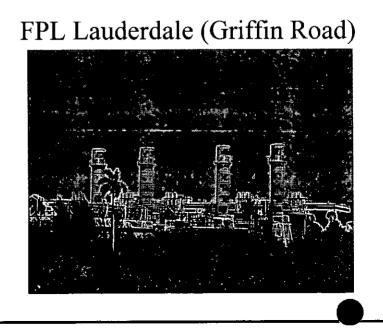
POLLUTANT	CONTROL TECHNOLOGY	PROPOSED BACT LIMIT
Particulate Matter	Pipeline Natural Gas No. 2 Fuel Oil Good Combustion	10 Pounds per hour - Gas 17 lb/hr – No. 2 Fuel Oil 10 Percent Opacity
Carbon Monoxide	Pipeline Natural Gas No. 2 Fuel Oil Good Combustion	9 ppmvd – Gas 20 ppmvd – Fuel Oil
Sulfur Oxides	Pipeline Natural Gas No. 2 Fuel Oil Good Combustion	2 grain of sulfur per 100 ft <sup>3</sup> gas 0.05 Percent Sulfur in Fuel Oil
Nitrogen Oxides	Dry Low NOx - Gas Wet Injection - for No. 2 Fuel Oil Limited No.2 Fuel Oil Use	9 ppmvd – Gas 42 ppmvd – No. 2 Fuel Oil Maximum 1000 of No. 2 Fuel Oil







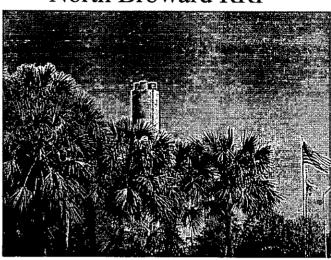




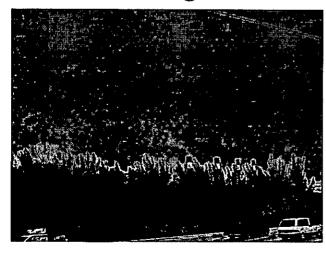
South Broward RRF



North Broward RRF



FPL Everglades



## Conclusion

- Best Available Control Technology
- Ambient Air Impacts are Low
- Will Not Cause or Contribute to Violation
- National Park Service Reviewed
- EPA is Reviewing
- Request Public Comments
- Prior to Final Decision

## Contacts

• A. A. Linero - Permit/BACT	850/921-9523
• Tom Rogers - Modeling	850/921-9537
<ul> <li>Cleve Holladay - Modeling</li> </ul>	850/921-8986
<ul> <li>Martha Nebelsiek - Legal</li> </ul>	850/488-9730
• Jarrett Mack - Compliance	954/519-1208
• alvaro.linero@dep.state.fl.us	

http://www8.myflorida.com/licensingpermitting/learn/environment/air/airpermit.html

## Pompano Beach Energy Center

Air Quality Analysis



# Pollutants Subject to Review

- Sulfur dioxide (SO2)
- Nitrogen oxides (NOx)
- Carbon monoxide (CO)
- Particulate matter (PM/PM10)
- Sulfuric acid mist (SAM)



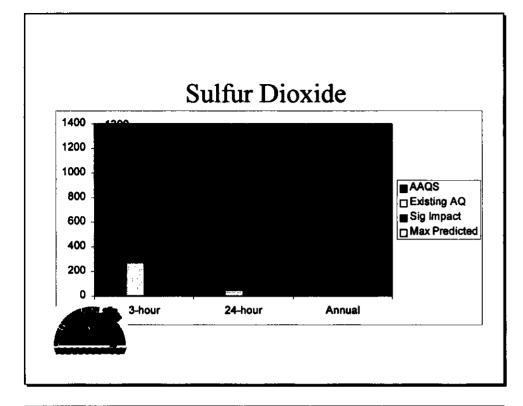
## Requirements

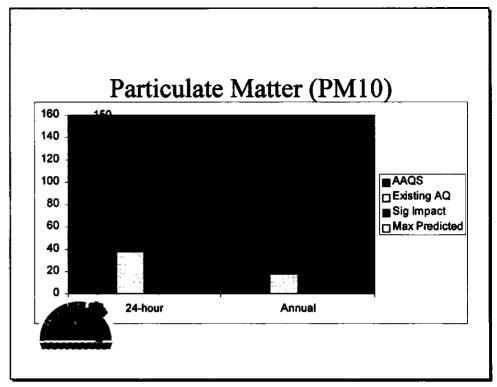
- Must show compliance with ambient air quality standards.
- Must show compliance with maximum allowable concentration increases (PSD increments and Broward county rules).
- Must make an acceptable demonstration that air quality-related values in the everglades are not significantly degraded.

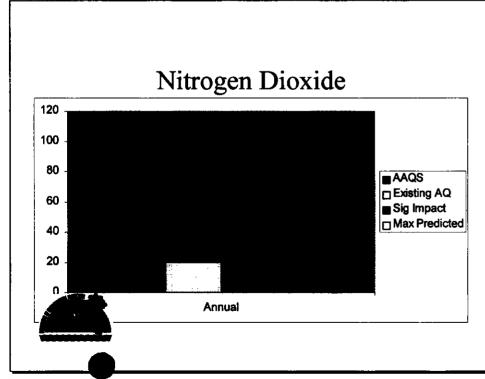
### Results

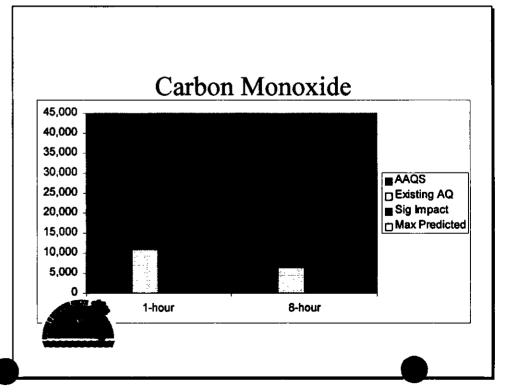
- Compliance with AAQS.
- Compliance with PSD increments.
- Compliance with Broward County rules.
- Impacts on the Everglades are minimal and acceptable to the National Park Service.











## Conclusion

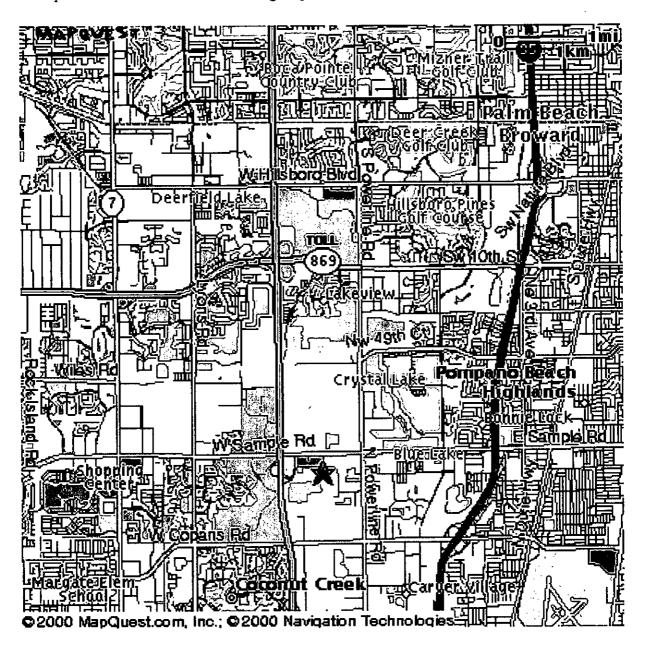
• Air pollutant emissions from the PBEC facility, as proposed, comply with all national, state, and local air quality requirements.



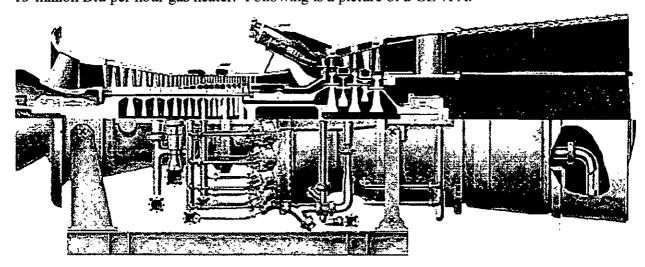
#### FLORIDA DEP AIR PERMITTING SUMMARY SHEET

# POMPANO BEACH ENERGY CENTER THREE 170 MEGAWATT GAS -FIRED COMBUSTION TURBINE PUBLIC MEETING – POMPANO BEACH, BROWARD COUNTY MARCH 26, 2001

Pompano Beach Energy L.L.C. (an affiliate of Enron North America) submitted an application to construct three 170-megawatt (MW) combustion turbine electrical generators and ancillary equipment in Pompano Beach, Broward County. The location is East of the Turnpike and South of Sample Road as shown in the following map.

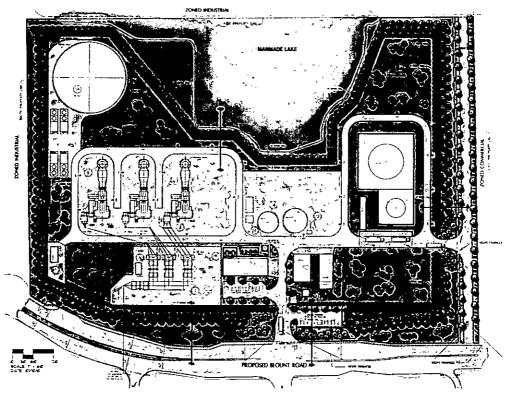


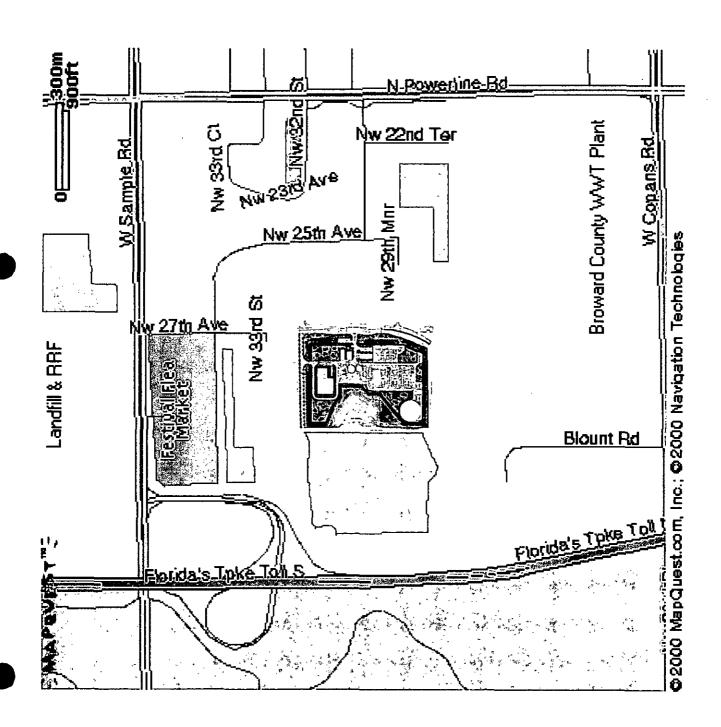
Each unit is a General Electric 7FA gas-fired combustion turbine, which directly generates approximately 170 MW of electricity. The units will operate in simple cycle and intermittent duty. There will not be separate heat recovery steam generators and steam-driven electrical generators. The project includes three 80-foot stacks, a 2.5 million-gallon storage tank for back-up diesel fuel, a 0.6 million gallon day tank, four mechanical draft cooling towers, and a 13-million Btu per hour gas heater. Following is a picture of a GE 7FA.



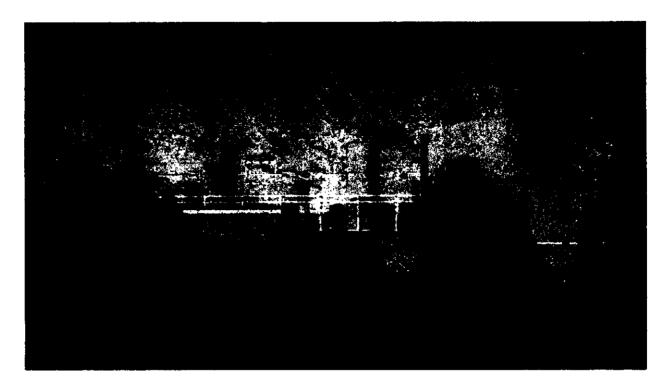
Basically these units are like jet engines. Air is drawn in and compressed. Fuel is introduced in the combustors. Hot exhaust gases expand in the rotor section. The rotational motion of the shaft drives the compressor and the electrical generator normally located before the compressor section.

Following is an artist's rendition of the layout for the facility and an overlay of the plant on the proposed site.





We do not have an elevated artist's rendition of the site. Following is a picture borrowed from a similar project in Brevard County (reference Oleander website <a href="https://www.oleanderpower.com">www.oleanderpower.com</a>)



The key air emissions will consist of nitrogen oxides, carbon monoxide, particulate matter, and sulfur dioxide. Air pollution control will be accomplished through "Dry-Low NO<sub>X</sub> combustion" and use of natural gas with low sulfur diesel oil as backup. Pompano Beach Energy requested only 3,500 hours per year of operation. That is roughly 40 percent of the time in a year. Actual hours of operation are likely to be lower.

The facility will use very low sulfur No. 2 distillate fuel oil as back-up fuel for up to 1000 hours per year per unit. For every hour of operation on fuel oil (beyond 250 hours per year per unit) the authorized hours of operation will be reduced by two hours per year per unit. This will encourage use of natural gas. For example, if the facility uses fuel oil during 1000 hours per year per unit, it may only operate a total of 2000 hours per year per unit (instead of 3500 hours per year per unit).

Most conventional oil-fired power plants in South Florida burn residual fuel oil with a sulfur content of 1 to 2.5 percent. The sulfur content of the No. 2 distillate fuel oil is 0.05 percent and produces very little ash. There will be virtually no visible plume (0 to 10 percent opacity) from the proposed facility, whereas the typical opacity of existing conventional residual oil-fired plants in Southeast Florida is approximately 20 percent and they are allowed up to 40 percent opacity under normal operations.

The Department has determined that the ambient air impacts of the facility are very low and will not cause or contribute to a violation of any of the National Ambient Air Quality Standards and Increments.

The Florida Department of Environmental Protection (DEP) is the permitting authority for the air construction permit under Chapter 403 of the Florida Statutes, Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code.

The DEP Bureau of Air Regulation in Tallahassee received the application on October 23, 2000. We distributed it to the EPA Region 4 office in Atlanta, the U.S. National Park Service's Air Resources Division in Denver, Colorado, and the Broward County Department of Planning and Environmental Protection.

The Technical Evaluation and Preliminary Determination and the draft air permit were completed and sent to the applicant on March 7 along with the Department's Intent to Issue. Copies were provided to the previously - mentioned agencies, the mayors of the nearby cities and the County Commissioners representing the nearby Districts. Copies were made available for public inspection at DEP offices in Tallahassee and West Palm Beach and the Broward County Department of Planning and Environmental Protection. We also posted these materials at:

#### http://www8.myflorida.com/licensingpermitting/learn/environment/air/airpermit.html

The Department's Public Notice of Intent to Issue Air Construction Permit was published by the applicant in the Fort Lauderdale Sun-Sentinel on March 10. It provided a 30-day period for anyone to submit comments on the Department's proposed action. It also provided a 14-day period for anyone whose substantial interests are affected by the project to file a petition for an administrative hearing. Thus far, a number of cities have asked for additional time to consider filing petitions.

The Public Notice of Intent to Issue published on March 10 and a notice in the Florida Administrative Weekly of March 16 advised of this meeting.

As I mentioned before, you can view the entire package on our website. We will be happy to e-mail to you along with any presentation materials from this meeting. You can also call if you want us to guide you through our Internet Site so you can retrieve this material. The application and complete permitting file are also available for public review and copying at our offices in Tallahassee and West Palm Beach and the Broward County Department of Planning and Environmental Protection in Fort Lauderdale.

Issues such as zoning are beyond the scope of our authority in making this permitting decision. These fall within local ordinances and local planning and zoning authorities. An air construction permit does not authorize any infringement of federal, state, or local laws or regulations. Also such a permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

DEP will consider comments specifically related to air emissions and control, which are submitted here and until April 10. These comments will be reviewed prior to issuance of the final permit decision. We do not expect that to occur before the end of April. If an administrative hearing is held, we must generally abide by the findings of fact and the recommended order from the administrative law judge when issuing a final order.

Comments may be submitted at this public meeting, E-Mailed, or mailed to:

<u>CONTACT:</u> A. A. Linero, P.E. Administrator

New Source Review Section Bureau of Air Regulation

2600 Blair Stone Road, M.S. 5505

Tallahassee, Florida 32399

Tel: 850/921-9523 Fax: 850/922-6979

Internet: alvaro.linero@dep.state.fl.us

AIR MODELING: Tom Rogers, Environmental Administrator

Air Modeling and Assessment Section

Office of Policy Analysis and Program Management

Tel: 850/921-9537

Cleve Holladay, Meteorologist New Source Review Section Bureau of Air Regulation

Tel: 850/921-8986

AIR COMPLIANCE: Jarrett Mack, Manager Permitting and Compliance

Air Quality Division

Broward County Department of

Planning and Environmental Protection

Tel: 941/519-1208

<u>LEGAL CONTACT:</u> Martha Nebelsiek, Attorney

Office of General Counsel, Tallahassee

Tel: 850/488-9730

#### Characteristics of Enron Pompano Beach Project

Location:

Pompano Beach Southeast of Turnpike and Sample Road

Area:

Approximately 30 acres

Plant Capacity:

510 megawatts (three 170-MW units)

Type of Units:

GE type 7FA Combustion Turbine-Electrical Generators

Stacks:

Three stacks at 80 feet each

Operation:

Simple Cycle (i.e. no steam cycle)

Primary Fuel:

Pipeline Natural Gas

Backup Fuel:

Very Low Sulfur No. 2 Distillate Fuel Oil

Permitted Hours:

3,500 hours per year per unit – (40 percent availability)

Restrictions:

Only 2000 hrs/yr/unit if they use 1000 hrs/yr/unit on fuel oil

Controls (gas):

Dry Low NO<sub>x</sub> combustors and clean fuel

Controls (fuel oil): Wet Injection and clean fuel

**Emissions:** 

Max 573 tons per year nitrogen oxides, 166 TPY sulfur dioxide

Emission Factors: See attached Figures comparing with other Broward Facilities

Distribute Draft:

March 7

**Publish Notice:** 

March 10

Petitions:

By March 24 (extensions have been requested)

Public Meeting:

March 26 at 7:30 p.m. in the Pompano Beach Civic Center

All Comments:

By April 10

Final Action:

By April 30 unless a petition is filed

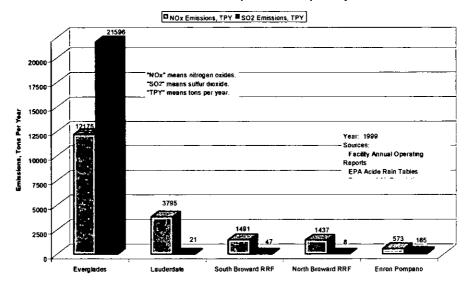
Construction:

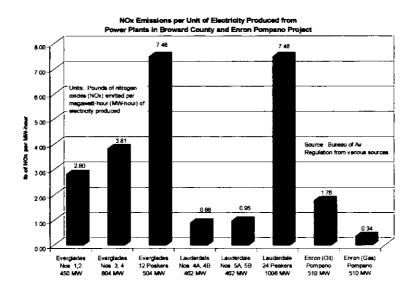
Planned Commencement in mid-2001

Startup:

Planned Startup in late 2002

## Comparison of 1999 Emissions from Power Plants in Broward County with Potential Emissions from Proposed Enron Pompano Project





#### SOz Emissions per Unit of Electricity Produced from Power Plants in Broward County and Enron Pompano Project

